

# Chrysobalanaceae R.Br.

Cynthia Sothers

Royal Botanic Gardens, Kew; c.sothers@kew.org

Renata Camargo Asprino Pereira

Universidade Estadual de Feira de Santana; renata.asprino@hotmail.com

Rafael Gomes Barbosa-Silva

Instituto Tecnológico Vale; rafa.g29@gmail.com

Ghilleen T. Prance

Royal Botanic Gardens, Kew; siriain01@yahoo.co.uk

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This treatment is composed of the following taxa: Chrysobalanaceae, *Acioa*, *Chrysobalanus*, *Couepia*, *Exellodendron*, *Gaulettia*, *Hirtella*, *Hymenopus*, *Leptobalanus*, *Licania*, *Microdesmia*, *Moquilea*, *Parinari*, *Parinariopsis*.

## HOW TO CITE

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## DESCRIPTION

Trees, shrubs or subshrubs. Leaves simple, entire, alternate, the venation pinnate; stipules caducous to persistent, axillary or sometimes fused to petiole; lamina chartaceous or coriaceous, with lower surface glabrous, variously hairy or with distinct hair-filled stomatal cavities. Inflorescence racemose, paniculate or cymose; flowers bracteate and usually 2-bracteolate. Flowers actinomorphic to zygomorphic, bisexual, rarely polygamous or unisexual, markedly perigynous. Receptacle short to elongate, sometimes gibbous at base. Disc always present, forming a lining to the receptacle or an annular or shortly tubular structure at its mouth. Calyx lobes 5, imbricate, often unequal, erect or reflexed. Petals 4-5 or absent, commonly unequal, imbricate, usually caducous, rarely distinctly unguiculate. Stamens 2-100 (-300), inserted on margin or surface of disc, or basally adnate to it, forming a complete or almost circle, semi-circle or unilateral, all fertile or some without anthers and then often reduced to small staminodes; filaments filiform, free, connate at base or ligulately connate, included to far-exserted; anthers small, dorsifixed, longitudinally dehiscent, glabrous. Gynoecium of 1-3 carpels, gynobasic, usually with only 1 carpel fully developed, attached to base, middle or mouth of receptacle-tube, sessile or with a short gynophore, pubescent or villous. Carpel unilocular with 2 ovules or falsely bilocular with 1 ovule in each compartment. Style filiform, gynobasic; stigma distinctly or indistinctly 3-lobed. Ovules erect, epitropous, with micropyle directed towards base. Fruit a fleshy, or rarely dry, drupe; epicarp glabrous, hairy, smooth, verrucose or crustaceous; endocarp various, thick or thin, fibrous or bony, often with a special mechanism for seedling escape, often densely hairy inside. Seed erect, almost exalbuminous; cotyledons plano-convex, fleshy, sometimes ruminant.

## COMMENTS

A family of ca. 545 species in 27 genera, of pantropical distribution. Brazil harbours ca. 270 species in 13 genera, occurring primarily in tropical lowland forests (Amazon and Atlantic coastal forests), and also present in secondary and dry forests, cerrado, campo rupestre, campina, savanna, and flooded forests. Chrysobalanaceae is distinguished from its sister clade (Balanopaceae, Dichapetalaceae, Euphroniaceae and Trigoniaceae) by the gynobasic style and silica in the wood.

## Life Form

Shrub, Subshrub, Tree

### Substrate

Terrestrial, Unknown

## DISTRIBUTION

Native, Not endemic to Brazil

### Phytogeographic Domains

Amazon Rainforest, Caatinga, Central Brazilian Savanna, Atlantic Rainforest

### Vegetation Types

Anthropic area, Caatinga (stricto sensu), Amazonian Campinarana, Flooded Field (Várzea), Cerrado (lato sensu), Riverine Forest and/or Gallery Forest, Inundated Forest (Igapó), Terra Firme Forest, Inundated Forest (Várzea), Seasonally Semideciduous Forest, Ombrophylous Forest (Tropical Rain Forest), Mixed Ombrophylous Forest, Coastal Forest (Restinga), Amazonian Savanna, Rock outcrop vegetation

### Geographic Distribution

#### Confirmed occurrences

North (Acre, Amazonas, Amapá, Pará, Rondônia, Roraima, Tocantins)  
 Northeast (Alagoas, Bahia, Ceará, Maranhão, Paraíba, Pernambuco, Piauí, Rio Grande do Norte, Sergipe)  
 Central-west (Distrito Federal, Goiás, Mato Grosso do Sul, Mato Grosso)  
 Southeast (Espírito Santo, Minas Gerais, Rio de Janeiro, São Paulo)  
 South (Paraná, Rio Grande do Sul, Santa Catarina)

#### Possible occurrences

North (Acre, Amazonas, Rondônia, Roraima, Tocantins)  
 Northeast (Maranhão)  
 Central-west (Distrito Federal, Goiás, Mato Grosso do Sul, Mato Grosso)  
 Southeast (Espírito Santo, Rio de Janeiro)

## IDENTIFICATION KEY

- 1 Ovary bilocular, inserted laterally on wall or mouth of receptacle; stamens inserted unilaterally
  - 2 Leaf lamina lower surface with reticulate venation, stomatal cavities or lanate (never glabrous); epicarp verrucose.....***Parinari***
  - 2: Leaf lamina lower surface venation not reticulate, indistinct, without stomatal cavities, glabrous or with whitish pubescence; epicarp smooth.....***Exellodendron***
- 1: Ovary unilocular, inserted at base, laterally on wall or at mouth of receptacle; stamens inserted unilaterally, in a semi- or complete circle
  - 3 Ovary inserted at base of receptacle
    - 4 Petals absent; stamens (2–)3–19(–22)
      - 5 Stamens exserted, always in a complete circle, 7–19(–22).....***Leptobalanus***
      - 5: Stamens included, unilateral or less frequently in a complete circle, 2–11.....***Licania***
    - 4: Petals present; stamens 5–90
      - 6 Stamens included, equal to or sometimes slightly longer than calyx, 3–14
        - 7 Leaf lower surface glabrous or hirsute; stamens 3–10.....***Hymenopus***
        - 7: Leaf lower surface deeply reticulate or with stomatal cavities; stamens 8–14  
 ..... ***Microdesmia***
      - 6: Stamens exserted (or less often equalling calyx), 11–45(–90)
        - 8 Stamens 12–26; filaments partially fused in groups, pubescent. Fruit costate  
 .....***Chrysobalanus***
        - 8: Stamens 11–90; filaments free almost to base, glabrous. Fruit not costate..... ***Moquilea***
  - 3: Ovary inserted at mouth of receptacle or laterally on wall of receptacle
    - 9 Leaf lamina glabrous or hispid, without stomatal cavities. Bracts and bracteoles frequentemente com glandular. Stamens 3–9, inserted unilaterally.....***Hirtella***
    - 9: Leaf lamina glabrous or pubescent, not hispid, or with stomatal cavities. Bracteoles not glandular. Stamens 12–300, unilateral or in a complete circle
      - 10 Stamens exserted barely beyond calyx; ovary inserted laterally in mid receptacle

- .....*Parinariopsis*
- 10:** Stamens far-exserted; ovary inserted at mouth of receptacle
- 11** Leaf lamina with lanate pubescence, or hairs only between reticulations or within stomatal cavities, deeply reticulate, usually with stomatal cavities.....*Gaulettia*
- 11:** Leaf lamina lanate, tomentose, hirsute or glabrous, without stomatal cavities
- 12** Stamens free or united into a ligule for up to ½ the length. Lamina glabrous. Calyx lobes with 2 glands on exterior.....*Acioa*
- 12:** Stamens free or sometimes united at base only. Lamina glabrous, lanate, tomentose, hirsute. Calyx lobes without glands on exterior.....*Couepia*

## REFERENCE

- Chave, J., Sothers, C., Iribar, A., Suescun, U., Chase, M.W. & Prance, G.T. (2020). Rapid diversification rates in Amazonian Chrysobalanaceae inferred from plastid genome phylogenetics. *Botanical Journal of the Linnean Society* 194: 271-289.
- Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), *Species Plantarum: Flora of the World 9*. Australian Biological Resources Study, Canberra.
- Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 2, Acioa to Magnistipula. In: A. E. Orchard & A. J. G. Wilson (eds), *Species Plantarum: Flora of the World 10*. Australian Biological Resources Study, Canberra.

# Acioa Aubl.

This treatment is composed of the following taxa: *Acioa*, *Acioa dolichopoda*, *Acioa edulis*, *Acioa guianensis*, *Acioa longipendula*, *Acioa schultesii*, *Acioa somnolens*.

## HOW TO CITE

Sothers, C.A., Prance, G.T. 2020. *Acioa* in **Flora do Brasil 2020**. Jardim Botânico do Rio de Janeiro. Available at: <http://floradobrasil.jbrj.gov.br/reflora/floradobrasil/FB34619>.

## Has as synonym

homotype *Acia* Schreb.

homotype *Dulacia* Neck.

## DESCRIPTION

Trees. Leaves: stipules intrapetiolar, persistent or caducous; petiole eglandular; lamina usually coriaceous, with 1 or 2 pairs of glands at base and smaller discoid glands; lower surface glabrous. Inflorescence a panicle or corymbose panicle with flattened axes, pendulous or upright. Bracteoles minute, persistent, eglandular. Flowers bisexual, strongly zygomorphic. Receptacle tube campanulate, obconic or turbinate. Sepals 5, glabrous outside except for the ciliolate margins, suborbicular, concave, unequal in size, 3 large, 2 small; 3 outer sepals with 1 or 2 large discoid glands towards the base. Petals 5, often with ciliate margin. Stamens 10-32, ligulately connate or free; staminodes absent or represented by minute denticulations or fimbriate on disc. Ovary 1-carpellary, 1-locular, inserted laterally at mouth of receptacle tube, glabrous or tomentose; style hairy at base or throughout, slightly 3-lobed at apex. Fruit a drupe 8 cm or more in length; epicarp smooth or verrucose, pericarp poorly differentiated into mesocarp and endocarp, thick, hard and fibrous, glabrous or lanate inside, on germination breaking up irregularly.

## COMMENTS

Genus of six species, occurring in northern South America. An oil for cooking and soap-making is extracted from the seeds of *Acioa edulis*, *A. longipendula* and *A. dolichopoda*; the cotyledons are also eaten raw. These species are cultivated locally and more widely throughout the Amazon.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types

Riverine Forest and/or Gallery Forest, Terra Firme Forest, Ombrophyllous Forest (Tropical Rain Forest)

## Geographic Distribution

### Confirmed occurrences

North (Amazonas, Amapá, Pará)

## IDENTIFICATION KEY

1 Leaves with prominently reticulate venation; stamens free.....*A. edulis*

1:Leaves with inconspicuous venation; stamens free or fused

2Stamens free

- 3** Exterior of receptacle pubescent; receptacle cylindrical-turbinate, 14-22 mm long; stamens c. 32; petioles 4-8 mm long.....  
.....*A. longipendula*
- 3:** Exterior of receptacle glabrous or almost so; receptacle campanulate, 4-6 mm long; stamens 16-21; petioles 10-12 mm long.....*A. dolichopoda*
- 2:**Stamens fused into a ligule
- 4** Receptacle tube campanulate, as long as the sepals; staminal ligule with several branches at base.....*A. schultesii*
- 4:** Receptacle-tube obconical, longer than the sepals, gradually narrowed into the pedicel; filaments united to form an unbranched staminal ligule
- 5** Leaves shortly cuspidate at apex, cuneate or decurrent into petiole at base.....*A. guianensis*
- 5:** Leaves rounded or emarginate at apex, rounded at base.....*A. somnolens*

## REFERENCE

- Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 2, Acioa to Magnistipula. In: A. E. Orchard & A. J. G. Wilson (eds), Species Plantarum: Flora of the World 10. Australian Biological Resources Study, Canberra.
- Sothers C.A., Prance G.T., Buerki S., Kok, R. de & Chase, M.W. (2014). Taxonomic novelties in Neotropical Chrysobalanaceae: towards a monophyletic *Couepia*. *Phytotaxa* 172: 176 – 200.
- Prance, G.T. 1972. Chrysobalanaceae. *Flora Neotropica* 9: 1-409.
- Prance, G.T. 1989. Chrysobalanaceae (Supplement). *Flora Neotropica* 9: 1-267

# *Acioa dolichopoda* (Prance) Sothers & Prance

## Has as synonym

basionym *Couepia dolichopoda* Prance

## DESCRIPTION

**Leaf:** shape elliptic. **Flower:** receptacle campanulate; **stamen number** 16 - 21; **stamen** free; **stamen insertion** unilateral. **Fruit:** epicarp glabrous/smooth.

## ADDITIONAL DESCRIPTION

Tree to 30 m . Branches glabrous when young. Leaves: stipules unknown; petioles 10-12 mm long, glabrous, shallowly canaliculate; lamina elliptic, coriaceous, 9-11.5 × 3.8-5.3 cm, cuneate at base, acuminate at apex with acumen 10-15 mm long, glabrous on both surfaces; midrib prominulous on both surfaces, glabrous; primary veins 6-8 pairs, almost plane on both surfaces. Inflorescences of pendulous panicles on long peduncles up to 75 cm; rachis and branches glabrous; branches small, numerous. Bracts and bracteoles 0.5-1.5 mm long, acute, glabrous except for the sparsely ciliate margins, subpersistent. Receptacle campanulate; tube 4-6 mm long, contracted into pedicels 10-15 mm long, glabrous within and without. Calyx lobes 5, rounded, unequal, with 2 longer than the other 3, sparsely puberulous when young; margins ciliate; exterior with 2 sessile conspicuous glands. Petals 5, glabrous, caducous, red. Stamens 16-21, unilateral, with c. 8 tooth-like staminodes opposite; filaments free and far exerted. Ovary sparsely villous. Style glabrous. Fruit obpyriform, 4.5 cm long × 3.5 cm wide at broadest point which is well below mid-point; exocarp smooth, glabrous; mesocarp thick, hard, fibrous; endocarp thin, bony.

## COMMENTS

Fruits are edible and an oil is extracted from the seeds used for cooking. Also distributed in Peru and in Colombia, where it is extensively cultivated for its fruits.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types



Terra Firme Forest

## Geographic Distribution

### Confirmed occurrences

North (Amazonas)

## HERBARIUM MATERIAL

Croat, T.B., 19382, NYBG, 428080,  (NY00428080), NY, **Typus**  
Lleras, E., P17294, INPA, 40488,  (INPA0040488), INPA, Amazonas

## REFERENCE

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 2, *Acioa* to *Magnistipula*. In: A. E. Orchard & A. J. G. Wilson (eds), *Species Plantarum: Flora of the World 10*. Australian Biological Resources Study, Canberra.

Sothers C.A., Prance G.T., Buerki S., Kok, R. de & Chase, M.W. (2014). Taxonomic novelties in Neotropical Chrysobalanaceae: towards a monophyletic *Couepia*. *Phytotaxa* 172: 176 – 200.

# *Acioa edulis* Prance

## Has as synonym

homotype *Couepia edulis* (Prance) Prance

## DESCRIPTION

**Leaf:** shape oblong. **Flower:** receptacle conical; **stamen number** 17 - 20; **stamen** free; **stamen insertion** semi circular. **Fruit:** epicarp glabrous/verrucose.

## ADDITIONAL DESCRIPTION

Tree to 25 m tall. Trunk slightly buttressed to 0.5 m. Branches glabrous when young. Leaves: stipules linear, membranous, 5-8 mm long, glabrous, caducous; petioles 1.5-2.5 cm long, terete, glabrous; lamina oblong, thickly coriaceous, 7-17 × 4.5-12 cm, rounded at base, acuminate at apex with acumen 2-6 mm long, glabrous on both surfaces, with 2 glands near to base of lower surface; midrib prominulous above, prominent beneath; primary veins 9-11 pairs, prominent on both surfaces; secondary venation prominent on both surfaces. Inflorescences much-branched slightly corymbose panicles, 5-10 cm long; rachis and branches glabrous. Receptacle conical, slightly curved near base, 6-7 mm long, glabrous on exterior, with pilose hairs on interior below insertion of style and glabrous on other side; interior lined by an extremely thick disc with only a small hollow portion. Calyx lobes 5, rounded, unequal, 3-5 mm long, glabrous with 2 glands on exterior, with ciliate margins, appressed-puberulous on interior. Petals 5, pale lilac, caducous, glabrous, with ciliate margins. Stamens 17-20, inserted in 2 rows around 1/2 of the thick staminal ring, the other 1/2 of the ring with staminodes, with a circle of deflexed hairs inserted on interior at base of staminal ring; filaments glabrous, free. Ovary inserted at mouth of receptacle on the same side as stamens, glabrous on exterior, glabrous within, unilocular. Style inserted at base of ovary towards interior, equalling stamens in length; swollen base pilose; filamentous portion glabrous. Fruit ellipsoid, 6-7.5 cm long x 4-5 cm broad; exocarp glabrous, lenticellate; mesocarp 12-14 mm thick; endocarp thin, bony, fragile, glabrous within; cotyledons completely filling central cavity.

## COMMENTS

The seeds are edible and eaten raw and are added to beiju (tapioca cakes). An oil is extracted and used for cooking and soap-making.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Is endemic from Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types

Riverine Forest and/or Gallery Forest, Terra Firme Forest, Ombrophyllous Forest (Tropical Rain Forest)













## Geographic Distribution

### Confirmed occurrences

North (Amazonas)



## HERBARIUM MATERIAL

G.T. Prance, 14015, US, 2636769,  (US00130981), R-, 163366,  (R000163366), US, 2636768,  (US00130982), US, 2636766,  (US01857505), P (P05562767), NY,  (NY00428071), NY,  (NY00428070), NY,  (NY00406439), NY,  (NY00406438), NY,  (NY00406437), NY,  (NY00406436), GH,  (GH00046163), K,  (K000220996), RB, MG, FHO, Amazonas, **Typus**

## REFERENCE

- Prance, G.T. 1989. Chrysobalanaceae (Supplement). *Flora Neotropica* 9: 1-267.
- Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 2, *Acioa* to *Magnistipula*. In: A. E. Orchard & A. J. G. Wilson (eds), *Species Plantarum: Flora of the World* 10. Australian Biological Resources Study, Canberra.
- Sothers C.A., Prance G.T., Buerki S., Kok, R. de & Chase, M.W. (2014). Taxonomic novelties in Neotropical Chrysobalanaceae: towards a monophyletic *Couepia*. *Phytotaxa* 172: 176 – 200.

# *Acioa guianensis* Aubl.

## Has as synonym

homotype *Acioa dulcis* (Willd.) Steud.

heterotypic *Acia dulcis* Willd.

heterotypic *Licania aubletiana* (Blume) Lemée

heterotypic *Moquilea aubletiana* Blume

## DESCRIPTION

**Leaf: shape** oblong/ovate. **Flower: receptacle** obconic/tubular; **stamen number** 10 - 12; **stamen** fused; **stamen insertion** unilateral. **Fruit: epicarp** glabrous/verrucose.

## ADDITIONAL DESCRIPTION

Tree. Leaves: stipules caducous; petioles 5-12 mm long, 1.5-3 mm thick, glabrous, terete; lamina ovate to oblong, 7-17.5 × 3-8.3 cm, cuneate or slightly tapered at base, abruptly short-acuminate at apex, with acumen 2-5 mm long, glabrous on both surfaces; primary veins 7-9 pairs, inconspicuous on both surfaces. Inflorescences terminal and axillary panicles, with glabrous rachis and branches. Receptacle obconic-tubular, 10-30 mm long, glabrous on exterior, glabrous within except for deflexed hairs at throat. Calyx lobes 5, pubescent within. Petals 5, pale reddish-purple, with minutely serrate margins. Stamens unilateral, 10-12; filaments ligulately connate for at least half of length. Ovary inserted at mouth of receptacle, densely pilose. Style pilose on lower portion. Fruit ellipsoid; epicarp glabrous and sparsely lenticellate; mesocarp to 14 mm thick, fibrous; endocarp thick, hard, merging gradually into mesocarp, with thick fibres, lacking mechanism for seedling escape, glabrous within.

## COMMENTS

Occurs in French Guiana as well as northern Brazil (AM, AP).

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types




Riverine Forest and/or Gallery Forest, Terra Firme Forest

## Geographic Distribution

### Confirmed occurrences

North (Amazonas, Amapá)

## HERBARIUM MATERIAL

J.M. Pires, 50490, US, 115184,  (US01857512), US, 115184,  (US01857511), P (P04735918), K,  (K001242068), G, IAN, NY, RB, 115184,  (RB00068193), Amapá

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. *Flora Neotropica* 9: 1-409.

Prance, G.T. 1989. Chrysobalanaceae (Supplement). *Flora Neotropica* 9: 1-267.

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 2, *Acioa* to *Magnistipula*. In: A. E. Orchard & A. J. G. Wilson (eds), *Species Plantarum: Flora of the World* 10. Australian Biological Resources Study, Canberra.

Sothers C.A., Prance G.T., Buerki S., Kok, R. de & Chase, M.W. (2014). Taxonomic novelties in Neotropical Chrysobalanaceae: towards a monophyletic *Couepia*. *Phytotaxa* 172: 176 – 200.

# *Acioa longipendula* (Pilg.) Sothers & Prance

## Has as synonym

basionym *Couepia longipendula* Pilg.

## DESCRIPTION

**Leaf:** shape oblong-elliptic. **Flower:** receptacle turbinate; **stamen number** 32; **stamen** free; **stamen insertion** complete circular. **Fruit:** epicarp smooth/indumentum.

## ADDITIONAL DESCRIPTION

Tree 5-30 m tall. Leaves: stipules lanceolate, to 3 mm long, persistent; petioles 4-8 mm long, weakly canaliculate, glabrous; lamina oblong-elliptic, 6-16 × 3-7.5 cm, rounded to cuneate at base, caudately acuminate at apex with acumen 1-1.5 cm long, glabrous on both surfaces; primary veins 5-8 pairs, almost plane. Inflorescences pendulous panicles on long (to 60 cm) peduncles, mostly glabrous but sparsely pubescent towards apex. Bracts and bracteoles 1-3 mm long, apiculate, caducous. Receptacle turbinate, 10-15 mm long, with short light brown pubescence on exterior, completely glabrous within. Calyx lobes rounded, with 2 sessile glands on exterior. Petals 5, rose, caducous, ciliate on margins. Stamens c. 32, inserted in a nearly complete circle, with a few toothed staminodes interspersed on distal side opposite ovary. Ovary densely villous. Style glabrous, flattened at base. Fruit round to ellipsoid, 4-6 × 4 cm; epicarp with short sparse brown pubescence; pericarp hard, thick, fibrous, not differentiated, densely lanate within.

## COMMENTS

The seeds are edible and an oil is extracted from the seeds. Widely cultivated in the region of Manaus and possibly elsewhere in Amazonia.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Is endemic from Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types


Terra Firme Forest

## Geographic Distribution

### Confirmed occurrences

North (Amazonas, Amapá, Pará)

## HERBARIUM MATERIAL

Ule, E., 8854, K,  (K000220976), Amazonas, **Typus**  
Ferreira, C.A.C., 1059, MG (MG082699), Pará

## REFERENCE

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 2, *Acioa* to *Magnistipula*. In: A. E. Orchard & A. J. G. Wilson (eds), *Species Plantarum: Flora of the World 10*. Australian Biological Resources Study, Canberra.

Sothers C.A., Prance G.T., Buerki S., Kok, R. de & Chase, M.W. (2014). Taxonomic novelties in Neotropical Chrysobalanaceae: towards a monophyletic *Couepia*. *Phytotaxa* 172: 176 – 200.

# *Acioa schultesii* Maguire

## DESCRIPTION

**Leaf:** shape oblong-elliptic/elliptic. **Flower:** receptacle campanulate; **stamen number** 15; **stamen** fused; **stamen insertion** unilateral. **Fruit:** epicarp glabrous/verruucose.

## ADDITIONAL DESCRIPTION

Tree. Leaves: stipules caducous (not seen); petioles 3-6 mm long, glabrous, thick; lamina broadly elliptic to oblong-elliptic, 8-16 × 4.5-8.5 cm, obtusely cordate at base, rounded to short-acuminate at apex, glabrous on both surfaces; primary veins inconspicuous. Inflorescences axillary and terminal panicles; rachis and branches glabrous. Bracts and bracteoles small; margins ciliolate. Receptacle broadly campanulate, gibbous, glabrous on exterior, glabrous within except for deflexed hairs at throat. Calyx lobes 5, glabrous on both surfaces except for ciliate margins. Petals 5, white; margins ciliate. Stamens c. 15, unilateral; filaments ligulately connate for half of length, with ligules 5 mm thick. Ovary pilose, inserted at mouth of receptacle. Style glabrous except for hirsute base. Fruit ovoid, 3.8 × 3 cm; exocarp glabrous, lenticellate.

## COMMENTS

Occurs in Brazil and in Colombia and Venezuela.

### Life Form

Tree

### Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

### Phytogeographic Domains

Amazon Rainforest

### Vegetation Types



Terra Firme Forest

### Geographic Distribution

#### Confirmed occurrences

North (Amazonas)

## HERBARIUM MATERIAL

Schultes, R.E., 9958, NY,  (NY00406443), K,  (K000220995), Amazonas, **Typus**

## REFERENCE

- Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 2, *Acioa* to *Magnistipula*. In: A. E. Orchard & A. J. G. Wilson (eds), *Species Plantarum: Flora of the World 10*. Australian Biological Resources Study, Canberra.
- Prance, G.T. 1972. Chrysobalanaceae. *Flora Neotropica* 9: 1-409.
- Prance, G.T. 1989. Chrysobalanaceae (Supplement). *Flora Neotropica* 9: 1-267

# *Acioa somnolens* Maguire

## DESCRIPTION

**Leaf:** shape oblong-elliptic/elliptic. **Flower:** receptacle obconic/tubular; **stamen number** 15; **stamen** fused; **stamen insertion** unilateral. **Fruit:** epicarp unknown.

## ADDITIONAL DESCRIPTION

Tree? Leaves: stipules caducous (not seen); petioles thick, 8-10 mm long, 4-5 mm broad; lamina broadly elliptic to oblong-elliptic, 10-15 × 6-9 cm, rounded to slightly retuse at apex, rounded at base, glabrous on both surfaces; primary veins 6-8 pairs, inconspicuous on both surfaces. Inflorescences terminal and axillary panicles, glabrous. Bracts and bracteoles small, caducous. Receptacle obconic-tubular, 18-20 mm long, glabrous on exterior, glabrous within except for deflexed hairs at throat. Calyx lobes 5, pubescent within. Petals 5, caducous. Stamens c. 15, unilateral; filaments ligulately connate; ligule 10-12 mm long, 2-3 mm broad. Ovary pilose, inserted at mouth of receptacle. Style sparsely hirsute for 2/3 its length. Fruit unknown.

## COMMENTS

Occurs in Brazil and also in French Guiana.

### Life Form

Tree

### Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

### Phytogeographic Domains

Amazon Rainforest

### Vegetation Types

Terra Firme Forest

### Geographic Distribution

#### Confirmed occurrences

North (Amazonas, Amapá)

## HERBARIUM MATERIAL

Melinon, 230, P (P00741120), P (P00741119), P, **Typus**

## REFERENCE

- Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 2, *Acioa* to *Magnistipula*. In: A. E. Orchard & A. J. G. Wilson (eds), *Species Plantarum: Flora of the World 10*. Australian Biological Resources Study, Canberra.
- Prance, G.T. 1972. Chrysobalanaceae. *Flora Neotropica* 9: 1-409.

# Chrysobalanus L.

This treatment is composed of the following taxa: *Chrysobalanus*, *Chrysobalanus icaco*, *Chrysobalanus prancei*.

## HOW TO CITE

Sothers, C.A., Prance, G.T. 2020. *Chrysobalanus* in **Flora do Brasil 2020**. Jardim Botânico do Rio de Janeiro. Available at: <http://floradobrasil.jbrj.gov.br/reflora/floradobrasil/FB16758>.

## Has as synonym

homotype *Icaco* Plum. ex Adans.

## DESCRIPTION

Shrubs or small to medium-sized trees. Leaves: stipules small, axillary, caducous; petiole eglandular; lower surface of lamina glabrous or with a few stiff, appressed hairs; 2 or more glands on lower surface. Inflorescence few-flowered, a short raceme of cymules or cymose throughout, or a false raceme, or a sessile fascicle. Bracts small, eglandular. Flowers bisexual, actinomorphic. Receptacle-tube cupuliform, interior and exterior puberulous. Sepals 5, acute, subequal. Petals 5, longer than the sepals. Stamens 12-26, forming a complete circle; filaments hairy, approximately twice as long as sepals, slightly united into groups at the base. Ovary monocarpellary, 1-locular, inserted at base of receptacle-tube, covered with a dense mass of hairs; style puberulous; stigma slightly expanded, shallowly 3-lobed. Drupe small, glabrous; endocarp thin, hard, interior glabrous and exterior smooth, with 4-8 prominent longitudinal ridges corresponding to the lines of fracture that allow seedling to escape.

## COMMENTS

Genus of three species, of which two occurring in Brazil.

## Life Form

Shrub, Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest, Atlantic Rainforest

## Vegetation Types

Ombrophylous Forest (Tropical Rain Forest), Coastal Forest (Restinga)

## Geographic Distribution

### Confirmed occurrences

North (Amazonas, Amapá, Pará)

Northeast (Alagoas, Bahia, Ceará, Maranhão, Paraíba, Piauí, Rio Grande do Norte, Sergipe)

Southeast (Espírito Santo, Rio de Janeiro, São Paulo)

## IDENTIFICATION KEY

1 Inflorescence usually with 7 or more sessile or subsessile flowers; receptacle-tube and sepals grey-tomentellous outside; leaves orbicular to lanceolate-acuminate.....*C. icaco*



**1:** Inflorescence with 1-5 flowers terminating in a stalk 0.4-0.6 cm long with 2 conspicuous bracteoles; receptacle-tube and sepals ferruginous outside; leaves elliptic to oblong.....*C. prancei*

## REFERENCE

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), Species Plantarum: Flora of the World 9. Australian Biological Resources Study, Canberra.

# Chrysobalanus icaco L.

This treatment is composed of the following taxa: *Chrysobalanus icaco*, *Chrysobalanus icaco* subsp. *icaco*.

## DESCRIPTION

**Leaf: shape** orbicular/ovate elliptic. **Inflorescence: type** cymule. **Flower: receptacle shape** cupuliform; **filament fusion** fused basally; **stamen number** 12 to 26. **Fruit: epicarp** glabrous/smooth/ridge.

## ADDITIONAL DESCRIPTION

Shrub or small tree to 5 m tall. Branches glabrous and lenticellate. Leaves: stipules deciduous, 1-3 mm long; petioles 2-4 mm long; lamina orbicular to ovate-elliptic, 2.8 × 1.2-6 cm, retuse, rounded or with a short blunt acumen not exceeding 2 mm at apex, subcuneate at base, glabrous on both surfaces; primary veins inconspicuous. Inflorescences small terminal and axillary cymules with grey-brown tomentum. Receptacle cupuliform, tomentose on interior and exterior. Calyx lobes 5, rounded to acute. Petals exceeding calyx lobes, white, glabrous. Stamens 12-26; filaments joined for part of their length in small groups, densely hairy. Ovary pilose. Fruit ovate to obovate, 1.8-5 cm long; epicarp smooth with longitudinal ridges; mesocarp thin and fleshy; endocarp thin and hard with smooth, ridged exterior.

### Life Form

Shrub, Tree

### Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

### Phytogeographic Domains

Amazon Rainforest, Atlantic Rainforest

### Vegetation Types

Coastal Forest (Restinga)

### Geographic Distribution

#### Confirmed occurrences

North (Amazonas, Amapá, Pará)


Northeast (Alagoas, Bahia, Ceará, Maranhão, Paraíba, Piauí, Rio Grande do Norte, Sergipe)


Southeast (Espírito Santo, Rio de Janeiro, São Paulo)

## HERBARIUM MATERIAL

Black, GA, 3614, IAN (IAN038110), Pará

G. Martinelli, 11055., RB

Dionisio Constantino, s.n., RB, 29814,  (RB00068265), Rio de Janeiro

J.A.de Jesus, 489, RB, 144117,  (RB00068256), Bahia

F. Villwock, s.n., HCF (HCF000029390), Rio Grande do Norte

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. Flora Neotropica 9: 1-409.

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), Species Plantarum: Flora of the World 9. Australian Biological Resources Study, Canberra.



# *Chrysobalanus icaco* L. subsp. *icaco*

## Has as synonym

heterotypic *Chrysobalanus ellipticus* Sol. ex Sabine  
 heterotypic *Chrysobalanus icaco* subsp. *ellipticus* (Sol. ex Sabine) Souza  
 heterotypic *Chrysobalanus icaco* subsp. *orbicularis* (Schumach.) Souza  
 heterotypic *Chrysobalanus icaco* subsp. *pellocarpus* (G.Mey.) A.E.Murray  
 heterotypic *Chrysobalanus icaco* var. *pellocarpus* (G.Mey.) Hook.f.  
 heterotypic *Chrysobalanus interior* Small  
 heterotypic *Chrysobalanus orbicularis* Schumach.  
 heterotypic *Chrysobalanus pellocarpus* G.Mey.  
 heterotypic *Chrysobalanus savannarum* Britton  
*Chrysobalanus guianensis* Klotzsch  
*Chrysobalanus icaco* var. *luteus* (Sabine) Souza  
*Chrysobalanus icaco* var. *macrocarpus* Souza  
*Chrysobalanus icaco* var. *roseus* Souza  
*Chrysobalanus luteus* Sabine  
*Chrysobalanus purpureus* Mill.

## DESCRIPTION

Leaves orbicular to broadly elliptic or oblong-elliptic, apex emarginate, rounded or shortly and bluntly cuspidate.

### **Life Form**

Shrub, Tree

### **Substrate**

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

### **Phytogeographic Domains**

Amazon Rainforest, Atlantic Rainforest

### **Vegetation Types**

Coastal Forest (Restinga)

### **Geographic Distribution**

#### Confirmed occurrences

North (Amapá, Pará)

Northeast (Alagoas, Bahia, Ceará, Maranhão, Paraíba, Piauí)

Southeast (Espírito Santo, Rio de Janeiro, São Paulo)

## HERBARIUM MATERIAL

C. Farney, 2151, NY, GUA

Guedes, ML, 18141, ALCB (ALCB042306), Bahia

## REFERENCE

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), Species Plantarum: Flora of the World 9. Australian Biological Resources Study, Canberra.

# *Chrysobalanus prancei* I.M.Turner

## Has as synonym

basionym *Chrysobalanus venezuelanus* Prance

## DESCRIPTION

**Leaf:** shape oblong-elliptic. **Inflorescence:** type cymule. **Flower:** receptacle shape campanulate; **filament fusion** free; **stamen number** 14 to 15. **Fruit:** epicarp glabrous/costate.

## ADDITIONAL DESCRIPTION

Tree, 10 m tall. Branches sparsely puberulous to glabrescent when young. Leaves: stipules caducous, membranous, axillary; petioles 2-4 mm long, terete, rugulose, glabrous; lamina oblong-elliptic, coriaceous, 5.5-11 × 2.2-4.2 cm, cuneate at base, caudate at apex; acumen 10-17 mm long; glabrous and shiny above, glabrous beneath except for appressed hairs on midrib and primary veins of lower surface of very young leaves; midrib prominulous above, prominent beneath; primary veins 6-8 pairs, prominulous on both surfaces. Inflorescences of few-flowered cymules, rachis to 5 cm long; rachis and branches ferruginous-pubescent; bracts and bracteoles ovate, membranous, puberulous on exterior, c. 1 mm long, caducous. Flowers 3 mm long, in small cymules. Receptacle campanulate, tomentellous on exterior, tomentose within; calyx lobes rounded, tomentellous. Petals 5, ovate, glabrous. Stamens 14 or 15, inserted around complete circle; filaments shortly exerted, pubescent. Ovary inserted at base of receptacle, lanate; style equalling filaments in length. Fruit oblong, costate; exocarp glabrous except when young.

## Life Form

Tree

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types




Ombrophyllous Forest (Tropical Rain Forest)

## Geographic Distribution

### Confirmed occurrences

North (Amazonas)

## HERBARIUM MATERIAL

Sothers, CA, 962, INPA, 188345,   (INPA0188345), Amazonas  
A. L. Bernardi, 2777, NYBG, 428054,  (NY00428054), **Typus**

## REFERENCE

- Turner, I.M. (2018). Names of Extant Angiosperm Species that are Illegitimate Homonyms of Fossils. *Annales Botanici Fennici*, 51(5):305-317. Pg. 306
- Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), Species Plantarum: Flora of the World 9. Australian Biological Resources Study, Canberra.

# Couepia Aubl.

This treatment is composed of the following taxa: *Couepia*, *Couepia belemii*, *Couepia bernardii*, *Couepia bondarii*, *Couepia bracteosa*, *Couepia brevistaminea*, *Couepia carautae*, *Couepia caryophylloides*, *Couepia cataractae*, *Couepia chrysocalyx*, *Couepia cidiana*, *Couepia coarctata*, *Couepia eriantha*, *Couepia excelsa*, *Couepia froesii*, *Couepia glabra*, *Couepia grandiflora*, *Couepia guianensis*, *Couepia habrantha*, *Couepia impressa*, *Couepia insignis*, *Couepia joaquinae*, *Couepia krukovii*, *Couepia latifolia*, *Couepia leitaofilhoi*, *Couepia longipetiolata*, *Couepia macrophylla*, *Couepia magnoliifolia*, *Couepia maguirei*, *Couepia marleneae*, *Couepia meridionalis*, *Couepia monteclarensis*, *Couepia morii*, *Couepia multiflora*, *Couepia obovata*, *Couepia ovalifolia*, *Couepia oxossii*, *Couepia paraensis*, *Couepia parvifolia*, *Couepia pernambucensis*, *Couepia rankiniae*, *Couepia reflexa*, *Couepia robusta*, *Couepia rufa*, *Couepia schottii*, *Couepia spicata*, *Couepia stipularis*, *Couepia subcordata*, *Couepia trapezioana*, *Couepia uiti*, *Couepia ulei*, *Couepia venosa*, *Couepia williamsii*.

## HOW TO CITE

Sothers, C.A., Prance, G.T. 2020. *Couepia* in **Flora do Brasil 2020**. Jardim Botânico do Rio de Janeiro. Available at: <http://floradobrasil.jbrj.gov.br/reflora/floradobrasil/FB16761>.

## Has as synonym

heterotypic *Grymania* C. Presl

heterotypic *Pleragina* Arruda

## DESCRIPTION

Trees or shrubs. Leaves: stipules subulate or deltate, persistent or sub-persistent; petiole eglandular; lamina often with 1 or 2 pairs of glands at base and sometimes with several small marginal glands especially near apex; lower surface of lamina glabrous or with arachnoid indumentum. Inflorescence a panicle, spike or raceme, rarely flowers solitary. Pedicels usually shorter than receptacle tube. Bracts and bracteoles usually persistent, sometimes enclosing flower-buds in small groups, eglandular. Flowers bisexual, zygomorphic. Receptacle tube campanulate to narrowly cylindrical, often slightly curved, ventricose, rarely longer than the calyx, interior hollow, usually glabrous inside except at throat, less often hairy within; receptacle disc well developed. Sepals 5, subequal, spreading or reflexed, acute or rounded, usually eglandular. Petals 5, white, caducous,  $\pm$ equalling sepals, orbicular to lingulate, sometimes shortly unguiculate. Stamens 20-300, rarely less than 15; filaments inserted on abaxial surface of disc, usually forming a complete circle, less frequently unilateral, shortly to far-exserted, but not much longer than the combined length of calyx and receptacle tube; staminodes absent or short and filiform. Ovary 1 (2 or 3)-carpellary, 1-locular, inserted laterally at mouth of receptacle tube; style filiform, far-exserted, indistinctly 3-lobed at apex, hairy for greater part of length. Fruit a drupe 2.5-12 cm or more long; endocarp hard, granular, shortly hairy inside, on germination breaking up irregularly, surface without longitudinal channels, rough and irregular owing to fusiform anticlinal aggregations of stone cells and fibres which penetrate the mesocarp  $\pm$ deeply.

## COMMENTS

Genus with ca. 64 species in the Neotropics, widely distributed from Mexico, Central America, throughout South America to southern Brazil and Paraguay. In Brazil the genus is represented by 54 species occurring in almost all the states, but with the greatest diversity in Amazonia.

## Life Form

Shrub, Tree

## Substrate

Terrestrial, Unknown

## DISTRIBUTION

Native, Not endemic to Brazil

### Phytogeographic Domains

Amazon Rainforest, Caatinga, Central Brazilian Savanna, Atlantic Rainforest

### Vegetation Types

Flooded Field (Várzea), Cerrado (lato sensu), Riverine Forest and/or Gallery Forest, Inundated Forest (Igapó), Terra Firme Forest, Inundated Forest (Várzea), Ombrophyllous Forest (Tropical Rain Forest), Coastal Forest (Restinga), Amazonian Savanna

### Geographic Distribution

#### Confirmed occurrences

North (Acre, Amazonas, Amapá, Pará, Rondônia, Roraima, Tocantins)  
 Northeast (Alagoas, Bahia, Ceará, Maranhão, Pernambuco, Piauí, Sergipe)  
 Central-west (Distrito Federal, Goiás, Mato Grosso do Sul, Mato Grosso)  
 Southeast (Espírito Santo, Minas Gerais, Rio de Janeiro, São Paulo)  
 South (Paraná)

#### Possible occurrences

North (Tocantins)  
 Central-west (Mato Grosso)

## IDENTIFICATION KEY

- 1 Inflorescence a raceme or spike
- 2 Leaves prominently reticulate beneath, with conspicuous parallel primary veins; exocarp often tomentellous
- 3 Inflorescence grey puberulous; leaf venation only prominulous; fruit exterior glabrous and smooth ..... **C. bernardii**
- 3: Inflorescence densely ferruginous; leaf venation prominent; fruit exterior verrucose or tomentose
- 2: Leaves not prominently reticulate beneath; fruit exocarp always glabrous, smooth or verrucose
- 4 Bracteoles persistent, and at least 3/4 the length of receptacle or more than 10 mm long
- 5 Flowers not more than 4 mm long ..... **C. spicata**
- 5: Flowers 6 mm long or more
- 6 Flowers 16-75 mm long; stamens more than 50; leaves 14-26 cm long
- 7 Primary leaf veins distinctly anastomosing at margins to form a marginal vein; leaf base rounded to subcordate; receptacle subcylindrical or tubular, 30-50 mm long
- 8 Flowers 16-18 mm long; receptacle subcylindrical, glabrous except for reflexed hairs at apex; stipules to 15 mm long, caducous ..... **C. insignis**
- 8: Flowers 60-75 mm long; receptacle tubular, tomentose within almost to base; stipules 20-35 mm long, persistent ..... **C. cidiana**
- 7: Primary leaf veins not anastomosing; leaf base cuneate to rounded; receptacle tubular, 12-15 mm long ..... **C. bondarii**
- 6: Flowers 6-12 mm long; stamens 15-28; leaves 6-18 cm long..... **C. habrantha**
- 4: Bracteoles caducous or less than 1/2 the length of receptacle, under 10 mm long
- 9 Stamens less than 40
- 10 Receptacle subcylindrical, densely ferruginous-sericeous
- 11 Leaves narrowly oblong, 7-10 cm long, 2-3.3 cm broad, glabrous beneath; receptacle light-brown on exterior; stamens c. 35 ..... **C. carautae**
- 11: Leaves broadly oblong, 12-24 cm long, 4.5-8.5 cm broad, ferruginous-lanate-pubescent beneath; receptacle ferruginous on exterior; stamens c. 25..... **C. magnoliifolia**
- 10: Receptacle cylindrical, with sparse appressed pubescence only
- 12 Leaves obovate, 2.5-10 cm long, bluntly acuminate; bracteoles persistent or subpersistent; stamens in a complete circle..... **C. obovata**
- 12: Leaves oblong-lanceolate, 9-15 cm long, with a long acumen; bracteoles caducous; stamens unilateral ..... **C. guianensis**
- 9: Stamens numerous (more than 60)
- 13 Receptacle glabrous or with sparse appressed grey tomentum on exterior
- 14 Leaves 9-17 cm long, densely appressed-lanate pubescent beneath; primary veins 12-15 pairs... **C. williamsii**
- 14: Leaves 5-8 cm long, sparsely pubescent beneath; primary veins 7-10 pairs..... **C. marleneae**
- 13: Receptacle with dense brown pubescence on exterior
- 15 Leaves oblong-lanceolate..... **C. krukovii**

- 15: Leaves oblong to oblong-elliptic
- 16 Primary veins 24-30 pairs.....**C. macrophylla**
- 16: Primary veins 16-20 pairs
- 17 Leaf apex with prominent well-developed acumen.....**C. chrysocalyx**
- 17: Leaf apex rounded to bluntly acuminate.....**C. latifolia**
- 1: Inflorescence a panicle
- 18 Bracts and bracteoles persistent at flowering, at least 1/2 as long as receptacle
- 19 Flowers 20-25 mm long; exterior of receptacle and calyx lobes with a long ferruginous sericeous pubescence; leaves glabrous (rarely glabrescent) beneath .....**C. eriantha**
- 19: Flowers 7-20 mm long; exterior of receptacle shortly brown- to greytomentose; leaves arachnoid-pubescent beneath
- 20 Leaves thick and coriaceous; bracteoles always persisting through flowering; rachis of inflorescence and receptacle longitudinally striate, or if not, petioles 13.18 mm long
- 21 Flowers 7-15 mm long; leaf bases subcordate, rarely rounded; rachis and receptacle with longitudinal striations .....**C. bracteosa**
- 21: Flowers 18-22 mm long; leaf bases rounded to subcuneate; rachis and receptacle not longitudinally striate .....**C. belemii**
- 20: Leaves thin and membranous; bracteoles persistent only in bud; rachis and receptacle not longitudinally striate; petioles 4-8 mm long
- 22 Stamens connate at base for at least 1 mm; receptacle tapering to base, subturbinate.....**C. trapezioana**
- 22: Stamens free almost to base; receptacle subcylindrical.....**C. subcordata**
- 18: Bracts and bracteoles not persistent at flowering, or small and inconspicuous
- 23 Interior of receptacle filled with hairs to base
- 24 Primary veins 10-15; exterior of receptacle and calyx lobes with sparse appressed pubescence not completely covering surface ..... **C. paraensis**
- 24: Primary veins 17-28; exterior of receptacle and calyx lobes densely pubescent, completely covering surface
- 25 Petioles canaliculate above; flowers 12-17 mm long; exterior of receptacle and calyx lobes with short brown pubescence; stamens 38-40.....**C. excelsa**
- 25: Petioles not canaliculate; flowers 8-12 mm long; exterior of receptacle and calyx lobes with sparse short grey pubescence; stamens 20-35 .....**C. caryophylloides**
- 23: Interior of receptacle glabrous except for deflexed hairs at throat
- 26 Leaf lower surface completely glabrous; exterior of receptacle usually almost glabrous
- 27 Peduncles elongated (30-80 cm long); exterior of calyx lobes with 2 sessile glands
- 27: Peduncles short (less than 10 cm long); exterior of calyx lobes eglandular
- 28 Stamens 9-11 .....**C. joaquinae**
- 28: Stamens 25-110
- 29 Leaves oblong to oblong-lanceolate, prominently acuminate; inflorescence little-branched, almost racemose; petioles 8-12 mm; stamens c. 110.....**C. glabra**
- 29: Leaves ovate to elliptic, bluntly acuminate; inflorescence much branched; petioles 4-7 mm; stamens 25-45 .....**C. paraensis**
- 26: Leaf lower surface lanate; exterior of receptacle pubescent
- 30 Exterior of receptacle and calyx lobes sparsely appressedpuberulous, the pubescence not forming a complete covering
- 31 Stipules persistent, adnate to the base of petiole; rachis of inflorescence 3-5 mm thick; petal margins glabrous .....**C. stipularis**
- 31: Stipules caducous, not adnate to base of petiole; rachis of inflorescence 1-2.5 mm thick; petal margins ciliate
- 32 Leaf lower surface with distinct, prominulous, parallel secondary venation at 90° to primary veins .....**C. bernardii**
- 32: Leaf lower surface densely lanate-pubescent and smooth, venation obscured beneath pubescence
- 33 Leaves bluntly or shortly acuminate to obtuse; receptacle subcampanulate, 3-5 mm thick at top; inflorescence a much-branched panicle
- 34 Leaves ovate to oblong, 2.5-8.5 cm broad.....**C. paraensis**
- 34: Leaves oblong-lanceolate, 1.5-4 cm broad.....**C. maguirei**
- 33: Leaves prominently acuminate; receptacle cylindrical, c. 2 mm thick at top; inflorescence often with only short 2-3 flowered branches
- 35 Inflorescences erect, much-branched, predominantly terminal panicles..... **C. guianensis**
- 35: Inflorescences little-branched racemose panicles, axillary or predominantly axillary, but with a small terminal branch
- 36 Inflorescences single racemose reflexed panicles; bracteoles persistent.....**C. reflexa**
- 36: Inflorescences erect, terminal and in the upper 2-6 axils; bracteoles caducous ..... **C. guianensis**
- 30: Exterior of receptacle and calyx lobes with dense pubescence forming a complete covering
- 37 Leaves 4-7 cm long; chartaceous; flowers 5-6 mm.....**C. pernambucensis**



- 37: Leaves 2-6 cm long; coriaceous; flowers 9-11 mm.....**C. oxossii**
- 38 Exterior of receptacle and calyx lobes grey-puberulous; primary leaf veins 18-23, slightly impressed above  
.....**C. impressa**
- 38: Exterior of receptacle and calyx lobes brown-tomentose; primary leaf veins 12-14, plane above  
.....**C. multiflora**
- 39 Outer surface of petals distinctly pubescent
- 40 Leaves 2.5-5.5 cm long; primary veins 5-9
- 41 Leaves oblong-lanceolate to oblong; acumen 5-7 mm long; base cuneate; petioles 5-7 mm long.**C. parvifolia**
- 41: Leaves orbicular to elliptic; acumen 0-3 mm long; base rounded to cordate; petioles 2 mm long.....**C. uiti**
- 40: Leaves (4-)6-16 cm long; primary veins 9-17
- 42 Flowers 6-12 mm long; receptacle cylindrical, c. 2 mm thick at top below calyx lobes
- 43 Inflorescence and flowers densely ferruginous-sericeous; flowers 8-12 mm long; petioles 5-10 mm long; receptacle not striate on exterior .....**C. meridionalis**
- 43: Inflorescence and flowers with short grey pubescence; flowers 6-8 mm long; petioles 3-7 mm long; exterior of receptacle longitudinally striate.....**C. ulei**
- 42: Flowers 12-20 mm long; receptacle subcampanulate, 4-6 mm thick
- 44 Pedicels 6-15 mm long; exterior of receptacle and calyx lobes short grey-sordid-puberulent....**C. cataractae**
- 44: Pedicels up to 6 mm in length; exterior of receptacle and calyx lobes spreading brown-tomentose.**C. venosa**
- 45 Leaves oblong to ovate; stamens 50-125.....**C. grandiflora**
- 45: Leaves elliptic to narrowly elliptic; stamens 35-40.....**C. brevistaminea**
- 39: Petals glabrous except for ciliate margins
- 46 Receptacle cylindrical or subcylindrical
- 47 Inflorescence of densely clustered glomerules.....**C. coarctata**
- 47: Inflorescence a loosely branched panicle
- 48 Stamens c. 35; leaf base subcordate to rounded.....**C. subcordata**
- 48: Stamens 15-28; leaf base rounded to cuneate
- 49 Primary leaf veins 8-14 pairs; petioles terete or canaliculate; stamens around partial or complete circle
- 50 Flowers borne on distinctly articulated pedicels with lower part of pedicel persistent after fall of some flowers ..... **C. monteclarensis**
- 50: Pedicels not conspicuously articulated and no part remaining after flower fall
- 51 Leaves 4.5-9.5 × 2-3.5 cm; base cuneate, subcuneate, equal; petioles 4-6 mm ..... **C. sandwithii**
- 51: Leaves 9-17 × 3.5-7.5 cm; base rounded, unequal; petioles 8-11 mm ..... **C. leitaofilhoi**
- 49: Primary leaf veins 14-19 pairs; petioles canaliculate; stamens always around complete circle
- 52 Bracteoles 3-15 mm, enclosing young buds; leaf acumen 5-12 mm ..... **C. morii**
- 52: Bracteoles 1-35 mm, not enclosing young buds; leaf acumen 3-5 mm ..... **C. trapezioana**
- 46: Receptacle broadly campanulate or turbinate
- 53 Stamens 14-20
- 54 Leaves ovate, 4-9 cm long; primary veins 11-15; flowers 8-12 mm long; petioles 4-8 mm long.....**C. ovalifolia**
- 54: Leaves oblong, 10-18 cm long; primary veins 16-20; flowers 11-15 mm long; petioles 10-15 mm long  
.....**C. schottii**
- 53: Stamens more than 28
- 55 Petioles 14-18 mm long; inflorescence densely crowded..... **C. longipetiolata**
- 55: Petioles 2-12 mm long; inflorescence lax
- 56 Leaves 2.5-5.5 × 1.5-3.5 cm.....**C. uiti**
- 56: Leaves 9-27 × 4-12 cm
- 57 Leaf margins undulate and revolute.....**C. rufa**
- 57: Leaf margins plane
- 58 Leaf with short and blunt acumen; lower surface rufous-pubescent; calyx lobes rufous-pubescent on exterior and yellow-brown-pubescent within ..... **C. robusta**
- 58: Leaf with finely pointed acumen, 10-14 mm long or abrupt acumen 3.10 mm long; lower surface grey or brown pubescent; calyx lobes grey-pubescent on both surfaces
- 59 Primary leaf veins 20-24 pairs; close together; leaf acumen 10-14 mm long; epicarp smooth.....**C. froesii**
- 59: Primary leaf veins 12-16 pairs, 1-2.5 cm apart; leaf acumen 3-10 mm long abrupt; epicarp lenticellate.....**C. rankiniae**

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. Flora Neotropica 9: 1-409.

Prance, G.T. 1989. Chrysobalanaceae (Supplement). *Flora Neotropica* 9: 1-267

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 2, *Acioa* to *Magnistipula*. In: A. E. Orchard & A. J. G. Wilson (eds), *Species Plantarum: Flora of the World* 10. Australian Biological Resources Study, Canberra.

Sothers C.A., Prance G.T., Buerki S., Kok, R. de & Chase, M.W. (2014). Taxonomic novelties in Neotropical Chrysobalanaceae: towards a monophyletic *Couepia*. *Phytotaxa* 172: 176 – 200.

# *Couepia belemii* Prance

## DESCRIPTION

**Leaf:** shape oblong-elliptic/oblong; **indumentum** pubescent/arachnoid. **Inflorescence:** type panicle. **Flower:** receptacle shape campanulate; **stamen number** 25 - 45; **filament fusion** free. **Fruit:** epicarp unknown.

## ADDITIONAL DESCRIPTION

Trees, medium sized. Branches glabrous when young, rugose. Leaves: stipules caducous (not seen); petioles 13-20 mm long, glabrescent, rugose, weakly canaliculate; lamina oblong to oblong-elliptic, 11-18 × 4-7 cm, acuminate at apex with acumen 4-8 mm long, rounded to subcuneate at base, glabrous above, densely lanate-arachnoid pubescent beneath; midrib prominent and glabrous above, prominent beneath; primary veins 18-24 pairs, plane above, prominent beneath. Inflorescences of terminal panicles; rachis and branches ferrugineoustomentose. Receptacle sessile, campanulate, 8-14 mm long, densely tomentose on exterior, glabrous within except for ring of deflexed hairs around throat. Calyx lobes acute, 7-10 mm long, tomentose on exterior. Petals 5, white, with ciliate margins. Stamens c. 30, inserted around complete circle. Ovary lanate-pilose. Style tomentose. Fruit not seen.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Is endemic from Brazil

## Phytogeographic Domains

Atlantic Rainforest

## Vegetation Types

Ombrophyllous Forest (Tropical Rain Forest)

## Geographic Distribution

### Confirmed occurrences

Northeast (Bahia)

Southeast (Espírito Santo)

## HERBARIUM MATERIAL

Belém, R.P., 3146, FHO, MG (MG046537), CEPEC,  (CEPEC00004237), NY,  (NY00428060), RB, 344644,  (RB00537116), Bahia, **Typus**  
I.A.SILVA, 283, RB, 230742,  (RB00068685), Espírito Santo

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. Flora Neotropica 9: 1-409.

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 2, Acioa to Magnistipula. In: A. E. Orchard & A. J. G. Wilson (eds), Species Plantarum: Flora of the World 10. Australian Biological Resources Study, Canberra.

# *Couepia bernardii* Prance

## DESCRIPTION

**Leaf:** shape elliptic; **indumentum** pubescent/lanate. **Inflorescence:** type panicle. **Flower:** receptacle shape cylindrical; **stamen number** 14 - 30; **filament fusion** free. **Fruit:** epicarp glabrous/smooth.

## ADDITIONAL DESCRIPTION

Trees. Branches puberulous when young, soon becoming glabrous. Leaves: stipules linear-lanceolate, tomentellous, to 6 mm long, caducous; petioles 4-7 mm long, tomentellous, becoming glabrous with age, rugulose, canaliculate above, eglandular; lamina elliptic, chartaceous, 9-16 × 3.5-6.5 cm, rounded to subcuneate at base, apiculate at apex with acumen 2-8 mm long, glabrous above, with a short appressed-lanate caducous pubescence beneath; midrib prominent on both surfaces; primary veins 12-14 pairs, plane above, prominent beneath; secondary venation prominulous, more or less parallel and 90° to primary veins. Inflorescences of terminal and axillary little-branched panicles with central rachis and short 2-3 flowered branches, or of racemes; rachis and branches puberulous. Receptacle cylindrical 7-8 mm long, sparsely grey-puberulous externally, glabrous within except for deflexed hairs at throat; pedicels c. 1 mm long. Calyx lobes 5, rounded, 2.5 mm long, puberulous externally. Petals 5, white; margins ciliate. Stamens 20-23, unilateral, with arc of circle opposite to them toothed. Ovary tomentose. Style pubescent on lower portion only. Fruit ovoid, c. 5 cm long × 4 cm broad; exocarp hard and smooth or crustaceous when dry, glabrous; mesocarp woody, 6-10 mm thick when dry; endocarp thin, bony, glabrous within.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types




Terra Firme Forest

## Geographic Distribution

### Confirmed occurrences

North (Amazonas)

## HERBARIUM MATERIAL

A. L. Bernardi, s.n., NYBG, 428061,  (NY00428061), Amazonas, **Typus**  
B.A. Krukoff, 6635, US, 1691179,  (US01855873), K,  (K001241909), BR, NY, BM

## REFERENCE

Prance, G.T. 1989. Chrysobalanaceae (Supplement). *Flora Neotropica* 9: 1-267  
Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 2, *Acioa* to *Magnistipula*. In: A. E. Orchard & A. J. G. Wilson (eds), *Species Plantarum: Flora of the World* 10. Australian Biological Resources Study, Canberra.

# *Couepia bondarii* Prance

## DESCRIPTION

**Leaf:** shape oblong/lanceolate; **indumentum** pubescent/arachnoid. **Inflorescence:** type raceme. **Flower:** receptacle shape cylindrical; **stamen number** more than 60; **filament fusion** fused basally. **Fruit:** epicarp glabrous/smooth.

## ADDITIONAL DESCRIPTION

Trees, small. Branches glabrous when young. Leaves: stipules lanceolate, membranous, to 30 mm long, caducous; petioles 6-10 mm long, terete, tomentellous; lamina oblong-lanceolate, 15-25 × 3.5-7 cm, acuminate at apex with acumen c. 5 mm long, subcuneate at base, glabrous above, densely rufous-brown-arachnoid pubescent beneath; midrib slightly prominent and glabrous above; primary veins 17-25 pairs, plane above, prominent beneath. Inflorescences of terminal and axillary fasciculate racemes; rachis ferruginous-tomentellous. Bracts and bracteoles large, ovate, persistent, to 25 mm long, densely brown-puberulous on exterior, sparsely puberulous within. Flowers 20-30 mm long. Receptacle tubular, sessile, 12-15 mm long, rufous-tomentellous on exterior, glabrous within except for ring of deflexed hairs around throat. Calyx lobes acute, rufous-tomentellous, 10-16 mm long. Petals 5, sericeous on outer surfaces. Stamens c. 65, inserted around complete circle, connate at base for 1.5 mm. Ovary pilose. Style tomentose. Fruit ellipsoid, 7 × 4.5 cm; exocarp smooth, glabrous; mesocarp c. 4 mm thick when dry; endocarp thin, bony, glabrous within.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Is endemic from Brazil

## Phytogeographic Domains

Atlantic Rainforest

## Vegetation Types

Ombrophyllous Forest (Tropical Rain Forest)

## Geographic Distribution

### Confirmed occurrences

Northeast (Bahia)

## HERBARIUM MATERIAL

A.M. Carvalho, 3249, CEPEC, K (K001244153), Bahia  
Bondar, G, 1863, SP, 33192,  (SP000469), Bahia, **Typus**

## REFERENCE

- Prance, G.T. 1972. Chrysobalanaceae. *Flora Neotropica* 9: 1-409.  
Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 2, *Acioa* to *Magnistipula*. In: A. E. Orchard & A. J. G. Wilson (eds), *Species Plantarum: Flora of the World* 10. Australian Biological Resources Study, Canberra.

# *Couepia bracteosa* Benth.

This treatment is composed of the following taxa: *Couepia bracteosa*, .

## Has as synonym

homotype *Moquilea bracteosa* (Benth.) Walp.  
 heterotypic *Couepia bracteosa* var. *grandifolia* Benoist  
 heterotypic *Couepia bracteosa* var. *minor* Ducke  
 heterotypic *Moquilea rufa* Barb.Rodr.

## DESCRIPTION

**Leaf: shape** elliptic/ovate; **indumentum** lanate. **Inflorescence: type** panicle. **Flower: receptacle shape** cylindric; **stamen number** 25 - 45; **filament fusion** fused basally. **Fruit: epicarp** glabrous/verrucose/smooth.

## ADDITIONAL DESCRIPTION

Trees to 20 m tall, usually smaller. Leaves: stipules 1.5-3.5 mm long, subulate, deciduous; petioles 8-18 mm long, sparsely pubescent, shallowly canaliculate; lamina ovateelliptic, 8-22 × 4-9.5 cm, subcordate at base, short-acuminate at apex, glabrous above, grey to brown-lanate beneath; primary veins 12-25 pairs, prominent beneath. Inflorescences terminal panicles with short silver-grey pubescence. Bracts ovate, often exceeding the receptacle tube, enclosing small groups of buds, 7-12 mm long, persistent. Receptacle subsessile, cylindrical, 7-12.5 mm long, densely brown-pubescent on exterior, glabrous within except for deflexed hairs at throat. Calyx lobes acute. Petals 5, white, sparsely ciliate on margins. Stamens 25-40, connate at base of filaments, inserted in an arc of 270°, with a few short filamentous staminodes opposite. Ovary densely villous. Style pubescent. Fruit globose, 8 × 7 cm; epicarp verrucose or smooth; mesocarp thick, fleshy; endocarp thin, rather fragile, granular, glabrous within.

## COMMENTS

Cultivated extensively for its edible fruits.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types


Terra Firme Forest



## Geographic Distribution

### Confirmed occurrences

North (Amazonas, Amapá, Pará, Rondônia)

## HERBARIUM MATERIAL

G.T. Prance, 20768, K,  (K001244012), FHO, INPA, NY, P, Amazonas

Schomburgk, 485, K,  (K000220948), **Typus**  
C.A.C. Ferreira, 7470, K,  (K001244033), Rondônia

## REFERENCE

- Prance, G.T. 1972. Chrysobalanaceae. Flora Neotropica 9: 1-409.
- Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 2, Acioa to Magnistipula. In: A. E. Orchard & A. J. G. Wilson (eds), Species Plantarum: Flora of the World 10. Australian Biological Resources Study, Canberra.
- Sothers C.A., Prance G.T., Buerki S., Kok, R. de & Chase, M.W. (2014). Taxonomic novelties in Neotropical Chrysobalanaceae: towards a monophyletic *Couepia*. *Phytotaxa* 172: 176 – 200.

# *Couepia brevistaminea* Barbosa-Silva & Antar

## DESCRIPTION

**Leaf:** shape elliptic/ovate/oblong; **indumentum** indumentum/lanate. **Inflorescence:** type panicle. **Flower:** receptacle shape cylindrical; **stamen number** 25 - 45; **filament fusion** free. **Fruit:** epicarp unknown.

## ADDITIONAL DESCRIPTION

Shrub to 1.50 m tall. Branches when young brownish, farinaceous-lanate to glabrescent. Leaves: stipules linear, 7–13 mm, often persistent; petiole 3–6 mm long, eglandular; lamina coriaceous, elliptic to narrow-elliptic, rarely oblong or ovate, base rounded or cuneate, apex acute, apiculate, rarely acuminate, 4.2–10.0 × 2.4–4.5 cm, 11–13 pairs of secondary veins; lower surface of lamina with two glands at base near to petiole, glands scattered along midrib, densely farinaceous-lanate, midrib prominent, secondary veins slightly prominent, tertiary veins and reticulation indistinct.

Inflorescence a terminal or sub-terminal panicle, rachis strigose; bracts and bracteoles triangular, strigose, 4 mm long, caducous; pedicel

ca. 3–3.5 mm long. Flowers ca. 13 mm long; receptacle cylindrical, strigose outside, inside glabrous except for deflexed hairs near throat; calyx lobes 5, ovate, margin eglandular, rarely with small sessile glands; petals 5, ciliate margin, white; stamens 35–40, inserted in a complete circle, filaments 10–12 mm long, glabrous; ovary inserted laterally at mouth of receptacle, lanate; style hirsute up to 3/5 of length, stigma truncate. Fruit unknown.

## Substrate

Terrestrial

## DISTRIBUTION

Native, Is endemic from Brazil

## Phytogeographic Domains

Central Brazilian Savanna

## Vegetation Types

Cerrado (lato sensu)

## Geographic Distribution

### Confirmed occurrences

North (Tocantins)

Central-west (Goiás)

## HERBARIUM MATERIAL

Antar, GM, 245, SPF,  (SPF00225380), Tocantins

## REFERENCE

Barbosa-Silva & Antar (2020). Description vs Deforestation: *Couepia brevistaminea* (Chrysobalanaceae), a new species on the frontier of agricultural expansion in the Brazilian savanna. *Phytotaxa* 471(1): 38-46.



# *Couepia carautae* Prance

## DESCRIPTION

**Leaf:** shape oblong; **indumentum** glabrous. **Inflorescence:** type raceme. **Flower:** receptacle shape subcylindrical; **stamen number** 25 - 45; **filament fusion** free. **Fruit:** epicarp unknown.

## ADDITIONAL DESCRIPTION

Trees to 22 m tall. Branches glabrous when young. Leaves: stipules linear, to 1 mm long, subsistent; petioles 6-10 mm long, glabrous, rugulose, terete; lamina narrowly oblong, coriaceous, 7-10 × 2-3.3 cm, subcuneate at base, acuminate at apex with acumen 4-7 mm long, finely pointed, glabrous above, glabrous and waxy beneath; midrib prominulous above, prominent and almost glabrous beneath, with only a few short stiff hairs; primary veins 16-20 pairs, plane above, prominent beneath. Inflorescences terminal and subterminal racemes; rachis densely yellow-brown sericeous-tomentose. Bracteoles ovate, 6-7 mm long, tomentose on exterior, caducous. Receptacle subcylindrical, 7-8 mm long, yellow-brown sericeous on exterior, glabrous within; pedicels 0.5 mm long. Calyx lobes 5, acute. Petals 5, glabrous on exterior; margins ciliate. Stamens c. 35, inserted around complete circle, filaments exerted. Ovary pilose. Style densely hirsute to apex. Fruit not seen.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Is endemic from Brazil

## Phytogeographic Domains

Atlantic Rainforest

## Vegetation Types




Ombrophyllous Forest (Tropical Rain Forest)

## Geographic Distribution

### Confirmed occurrences

Southeast (Espírito Santo)

## HERBARIUM MATERIAL

Spada, J.S., 031-78, RB, NY,  (NY00452433), RB, 239061,  (RB00537003), INPA, 95325,  (INPA0095325), Espírito Santo, **Typus**

## REFERENCE

- Prance, G.T. 1989. Chrysobalanaceae (Supplement). *Flora Neotropica* 9: 1-267  
Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 2, *Acioa* to *Magnistipula*. In: A. E. Orchard & A. J. G. Wilson (eds), *Species Plantarum: Flora of the World* 10. Australian Biological Resources Study, Canberra.

# *Couepia caryophylloides* Benoist

This treatment is composed of the following taxa: *Couepia caryophylloides*, *Couepia caryophylloides* subsp. *caryophylloides*, *Couepia caryophylloides* subsp. *glabra*.

## DESCRIPTION

**Leaf: shape** oblong-elliptic/oblong/lanceolate; **indumentum** arachnoid. **Inflorescence: type** panicle. **Flower: receptacle shape** subcylindrical; **stamen number** 25 - 45; **filament fusion** free. **Fruit: epicarp** glabrous/smooth.

## ADDITIONAL DESCRIPTION

Trees to 25 m tall. Leaves: stipules c. 2 mm long, caducous; petioles 7-9 mm long, canaliculate above, glabrous or sparsely pubescent; lamina oblong-elliptic to oblong-lanceolate, 10-21 × 4-7.5 cm, rounded at base, acuminate at apex with acumen 4-10 mm long, glabrous above, densely grey-brown-arachnoid beneath; primary veins 17-25 pairs, prominent beneath; midrib glabrous above. Inflorescences dense terminal or axillary panicles 4-6 cm long; rachis and branches densely grey-pubescent. Bracts and bracteoles ovate, to 8 mm long, early caducous. Receptacle subcylindrical 5-7 mm long, longitudinally ridged when dry, with short grey pubescence on exterior; interior lined by dense reflexed hairs to base, or confined to ring at throat; pedicels 1-3 mm long. Calyx lobes rounded, ovate, 3-4 mm long. Petals 5, white, ciliate on margins. Stamens 22-35, inserted in a semicircle, with a toothed ridge of staminodes opposite. Ovary villous. Style pubescent almost to apex. Fruit round to oval; epicarp smooth, glabrous; mesocarp thin, fleshy; endocarp granular, fragile, glabrous within.

## COMMENTS

Two subspecies are recognised.

### Life Form

Tree

### Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

### Phytogeographic Domains

Amazon Rainforest

### Vegetation Types

Terra Firme Forest

### Geographic Distribution

#### Confirmed occurrences

North (Amazonas, Amapá, Pará)

## IDENTIFICATION KEY

Interior of receptacle hairy to base.....1. *C. caryophylloides* subsp. *caryophylloides*  
 Interior of receptacle glabrous except for ring of hairs around throat...2. *C. caryophylloides* subsp. *glabra*

## HERBARIUM MATERIAL

Wachenheim, 0-11, P (P00741078), P (P00741077), P (P00741076), **Typus**

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. *Flora Neotropica* 9: 1-409.

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 2, *Acioa* to *Magnistipula*. In: A. E. Orchard & A. J. G. Wilson (eds), *Species Plantarum: Flora of the World* 10. Australian Biological Resources Study, Canberra.

Sothers C.A., Prance G.T., Buerki S., Kok, R. de & Chase, M.W. (2014). Taxonomic novelties in Neotropical Chrysobalanaceae: towards a monophyletic *Couepia*. *Phytotaxa* 172: 176 – 200.

# *Couepia caryophylloides* Benoist subsp. *caryophylloides*

## DESCRIPTION

Receptacle interior hairy to base.

### Life Form

Tree

### Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

### Phytogeographic Domains

Amazon Rainforest

### Vegetation Types

Terra Firme Forest

### Geographic Distribution

#### Confirmed occurrences

North (Amazonas, Amapá, Pará)

## HERBARIUM MATERIAL

S.A. Mori, 20044, NY, K, INPA, Amazonas

H.S. Irwin, 48695, US, NY, IAN, Amapá

H.T.Beck et al., 282, INPA, NY, K, Pará

## REFERENCE

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 2, Acioa to Magnistipula. In: A. E. Orchard & A. J. G. Wilson (eds), Species Plantarum: Flora of the World 10. Australian Biological Resources Study, Canberra.

# *Couepia caryophylloides* subsp. *glabra* Prance

## DESCRIPTION

Receptacle interior glabrous except for ring of hairs around throat.

### Life Form

Tree

### Substrate

Terrestrial

## DISTRIBUTION

Native, Is endemic from Brazil

### Phytogeographic Domains

Amazon Rainforest

### Vegetation Types

Terra Firme Forest

### Geographic Distribution

#### Confirmed occurrences

North (Pará)

## HERBARIUM MATERIAL

Medeiros, 58, IAN, Pará, **Typus**

## REFERENCE

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 2, Acioa to Magnistipula. In: A. E. Orchard & A. J. G. Wilson (eds), Species Plantarum: Flora of the World 10. Australian Biological Resources Study, Canberra.

# *Couepia cataractae* Ducke

## DESCRIPTION

**Leaf:** shape oblong; **indumentum** glabrous/arachnoid. **Inflorescence:** type panicle. **Flower:** receptacle shape campanulate/turbinate; **stamen number** more than 60; **filament fusion** free. **Fruit:** epicarp glabrous/verrucose.

## ADDITIONAL DESCRIPTION

Shrubs or small trees. Leaves: stipules linear, to 1.5 mm long, membranous, deciduous; petioles 3-5 mm long, sparsely pubescent, canaliculate above; lamina oblong, 4-10 × 1.5-5 cm, rounded to subcordate at base, rounded to obtuse at apex, glabrous above, densely greyarachnoid beneath, usually becoming glabrous with age; primary veins 10-15 pairs, rather inconspicuous beneath; midrib prominent beneath, glabrous above except at base. Inflorescences terminal and axillary panicles; rachis and branches with short dense grey pubescence. Bracts and bracteoles 1.5-5 mm long, ovate, deciduous. Receptacle 5-7 mm long, subcampanulate-turbinate, often slightly curved anteriorly, short grey-pubescent on exterior, glabrous within except for deflexed hairs at throat; pedicels slender, 6-13 mm long. Calyx lobes rounded. Petals 5, white, pubescent, ciliate on margins. Stamens 60-90, inserted in a complete circle; filaments very far exerted. Ovary pilose. Style pubescent for 3/4 its length. Fruit ovoid, with a verrucose epicarp; mesocarp thin; endocarp thin, fragile, granular, sparsely pubescent within.

## Life Form

Shrub, Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Is endemic from Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types





Riverine Forest and/or Gallery Forest

## Geographic Distribution

Confirmed occurrences

North (Pará, Rondônia)

## HERBARIUM MATERIAL

A. Ducke, s.n., U, IAN, US, 1442024,  (US00130920), K, 1442024,  (K000220955), MG, 1442024 (MG016388), RB, 15136,  (RB00537005), Pará, **Typus**  
Rosa, NA, 436, IAN, 15136 (IAN149866), INPA, 54589,  (INPA0054589), Rondônia

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. Flora Neotropica 9: 1-409.

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 2, Acioa to Magnistipula. In: A. E. Orchard & A. J. G. Wilson (eds), Species Plantarum: Flora of the World 10. Australian Biological Resources Study, Canberra.

# *Couepia chrysocalyx* (Poepp. & Endl.) Benth. ex Hook. f.

## Has as synonym

basionym *Moquilea chrysocalyx* Poepp.

## DESCRIPTION

**Leaf:** shape oblong; **indumentum** arachnoid. **Inflorescence:** type raceme. **Flower:** receptacle shape cylindrical; **stamen number** more than 60; **filament fusion** free. **Fruit:** epicarp glabrous/verrucose/smooth.

## ADDITIONAL DESCRIPTION

Trees to 10 m tall. Leaves: stipules to 7 mm long, linear, caducous; petioles 4-7 mm long sparsely pubescent, terete, with 2 sessile glands near base of lamina; lamina oblong, 10-22 × 4-8.5 cm, rounded to cuneate at base, acuminate at apex with acumen 2-12 mm long, glabrous above (or with sparse appressed pubescence when very young), densely silver-grey arachnoid beneath; primary veins 15-20 pairs, prominent beneath. Inflorescences short densely-flowered axillary corymbose racemes; rachis with short reddish-brown pubescence. Bracts and bracteoles 1.5-3.5 mm long; deciduous. Receptacle cylindrical, slightly curved, 9-14 mm long, with short reddish-brown pubescence on exterior, glabrous within except for deflexed hairs at throat, with thick walls leaving the cavity small; pedicels 2-3 mm long. Calyx lobes rounded. Petals 5, white, sparsely ciliate or glabrous on margins. Ovary densely villous. Style densely villous almost to apex. Stamens c. 100, inserted in a complete circle; filaments far exserted, forming a dense tangled mass. Fruit globose to oblong, to 9 cm long; epicarp verrucose or smooth, glabrous; mesocarp thick, fleshy; endocarp thick, fragile, granular-fibrous, glabrous within.

## COMMENTS

Fruits are edible.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types


Terra Firme Forest

## Geographic Distribution

### Confirmed occurrences

North (Acre, Amazonas, Pará)

## HERBARIUM MATERIAL

C.A. Cid Ferreira, 4088, MG, 24735 (MG103195), K, 24735,  (K001242032), Amazonas

G.T. Prance, 7934, NY, INPA, 24735,  (INPA0024735)  
Monteiro, O.P., 454, INPA, NY, INPA, 56304,  (INPA0056304), Acre

## REFERENCE

- Prance, G.T. 1972. Chrysobalanaceae. *Flora Neotropica* 9: 1-409.
- Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 2, *Acioa* to *Magnistipula*. In: A. E. Orchard & A. J. G. Wilson (eds), *Species Plantarum: Flora of the World* 10. Australian Biological Resources Study, Canberra.
- Sothers C.A., Prance G.T., Buerki S., Kok, R. de & Chase, M.W. (2014). Taxonomic novelties in Neotropical Chrysobalanaceae: towards a monophyletic *Couepia*. *Phytotaxa* 172: 176 – 200.



# *Couepia cidiana* Prance

## DESCRIPTION

**Leaf:** shape oblong/lanceolate; **indumentum** tomentose/lanate. **Inflorescence:** type raceme. **Flower:** receptacle shape cylindrical; **stamen number** more than 60; **filament fusion** fused basally. **Fruit:** epicarp unknown.

## ADDITIONAL DESCRIPTION

Treelets 8-10 m tall. Branches tomentose when young. Leaves: stipules linear, membranous, 2-2.5 cm long, persistent; petioles 5-7 mm long, terete, eglandular, densely tomentose; lamina oblong-lanceolate, coriaceous, 15-26 × 7-9.5 cm broad, subcordate at base, acuminate at apex with acumen 7-10 mm long, glabrous above, densely grey short-lanate beneath with contrasting brown-tomentose venation; midrib prominulous above, tomentellous when young; primary veins 26-35 pairs, lightly impressed above, prominent and tomentose beneath, anastomosing c. 3 mm from margin to form a conspicuous marginal vein; secondary veins ±parallel, prominulous. Inflorescences few-flowered racemes; rachis tomentose. Bracts and bracteoles persistent, 2-3.6 cm long, tomentose on exterior, glabrous within, ovate, acuminate. Flowers 60-75 mm long. Receptacle cylindrical, 3-4 cm long, densely velutinoustomentellous on exterior, tomentose within to base, sessile. Calyx lobes 5, triangular, acute, tomentose on exterior, tomentose within except for glabrous lower portion, 10-13 mm long. Petals 5, white, glabrous on exterior; margins ciliate. Stamens c. 165, inserted around a complete circle, fused at base to form a ring c. 5 mm tall with stamens inserted in several rows on exterior of ring; interior of ring densely tomentose. Ovary inserted near mouth of tube, densely villous. Style sparsely hirsute pubescent on lower 1/3. Fruit not seen.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Is endemic from Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types







Terra Firme Forest

## Geographic Distribution

Confirmed occurrences

North (Pará)

## HERBARIUM MATERIAL

G. Martinelli, 7052, RB, NY, RB, 203594,  (RB00068363), INPA, 101648,  (INPA0101648), Pará Ferreira, C.A.C., 2261, MG, 101648 (MG077685), NY, 101648,  (NY00428069), RB, 344612,  (RB00068351), INPA, 96502,  (INPA0096502), US, 2985757,  (US00130921), Pará, **Typus**

## REFERENCE

Prance, G.T. 1989. Chrysobalanaceae (Supplement). *Flora Neotropica* 9: 1-267

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 2, *Acioa* to *Magnistipula*. In: A. E. Orchard & A. J. G. Wilson (eds), *Species Plantarum: Flora of the World 10*. Australian Biological Resources Study, Canberra.

# *Couepia coarctata* Prance

## DESCRIPTION

**Leaf:** shape oblong-elliptic/oblong; **indumentum** arachnoid. **Inflorescence:** type panicle. **Flower:** receptacle shape cylindrical; **stamen number** 14 - 30; **filament fusion** free. **Fruit:** epicarp glabrous/smooth.

## ADDITIONAL DESCRIPTION

Trees to 6 m tall. Branches sparsely puberulous when young, soon becoming glabrous and lenticellate. Leaves: stipules 1-2 mm long, ovate, membranous, caducous; petioles 6-10 mm long, lanate, with 2 glands at base (visible in young petioles only), becoming rugulose with age; lamina oblong to oblong-elliptic, thickly coriaceous, 6-13 × 3.5-5.5 cm, subcordate to rounded at base, rounded at apex, acute or bluntly acuminate, glabrous and lustrous above, densely velutinous-arachnoid ferruginous beneath; midrib slightly impressed above, prominent and lanate beneath; primary veins 9-13 pairs, impressed above, prominent beneath. Inflorescences of terminal densely crowded panicles with many short branches only; rachis and branches puberulous. Bracts and bracteoles small, membranous, very early caducous. Receptacle cylindrical, 7-9 mm long, with short dense puberulous pubescence on exterior, glabrous within except for deflexed hairs at throat and dense lanate pubescence around stamen bases; pedicels 2-6 mm long, thin. Calyx lobes 5, acute, with sessile glands around margins. Petals 5, glabrous except for ciliate margins. Stamens c. 17, inserted around a complete circle. Ovary densely lanate. Style pubescent for 3/4 of its length. Fruit ellipsoid pyriform, tapering towards apex, 4.5 cm long × 3 cm broad; exocarp smooth, glabrous; pericarp hard, fibrous, 3 mm thick, glabrous within.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Is endemic from Brazil

## Phytogeographic Domains

Atlantic Rainforest

## Vegetation Types

Ombrophyllous Forest (Tropical Rain Forest), Coastal Forest (Restinga)



## Geographic Distribution

### Confirmed occurrences

Northeast (Bahia)

## HERBARIUM MATERIAL

A.M. Carvalho, 1106, CEPEC, NY, CEPEC, 216542,  (CEPEC00028759), RB, 216542,  (RB00537006), RB, 216542,  (RB00538909), Bahia

A. M. V. de Carvalho, 1116, NY, 216542,  (NY00428072), NY, 216542,  (NY00743672), Bahia, **Typus**

## REFERENCE

Prance, G.T. 1989. Chrysobalanaceae (Supplement). *Flora Neotropica* 9: 1-267

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 2, *Acioa* to *Magnistipula*. In: A. E. Orchard & A. J. G. Wilson (eds), *Species Plantarum: Flora of the World 10*. Australian Biological Resources Study, Canberra.

# *Couepia eriantha* Spruce ex Hook.f.

## DESCRIPTION

**Leaf:** shape oblanceolate/oblong; **indumentum** glabrous. **Inflorescence:** type panicle. **Flower:** receptacle shape cylindrical; **stamen number** 25 - 45; **filament fusion** free. **Fruit:** epicarp glabrous/smooth.

## ADDITIONAL DESCRIPTION

Shrubs or small trees. Leaves: stipules to 3 mm long, linear, caducous; petioles 3.5-6 mm long, pubescent; lamina oblong to oblong-lanceolate, 10-14 × 3-5.5 cm, cordate to cuneate at base, apiculate or acuminate at apex with acumen to 5 mm long, glabrous on both surfaces; primary veins 15-20 pairs, prominent beneath. Inflorescences terminal and axillary panicles; rachis and branches densely brown-villous. Bracts and bracteoles ovate, to 15 mm long, persistent. Receptacle cylindrical, 15-18 mm long, densely ferruginous-villous on exterior, glabrous within except for deflexed hairs at throat. Calyx lobes rounded, sericeous. Petals 5, white, pubescent, ciliate on margins. Stamens c. 40, inserted in a complete circle. Ovary densely villous. Style pubescent for 3/4 its length. Fruit (immature) long and narrow, with smooth glabrous epicarp.

## Life Form

Shrub, Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Is endemic from Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types

Riverine Forest and/or Gallery Forest, Inundated Forest (Igapó), Terra Firme Forest

## Geographic Distribution



### Confirmed occurrences

North (Amazonas, Pará)

## HERBARIUM MATERIAL

R. Spruce, 313, CGE, GH, K, OXF, RB, **Typus**

M.B. Silva, 1408, OXF, RB, GH, K, CGE

G.T. Prance, 16368, US, 159019,  (US01855945), RB, 159019,  (RB00068477), Amazonas

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. *Flora Neotropica* 9: 1-409.

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 2, *Acioa* to *Magnistipula*. In: A. E. Orchard & A. J. G. Wilson (eds), *Species Plantarum: Flora of the World 10*. Australian Biological Resources Study, Canberra.

Sothers C.A., Prance G.T., Buerki S., Kok, R. de & Chase, M.W. (2014). Taxonomic novelties in Neotropical Chrysobalanaceae: towards a monophyletic *Couepia*. *Phytotaxa* 172: 176 – 200.

# *Couepia excelsa* Ducke

## DESCRIPTION

**Leaf:** shape elliptic/oblong/lanceolate; **indumentum** arachnoid. **Inflorescence:** type panicle/raceme. **Flower:** receptacle shape campanulate; **stamen number** 25 - 45; **filament fusion** free. **Fruit:** epicarp glabrous/smooth.

## ADDITIONAL DESCRIPTION

Trees to 25 m tall. Leaves: stipules to 3 mm long, caducous; petioles 8-10.5 mm long, terete, pubescent; lamina elliptic to oblong-lanceolate, 13-25 × 4-7 cm, rounded to subcordate at base, acuminate at apex with acumen 4-9 mm long, sparsely appressed-pubescent above, becoming glabrous with age, densely grey-arachnoid beneath; midrib sparsely pubescent above; primary veins 23-38 pairs, prominent on lower surface. Inflorescences short-branched panicles or racemes, axillary or terminal, 3-6 cm long; rachis and branches brown tomentellous. Bracts and bracteoles ovate, to 8 mm long, caducous. Receptacle subcampanulate, 9 mm long, densely brown-pubescent on exterior; interior lined to base by dense reflexed hairs; pedicels 2-3 mm long. Calyx lobes rounded, ovate, 4.5-6 mm long. Petals 5, white, ciliate on margins. Stamens 38-40, inserted in an arc of 270°, sometimes with a short sterile toothed portion of circle opposite. Ovary villous. Style pubescent almost to apex. Fruit oval, 6-7 × 4 cm; epicarp smooth, glabrous; endocarp granular, fragile, glabrous within.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types

Terra Firme Forest




## Geographic Distribution

### Confirmed occurrences

North (Amazonas, Amapá, Pará, Roraima)

## HERBARIUM MATERIAL

A. Ducke, s.n., U, P, K, IAN, RB, 9758

A. Ducke, 19758, K,  (K000220952), P (P00741082), RB, 19758,  (RB00537011), RB, 19758,  (RB00538908), Pará,

## Typus

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. Flora Neotropica 9: 1-409.

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 2, Acioa to Magnistipula. In: A. E. Orchard & A. J. G. Wilson (eds), Species Plantarum: Flora of the World 10. Australian Biological Resources Study, Canberra.

# *Couepia froesii* Prance

## DESCRIPTION

**Leaf:** shape oblong; **indumentum** lanate-pubescent. **Inflorescence:** type panicle. **Flower:** receptacle shape campanulate; **stamen number** 25 - 45; **filament fusion** free. **Fruit:** epicarp glabrous/smooth.

## ADDITIONAL DESCRIPTION

Trees. Branches glabrous when young, lenticellate. Leaves: stipules small, caducous; petiole 6-8 mm long, glabrous, eglandular, canaliculate above; lamina oblong, 11-23 × 4.5-8.5 cm, caudate-acuminate at apex with acumen 8-14 mm long, rounded at base, glabrous above, densely short-grey-lanate pubescent beneath; midrib glabrous; primary veins 20-24 pairs, impressed above, prominent beneath. Inflorescences little-branched terminal and axillary panicles; rachis and branches densely grey-pubescent. Bracts and bracteoles small, caducous. Receptacle subcampanulate, 6 mm long, grey-pubescent on exterior, glabrous within except around throat below stamens; pedicels c. 1 mm long. Calyx lobes acute. Petals 5, white, caducous; margins shortly ciliate. Stamens c. 30, inserted around complete circle. Ovary pilose. Style pubescent to middle. Fruit when young ovoid; exocarp smooth, pubescent soon becoming glabrous; endocarp granular, thin, fragile.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Is endemic from Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types

Terra Firme Forest

## Geographic Distribution

### Confirmed occurrences

North (Amazonas, Pará)

## HERBARIUM MATERIAL

R.L. Fróes, 32164, IAN, NY, NY,  (NY00428091), Pará, **Typus**

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. Flora Neotropica 9: 1-409.

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 2, Acioa to Magnistipula. In: A. E. Orchard & A. J. G. Wilson (eds), Species Plantarum: Flora of the World 10. Australian Biological Resources Study, Canberra.

# *Couepia glabra* Prance

## DESCRIPTION

**Leaf:** shape oblanceolate/oblong; **indumentum** glabrous. **Inflorescence:** type panicle/raceme. **Flower:** receptacle shape cylindrical/turbinate; **stamen number** more than 60; **filament fusion** free. **Fruit:** epicarp unknown.

## ADDITIONAL DESCRIPTION

Trees to 10 m tall. Branches glabrous when young. Leaves: stipules lanceolate, membranous, c. 2 mm long, caducous; petioles 8-12 mm long, glabrous, canaliculate, rugose, eglandular; lamina oblong to oblong-lanceolate, coriaceous, 11-21 × 4-7 cm; base subcuneate; apex acuminate with acumen 5-9 mm long, usually curved; glabrous on both surfaces; midrib prominent on both surfaces; primary veins 16-17 pairs, prominulous or plane above, prominent beneath. Inflorescences of terminal and axillary panicles, 4.5-9 cm long, or rarely of unbranched racemes; rachis and branches with minute sparse pubescence. Bracts and bracteoles caducous. Receptacle cylindrical-turbinate, 15-20 mm long, sparsely puberulous in bud, soon becoming glabrous, glabrous within except for dense deflexed hairs around throat. Calyx lobes 5, sparsely puberulous when young, soon becoming glabrous; margins ciliate. Petals 5, glabrous, caducous. Stamens c. 110, inserted around a complete circle; filaments tomentose around base, glabrous for most of length. Ovary pilose. Style pilose at base, glabrous above. Fruit unknown.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Is endemic from Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types

Terra Firme Forest

## Geographic Distribution

Confirmed occurrences

North (Amazonas)

## HERBARIUM MATERIAL

G.T. Prance, 1494, FHO, INPA, NY, NY,  (NY00428093), INPA, 33158,  (INPA0033158), NY, 428092,  (NY00428092), Amazonas, **Typus**

## REFERENCE

Prance, G.T. 1989. Chrysobalanaceae (Supplement). *Flora Neotropica* 9: 1-267

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 2, *Acioa* to *Magnistipula*. In: A. E. Orchard & A. J. G. Wilson (eds), *Species Plantarum: Flora of the World* 10. Australian Biological Resources Study, Canberra.



# *Couepia grandiflora* (Mart. & Zucc.) Benth.

## Has as synonym

basionym *Moquilea grandiflora* Mart. & Zucc.

heterotypic *Couepia formosana* Taub.

heterotypic *Couepia suberosa* Pilg.

## DESCRIPTION

**Leaf: shape** ovate/oblong; **indumentum** arachnoid. **Inflorescence: type** panicle. **Flower: receptacle shape** campanulate; **stamen number** 55 - 60/more than 60; **filament fusion** free. **Fruit: epicarp** glabrous/smooth.

## ADDITIONAL DESCRIPTION

Trees to 8 m tall. Branches pubescent when young; older branches often with a conspicuous thick cork covering c. 4 mm thick. Leaves: stipules to 2 mm long, subulate, caducous; petioles 3-13 mm long, pubescent, terete; lamina oblong to ovate, 7.5-18 x 3.5-9 cm, cordate to cuneate at base, rounded to bluntly acuminate at apex, glabrous above, or with sparse ferruginous pubescence when young, shortly dense-arachnoid beneath; primary veins 10-16 pairs, prominent beneath, prominulous above; midrib prominent on both surfaces. Inflorescences terminal and axillary panicles; rachis and branches with dense yellow-brown pubescence. Bracts and bracteoles 1.5-5 mm long, ovate, membranous, caducous. Receptacle campanulate, 5-11.5 mm long, densely cinereous-pubescent, glabrous within except for deflexed hairs at throat; pedicels 25 mm long. Calyx lobes rounded. Petals 5, white, pubescent, ciliate on margins, caducous. Stamens 50-125, inserted in a complete circle. Ovary densely villous. Style pubescent for most of its length. Fruit oblong; epicarp smooth, glabrous, drying black; pericarp thick, fleshy, glabrous within.

## COMMENTS

Widespread in cerrado vegetation.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest, Caatinga, Central Brazilian Savanna

## Vegetation Types

Cerrado (lato sensu), Ombrophyllous Forest (Tropical Rain Forest)

## Geographic Distribution

### Confirmed occurrences

North (Rondônia, Tocantins)



Northeast (Bahia, Maranhão, Piauí)

Central-west (Distrito Federal, Goiás, Mato Grosso do Sul, Mato Grosso)

Southeast (Minas Gerais, São Paulo)

South (Paraná)

## HERBARIUM MATERIAL

Amaral Jr., A., 3, BOTU, HRCB, SP, K (K001244138), UEC, 44882,  (UEC061975), São Paulo  
J.A. Ratter, 8009, BOTU, HRCB, SP, HUEFS, 44882 (HUEFS0038682), K, 44882 (K001244133), UEC, 107329,   
(UEC061982), Bahia

## REFERENCE

- Prance, G.T. 1972. Chrysobalanaceae. *Flora Neotropica* 9: 1-409.
- Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 2, *Acioa* to *Magnistipula*. In: A. E. Orchard & A. J. G. Wilson (eds), *Species Plantarum: Flora of the World* 10. Australian Biological Resources Study, Canberra.

# *Couepia guianensis* Aubl.

This treatment is composed of the following taxa: *Couepia guianensis*, *Couepia guianensis* subsp. *divaricata*, *Couepia guianensis* subsp. *glandulosa*, *Couepia guianensis* subsp. *guianensis*.

## Has as synonym

homotype *Acia amara* Willd.

homotype *Acioa amara* Steud.

*Moquilea couepia* Steud.

## DESCRIPTION

**Leaf: shape** oblong/lanceolate; **indumentum** glabrous/pubescent/lanate. **Inflorescence: type** panicle/raceme. **Flower: receptacle shape** campanulate/cylindric; **stamen number** 14 - 30; **filament fusion** free. **Fruit: epicarp** glabrous/smooth.

## ADDITIONAL DESCRIPTION

Trees to 25 m tall. Branches puberulous when young, soon becoming glabrous. Leaves: stipules 1-3 mm long, linear, early caducous; petioles 3-9 mm long, canaliculate above, pubescent when young, becoming glabrous and rugose with age; lamina oblong to oblong-lanceolate, membranous to coriaceous, 4.5-16.5 x 2.5-5.5 cm, rounded to subcuneate at base, acuminate at apex with acumen 5-18 mm long, glabrous above, densely grey- to brown-lanate, or glabrous, or with a sparse caducous pubescence beneath, frequently with 2 glands at junction with petiole; primary veins 10-15 pairs, plane above, prominent beneath; midrib prominulous above, prominent beneath. Inflorescences terminal and axillary little branched panicles or racemes; rachis and branches sparsely puberulous to glabrous. Bracts and bracteoles minute, membranous, ovate, caducous. Receptacle cylindrical to subcampanulate, 4.5-10 (-12) mm long, 1-2.5 mm broad below calyx, sparsely puberulous to glabrous externally, glabrous within except for deflexed hairs around throat; pedicels 0.5-4 mm long. Calyx lobes 5, rounded, 22.5 mm long, puberulous or glabrous externally. Petals 5, white, ciliate. Stamens 14-30, unilateral, inserted around 1/2 of a circle with short staminodes opposite them. Ovary villous. Style pubescent for at least 1/2 its length. Fruit rounded to ovoid, 3-4 cm long, 2.5-3 cm broad; exocarp smooth, glabrous; mesocarp thin, fleshy; endocarp thin, fragile, granular in texture, glabrous within.

## COMMENTS

This species has three subspecies.

### Life Form

Tree

### Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

### Phytogeographic Domains

Amazon Rainforest

### Vegetation Types

Flooded Field (Várzea), Inundated Forest (Igapó), Terra Firme Forest

### Geographic Distribution

#### Confirmed occurrences

North (Amazonas, Amapá, Pará, Rondônia, Roraima)

Northeast (Maranhão)

#### Possible occurrences

North (Tocantins)

Central-west (Mato Grosso)

## IDENTIFICATION KEY

- 1 Inflorescences of racemes (rarely with a few short branches bearing 2 flowers), usually in at least 3 axils below the apex of branch; leaf lamina 9-16.3 cm long, chartaceous; petioles 6-9 mm long, receptacle always narrowly cylindrical; growing on terra firme.....subsp. guianensis
- 1: Inflorescences of panicles, usually only 1 or 2 axils below apex; leaf lamina 5-10.5 cm long, coriaceous or chartaceous; petioles 3-6 mm long; receptacle cylindrical or subcampanulate; growing on terra firme or flooded river banks
- 2 Leaves chartaceous; lower side glabrous or sparsely pubescent; on flooded river banks.....subsp. glandulosa
- 2: Leaves thickly coriaceous; lower side densely lanate-pubescent; on terra firme.....subsp. divaricata

## HERBARIUM MATERIAL

Krukoff B.A., 1362, P (P00741084), **Typus**

## REFERENCE

- Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 2, *Acioa* to *Magnistipula*. In: A. E. Orchard & A. J. G. Wilson (eds), *Species Plantarum: Flora of the World 10*. Australian Biological Resources Study, Canberra.
- Prance, G.T. 1989. Chrysobalanaceae (Supplement). *Flora Neotropica* 9: 1-267

# *Couepia guianensis* Aubl. subsp. *guianensis*

## Has as synonym

basionym *Couepia leptostachya* Benth. ex Hook.f.

heterotypic *Couepia surinamensis* Kleinhoonte

heterotypic *Couepia versicolor* Benoist

## DESCRIPTION

Leaf lamina chartaceous, 9-16.3 cm long; lower surface densely lanate-pubescent; petioles 6-9 mm long. Inflorescence mainly of terminal axillary racemes, usually in several axils below the apex, a few with short branches bearing 2 or 3 flowers. Receptacle 7-12 mm long, always narrowly cylindrical.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types

Terra Firme Forest

## Geographic Distribution

### Confirmed occurrences






North (Amazonas, Amapá, Pará, Rondônia)

Northeast (Maranhão)

## HERBARIUM MATERIAL

G.T. Prance, 14347, FHO, INPA, K, NY, P

Bastos, MA, 60, RB, 135989,  (RB00068388), IAN (IAN097827), Amapá

R. Spruce, 1536, GH,  (GH00046190), K,  (K000220926), NY,  (NY00428107), P (P00741089), P (P00741090), RB, 19751,  (RB00537016), RB, 19751,  (RB00538905), Amazonas, **Typus**

## REFERENCE

Prance, G.T. 1989. Chrysobalanaceae (Supplement). *Flora Neotropica* 9: 1-267

# *Couepia guianensis* subsp. *divaricata* (Huber) Prance

## Has as synonym

basionym *Couepia divaricata* Huber

heterotypic *Couepia di* var. *cata* Huber

heterotypic *Parinari krukovii* Gleason

## DESCRIPTION

Leaf lamina coriaceous, 6-10.5 cm long; lower surface densely lanate-pubescent; petioles 3-6 mm long. Inflorescences of terminal and axillary panicles with small few-flowered branches in only 1 or 2 axils below the apex of branch. Receptacle 5-7 mm long, cylindrical.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types

Terra Firme Forest

## Geographic Distribution

### Confirmed occurrences

North (Amazonas, Amapá, Pará, Rondônia)

Northeast (Maranhão)

## HERBARIUM MATERIAL

J.M. Pires, 51314, IAN, NY, IAN (IAN113901), Amapá

Huber, J., s.n., MG (MG002030), Pará, **Typus**

## REFERENCE

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 2, Acioa to Magnistipula. In: A. E. Orchard & A. J. G. Wilson (eds), Species Plantarum: Flora of the World 10. Australian Biological Resources Study, Canberra.

# *Couepia guianensis* subsp. *glandulosa* (Miq.) Prance

## Has as synonym

basionym *Couepia glandulosa* Miq.

heterotypic *Couepia myrtifolia* Benth. ex Hook.f.

heterotypic *Couepia thyrsiflora* Hook.f.

heterotypic *Moquilea glandulosa* (Miq.) Walp.

## DESCRIPTION

Leaf lamina chartaceous to thinly coriaceous, 5-10.5 cm long; lower surface glabrous or sparsely lanate-pubescent; petioles 3-6 mm long. Inflorescences of terminal and axillary panicles with small few-flowered branches, in only 1 or 2 axils below the apex of branch. Receptacle 5-10 mm, subcampanulate to narrowly cylindrical.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types

Terra Firme Forest

## Geographic Distribution

### Confirmed occurrences

North (Amazonas, Amapá, Pará, Roraima)

Northeast (Maranhão)

## HERBARIUM MATERIAL

N.T. Silva, 4521, FHO, MG, NY

Egler, WA, 47766, IAN (IAN108981), US,  (US01856000), W,  (W19660000956), Amapá

## REFERENCE

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 2, Acioa to Magnistipula. In: A. E. Orchard & A. J. G. Wilson (eds), Species Plantarum: Flora of the World 10. Australian Biological Resources Study, Canberra.

# *Couepia habrantha* Standl.

## DESCRIPTION

**Leaf:** shape oblong-elliptic; **indumentum** arachnoid. **Inflorescence:** type racemose. **Flower:** receptacle shape subcylindrical; **stamen number** 14 - 30; **filament fusion** free. **Fruit:** epicarp glabrous/smooth.

## ADDITIONAL DESCRIPTION

Trees to 12 m tall. Leaves: stipules to 2 mm long, caducous; petioles 5-8 mm long, canaliculate above; lamina oblong-elliptic, 6-13 × 2.5-6 cm, cuneate to rounded at base, acuminate at apex with acumen 4-14 mm long, glabrous above, densely reddish-brown to grey-arachnoid beneath; midrib prominent and glabrous on upper surface; primary veins 11-15 pairs, prominent beneath. Inflorescences short dense axillary and terminal spikes; rachis with ferruginous-brown pubescence. Bracts and bracteoles 7-9 mm long, ovate, acute, deciduous.

Receptacle subsessile, subcylindrical, 8-10 mm long, densely ferruginous-sericeous on exterior, glabrous within except for deflexed hairs at throat. Calyx lobes rounded. Petals 5, white, ciliate on margins. Stamens c. 25, inserted in a semicircle, with short filamentous staminodes opposite. Style densely pubescent for 3/4 of its length. Ovary pilose. Fruit ellipsoid; epicarp smooth, glabrous; mesocarp thin, fleshy; pericarp thin, fibrous, fragile, glabrous within.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types

Riverine Forest and/or Gallery Forest, Terra Firme Forest

## Geographic Distribution

### Confirmed occurrences

North (Amazonas, Pará)

## HERBARIUM MATERIAL

B.A. Krukoff, 7252, A, K,  (K000220945), US, U, IAN, BR, BM, F, MG (MG190674), MO (MO255301), NY,  (NY00428100), NY,  (NY01085713), RB, 31591,  (RB00537012), RB, 31591,  (RB00537136), **Typus**

## REFERENCE

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 2, *Acioa* to *Magnistipula*. In: A. E. Orchard & A. J. G. Wilson (eds), *Species Plantarum: Flora of the World 10*. Australian Biological Resources Study, Canberra.

Prance, G.T. 1972. Chrysobalanaceae. *Flora Neotropica* 9: 1-409.



# Couepia impressa Prance

This treatment is composed of the following taxa: *Couepia impressa*, *Couepia impressa* subsp. *cabraliae*, *Couepia impressa* subsp. *impressa*.

## DESCRIPTION

**Leaf: shape** ovate/oblong/lanceolate; **indumentum** pubescent. **Inflorescence: type** panicle. **Flower: receptacle shape** campanulate; **stamen number** 14 - 30; **filament fusion** fused basally. **Fruit: epicarp** glabrous/smooth.

## ADDITIONAL DESCRIPTION

Trees. Branches glabrous when young. Leaves: stipules c. 2 mm long, subulate, caducous; petiole 6-12 mm long, glabrous, canaliculate, eglandular; lamina oblong to oblong-lanceolate or ovate, 9-22 x 4-8.5 cm, acuminate at apex with acumen 3-7 mm long, rounded at base, glabrous above, sparsely pubescent beneath; midrib glabrous above; primary veins 14-22 pairs, impressed above, prominent beneath. Inflorescences of terminal panicles; rachis and branches densely grey-pubescent. Bracts and bracteoles ovate, 2-3.5 mm long, caducous. Receptacle subcampanulate, 6-7 mm long, slightly curved, grey-puberulous on exterior, glabrous within except for ring of deflexed hairs around throat. Calyx lobes acute. Petals 5, caducous; margins shortly ciliate. Stamens 15-17 inserted around 2/3 of circle; filaments slightly connate at base. Ovary villous. Style pubescent to middle. Fruit globose to ellipsoid; 4.5-6 x 3-3.5 cm; exocarp smooth, glabrous; mesocarp fleshy, 35 mm thick when dry; endocarp c. 1 mm thick, fibrous, glabrous within.

## COMMENTS

This species has two subspecies.

### Life Form

Tree

### Substrate

Terrestrial

## DISTRIBUTION

Native, Is endemic from Brazil

### Phytogeographic Domains

Atlantic Rainforest

### Vegetation Types

Ombrophyllous Forest (Tropical Rain Forest)

### Geographic Distribution

#### Confirmed occurrences

Northeast (Alagoas, Bahia, Pernambuco)

## IDENTIFICATION KEY

Leaves oblong-ovate, 19-22 × 4-8.5 cm; primary veins 19-22 pairs.....subsp. **impressa**  
 Leaves ovate, 9-13 × 4-7.5 cm; primary veins 14-19 pairs.....subsp. **cabraliae**

## HERBARIUM MATERIAL

A. Lima, 54á1897, NY,  (NY00428102), Pernambuco, **Typus**

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. *Flora Neotropica* 9: 1-409.

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 2, *Acioa* to *Magnistipula*. In: A. E. Orchard & A. J. G. Wilson (eds), *Species Plantarum: Flora of the World* 10. Australian Biological Resources Study, Canberra.

# *Couepia impressa* Prance subsp. *impressa*

## DESCRIPTION

Leaves oblong-ovate, 19-22 × 4-8.5 cm; primary veins 19-22 pairs.

### Life Form

Tree

### Substrate

Terrestrial

## DISTRIBUTION

Native, Is endemic from Brazil

### Phytogeographic Domains

Atlantic Rainforest

### Vegetation Types

Ombrophyllous Forest (Tropical Rain Forest)

### Geographic Distribution

#### Confirmed occurrences

Northeast (Alagoas, Pernambuco)

## HERBARIUM MATERIAL

Pontual, I., 66-280, IPA, PEUFR

## REFERENCE

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 2, *Acioa* to *Magnistipula*. In: A. E. Orchard & A. J. G. Wilson (eds), *Species Plantarum: Flora of the World 10*. Australian Biological Resources Study, Canberra.

# *Couepia impressa* subsp. *cabraliae* Prance

## DESCRIPTION

Leaves ovate, 9-13 × 4-7.5 cm; primary veins 14-19 pairs. Fruit globose, 2.2 × 1.9 cm, glabrous.

### Life Form

Tree

### Substrate

Terrestrial

## DISTRIBUTION

Native, Is endemic from Brazil

### Phytogeographic Domains

Atlantic Rainforest

### Vegetation Types


Ombrophyllous Forest (Tropical Rain Forest)

### Geographic Distribution

#### Confirmed occurrences

Northeast (Bahia)

## HERBARIUM MATERIAL

Belém, R.P., 2837, FHO, MG, RB, CEPEC, NY,  (NY00335424)

## REFERENCE

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 2, *Acioa* to *Magnistipula*. In: A. E. Orchard & A. J. G. Wilson (eds), *Species Plantarum: Flora of the World 10*. Australian Biological Resources Study, Canberra.

# *Couepia insignis* Fritsch

## DESCRIPTION

**Leaf:** shape oblong; **indumentum** arachnoid. **Inflorescence:** type raceme. **Flower:** receptacle shape cylindrical; **stamen number** 55 - 60; **filament fusion** free. **Fruit:** epicarp glabrous/rugose.

## ADDITIONAL DESCRIPTION

Trees. Leaves: stipules linear, to 15 mm long, membranous, caducous; petioles 8-11 mm long, sparsely pubescent, terete; lamina oblong, 15-24 × 8-9.5 cm, rounded at apex, rounded to cordate at base, glabrous above, densely grey-arachnoid beneath; primary veins 21-25 pairs, impressed above, prominent beneath, arcuate and anastomosing near the lamina margin. Inflorescences few-flowered racemes; rachis with short rufous pubescence. Bracts and bracteoles persistent, 10-28 mm long, oblong, acuminate, membranous. Receptacle subcylindrical, 8-9 mm long, with short brown pubescence on exterior, glabrous within except for deflexed hairs at throat; pedicels 1-2 mm long. Calyx lobes oblong-lanceolate, 10-12 mm long, acute. Petals 5, ciliate on margins. Stamens numerous (over 50). Ovary villous. Style pubescent for 3/4 its length. Fruit (section only seen) 7.5 cm diam.; exocarp glabrous, wrinkled when dry; mesocarp fleshy, 4-10 mm thick when dry; endocarp c. 1 mm thick, fibrous, glabrous within.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Is endemic from Brazil

## Phytogeographic Domains

Atlantic Rainforest

## Vegetation Types

Ombrophyllous Forest (Tropical Rain Forest)

## Geographic Distribution

### Confirmed occurrences

Northeast (Bahia)

## HERBARIUM MATERIAL

A.M. Amorim, 481, NY, CEPEC,  (CEPEC00052405), K (K001244155), K (K001244156), MBM (MBM163188)

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. Flora Neotropica 9: 1-409.

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 2, Acioa to Magnistipula. In: A. E. Orchard & A. J. G. Wilson (eds), Species Plantarum: Flora of the World 10. Australian Biological Resources Study, Canberra.

# *Couepia joaquinae* Prance

## DESCRIPTION

**Leaf: shape** oblanceolate/oblong; **indumentum** glabrous. **Inflorescence: type** panicle/raceme. **Flower: receptacle shape** cylindrical; **stamen number** less than 14; **filament fusion** free. **Fruit: epicarp** glabrous/verrucose.

## ADDITIONAL DESCRIPTION

Trees 20-30 m tall. Branches glabrous when young. Leaves: stipules triangular, membranous, 1.5-2 mm long, early caducous; petioles 7-12 mm long, terete, eglandular, glabrous; lamina oblong to oblong-lanceolate, chartaceous, 10-15 × 3-5.5 cm broad, cuneate at base, acuminate at apex with acumen 8-15 mm long, often slightly curved, glabrous on both surfaces; midrib plane above, prominent and glabrous beneath; primary veins 10-14 pairs, plane above, prominulous beneath. Inflorescence of terminal and axillary panicles or rarely racemes; flowers borne in small groups of 2-4 along rachis; rachis and branches glabrous or sparsely puberulous. Bracts and bracteoles minute, lanceolate, membranous, caducous, sparsely puberulous. Receptacle narrowly cylindrical, almost glabrous and striate when dry on exterior, glabrous within except for few hairs at base. Calyx lobes 5, acute, sparsely puberulous on exterior; margins ciliate. Petals 5, white, glabrous. Stamens 9-11, unilateral; filaments exerted, glabrous. Ovary lanate. Style glabrous except for few hairs at base. Fruit ovoid, 3.5-4.5 × 1.9-2.4 cm; exocarp sparsely and inconspicuously lenticellate; mesocarp 1.5 mm thick, fleshy; endocarp 0.5 mm thick, hard, fibrous, glabrous within.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types



Terra Firme Forest

## Geographic Distribution

Confirmed occurrences

North (Amapá)

## HERBARIUM MATERIAL

Conceição, M.A., 176, MG, NY, K,  (K000220971), K,  (K000220972), MG (MG139469), Amapá, **Typus**

## REFERENCE

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 2, *Acioa* to *Magnistipula*. In: A. E. Orchard & A. J. G. Wilson (eds), *Species Plantarum: Flora of the World 10*. Australian Biological Resources Study, Canberra.

# *Couepia krukovii* Standl.

## DESCRIPTION

**Leaf:** shape oblanceolate/oblong; **indumentum** glabrous. **Inflorescence:** type raceme. **Flower:** receptacle shape cylindrical; **stamen number** more than 60; **filament fusion** free. **Fruit:** epicarp unknown.

## ADDITIONAL DESCRIPTION

Trees, small to medium-sized. Leaves: stipules linear, to 1.5 cm long, caducous; petioles thick, 3-6 mm long, glabrous, eglandular, terete; lamina oblong-oblanceolate, 22-33 × 6-7.5 cm, rounded to cordate at base, acuminate at apex with acumen 7-10 mm long, glabrous on both surfaces except when very young; midrib prominent above, glabrous when mature; primary veins 17-23 pairs, prominent beneath, slightly impressed above. Inflorescences densely flowered terminal and axillary spicate racemes; rachis with short tomentellous brown pubescence. Bracts and bracteoles 6-10 mm long, ovate, acute, persistent. Receptacle subsessile, cylindrical, 2.5 cm long, slightly curved, with short dense brown pubescence on exterior, glabrous within except for deflexed hairs at throat. Calyx lobes rounded, 1 cm long. Petals 5, ciliate on margins. Stamens numerous (c. 255), inserted in a complete circle. Ovary villous. Style pubescent for 2/3 its length. Fruit unknown.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types

Riverine Forest and/or Gallery Forest, Inundated Forest (Igapó)

## Geographic Distribution

### Confirmed occurrences

North (Amazonas, Rondônia)

## HERBARIUM MATERIAL

B.A. Krukoff, 6208, BR, BM, F, U, A,  (A00046187), K,  (K000220956), MO (MO255300), NY,  (NY00428105), RB, 31586,  (RB00537013), RB, 31586,  (RB00538907), Amazonas, **Typus**

## REFERENCE

- Prance, G.T. 1972. Chrysobalanaceae. Flora Neotropica 9: 1-409.  
 Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 2, Acioa to Magnistipula. In: A. E. Orchard & A. J. G. Wilson (eds), Species Plantarum: Flora of the World 10. Australian Biological Resources Study, Canberra.

# *Couepia latifolia* Standl.

## DESCRIPTION

**Leaf:** shape ovate; **indumentum** glabrous/arachnoid. **Inflorescence:** type raceme. **Flower:** receptacle shape cylindrical; **stamen number** more than 60; **filament fusion** free. **Fruit:** epicarp glabrous/smooth.

## ADDITIONAL DESCRIPTION

Trees. Leaves: stipules lanceolate, c. 3 mm long, subpersistent; petioles 4-9 mm long, pubescent, with 2 medial glands, terete; lamina oblong-ovate, 17-24 × 5-12 cm, glabrous above, sparsely grey-arachnoid or glabrous beneath, rounded at base, rounded or with short and blunt acumen at apex; primary veins 16-19 pairs, prominent beneath, slightly impressed above. Inflorescences axillary racemes; rachis tomentellous. Bracts and bracteoles 4-8 mm long, ovate, acute, persistent, tomentellous on exterior. Receptacle cylindrical, sessile, 1.5-2.5 cm long, with dense light-brown pubescence on exterior, glabrous within except for deflexed hairs at throat. Calyx lobes rounded. Petals 5, persistent, ciliate on margins. Stamens numerous, inserted in a complete circle. Ovary villous. Style densely pubescent for 3/4 its length. Fruit ovoid, 5-9 cm long, 1.5-5.5 cm broad; epicarp smooth, glabrous; mesocarp thick, fleshy; endocarp thin, of a granular texture, fragile, glabrous within.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types








Inundated Forest (Igapó)

## Geographic Distribution

### Confirmed occurrences

North (Acre, Amazonas)

## HERBARIUM MATERIAL

B.A. Krukoff, 6005, BR, BM, A,  (A00046189), K,  (K000220957), MO (MO255299), NY,  (NY00428106), RB, 37400,  (RB00537015), RB, 37400,  (RB00538906), S, 37400 (S-R-8165), US, 2608207,  (US00130934), US, 1691160,  (US00130935), Amazonas, **Typus**

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. Flora Neotropica 9: 1-409.

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 2, Acioa to Magnistipula. In: A. E. Orchard & A. J. G. Wilson (eds), Species Plantarum: Flora of the World 10. Australian Biological Resources Study, Canberra.



# *Couepia leitaofilhoi* Prance

## DESCRIPTION

**Leaf:** shape oblong; **indumentum** lanate. **Inflorescence:** type panicle. **Flower:** receptacle shape cylindrical; **stamen number** 14 - 30; **filament fusion** free. **Fruit:** epicarp glabrous/smooth.

## ADDITIONAL DESCRIPTION

Trees. Branches glabrous when young, conspicuously lenticellate. Leaves: stipules minute, interpetiolar, caducous; petioles 8-11 mm, glabrous, weakly canaliculate above, eglandular; lamina oblong, chartaceous, 9-17 × 3.5-7.5 cm, acuminate at 7-12 mm long apex, rounded and slightly unequal at base, glabrous above, with a short brown, appressed-lanate pubescence beneath; midrib prominulous above, prominent and almost glabrous beneath; primary veins 11-13 pairs, plane above, prominulous beneath. Inflorescences of terminal and axillary panicles; rachis and branches brown-tomentellous. Receptacle cylindrical, 6-7 mm long, brown-tomentellous on exterior, glabrous within except for deflexed hairs on throat; pedicels 0.5 mm long. Calyx lobes 5, acute, brown-tomentellous on exterior. Petals 5, white; margins ciliate. Stamens 19-21, inserted around complete circle. Ovary lanate. Style hirsute for 2/3 of length. Fruit ovoid, 3 cm long, 2.5 cm wide; exocarp smooth, glabrous.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Is endemic from Brazil

## Phytogeographic Domains

Atlantic Rainforest

## Vegetation Types




Ombrophyllous Forest (Tropical Rain Forest)

## Geographic Distribution

### Confirmed occurrences

Southeast (São Paulo)

## HERBARIUM MATERIAL

Furlan et. al., 762, K,   (K000220960), NY,  (NY00329207), São Paulo, **Typus**  
J.E.L.S. Ribeiro, 639, K, HRCB, São Paulo

## REFERENCE

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 2, *Acioa* to *Magnistipula*. In: A. E. Orchard & A. J. G. Wilson (eds), *Species Plantarum: Flora of the World 10*. Australian Biological Resources Study, Canberra.

# *Couepia longipetiolata* Prance

## DESCRIPTION

**Leaf:** shape oblong; **indumentum** lanate-pubescent. **Inflorescence:** type panicle. **Flower:** receptacle shape campanulate/turbinate; **stamen number** 14 - 30; **filament fusion** free. **Fruit:** epicarp unknown.

## ADDITIONAL DESCRIPTION

Trees to 8 m tall. Branches glabrous when young, conspicuously lenticellate. Leaves: stipules small, ovate, membranous, caducous; petioles 14-18 mm long, canaliculate on upper surface, lanate pubescent, transversely rugose, 2-3 mm thick; lamina oblong, coriaceous, 12-15 × 4-4.5 cm, cuneate at base, shortly and abruptly acuminate at apex with acumen 2-3 mm long, glabrous above except on midrib, lanate brown-pubescent beneath, appearing smooth but pubescence covering a deeply reticulate venation with stomatal crypts; midrib prominent beneath, slightly impressed and lanate on basal 1/2 above; primary veins 11-13 pairs, slightly prominent beneath, slightly impressed to plane above. Inflorescences of terminal and subterminal panicles, densely crowded, short branched; rachis and branches rufoustomentellous. Bracts caducous, to 5 mm long, membranous, glabrous; bracteoles caducous, c. 1 mm long, tomentellous on exterior. Receptacle campanulate-turbinate, 4-5 mm long, rufous tomentellous on exterior, glabrous within except for deflexed hairs at throat. Calyx lobes acute, tomentellous on both surfaces. Petals 5, cream, glabrous with ciliate margins. Stamens c. 30, inserted around a complete circle, far exserted. Ovary villous-pubescent. Style pilose-tomentose almost to apex, slightly exceeding the filaments. Fruit not seen.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Is endemic from Brazil

## Phytogeographic Domains

Atlantic Rainforest

## Vegetation Types

Ombrophyllous Forest (Tropical Rain Forest)

## Geographic Distribution

Confirmed occurrences

Northeast (Bahia)

## HERBARIUM MATERIAL

T.S. dos Santos, 2935, FHO, CEPEC,  (CEPEC00011284), NY,  (NY00428109), Bahia, **Typus**

## REFERENCE

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 2, *Acioa* to *Magnistipula*. In: A. E. Orchard & A. J. G. Wilson (eds), *Species Plantarum: Flora of the World 10*. Australian Biological Resources Study, Canberra.

# *Couepia macrophylla* Spruce ex Hook.f.

## Has as synonym

heterotypic *Couepia speciosa* Pilg.

## DESCRIPTION

**Leaf:** shape oblong; **indumentum** arachnoid. **Inflorescence:** type raceme. **Flower:** receptacle shape cylindrical; **stamen number** more than 60; **filament fusion** free. **Fruit:** epicarp glabrous/smooth.

## ADDITIONAL DESCRIPTION

Trees, small. Leaves: stipules 15-20 mm long, linear, caducous; petioles thick, 8-15 mm long, terete, sparsely pubescent, with 2 medial sessile glands; lamina oblong to oblong-elliptic, 19-22 x 6-12 cm on flowering branches (much larger on sterile branches, up to 40 x 14 cm), glabrous above, densely rufous-to-grey arachnoid beneath, rounded to cordate at base, abruptly obtuse to abruptly acuminate at apex with acumen 4-8 mm long; primary veins 26-30 pairs, prominent beneath, slightly impressed above. Inflorescences dense-flowered racemes; rachis with short reddish-brown pubescence. Bracts and bracteoles ovate, to 15 mm long, persistent. Receptacle 20-25 mm long, cylindrical, with short reddish-brown pubescence on exterior, glabrous within except for deflexed hairs at throat; pedicels 2-3.2 mm long. Calyx lobes rounded. Petals 5, persistent, sparsely ciliate at margins. Stamens numerous (c. 280), inserted in a complete circle, in many rows. Ovary villous. Style densely pubescent throughout. Fruit (when young) ellipsoid, 4 x 1.5 cm; exocarp smooth, glabrous.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types


Terra Firme Forest

## Geographic Distribution

### Confirmed occurrences

North (Acre, Amazonas)

## HERBARIUM MATERIAL

M. Silveira, 934, K, NY, INPA, 211332,  (INPA0211332), Acre

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. Flora Neotropica 9: 1-409.

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 2, Acioa to Magnistipula. In: A. E. Orchard & A. J. G. Wilson (eds), Species Plantarum: Flora of the World 10. Australian Biological Resources Study, Canberra.

# *Couepia magnoliifolia* Benth. ex Hook.f.

## DESCRIPTION

**Leaf:** shape oblong; **indumentum** arachnoid. **Inflorescence:** type racemose. **Flower:** receptacle shape cylindric; **stamen number** 14 - 30; **filament fusion** free. **Fruit:** epicarp glabrous/smooth.

## ADDITIONAL DESCRIPTION

Trees, small to medium-sized. Leaves: stipules linear, to 1 mm long, membranous, caducous; petioles 7-8 mm long, tomentose, terete; lamina oblong, 14-24 × 5.5-8.5 cm, rounded to subcuneate at base, shortly acuminate at apex with acumen 3-5 mm long, glabrous above, with dense rufous-brown arachnoid pubescence beneath; primary veins 15-18 pairs, prominent beneath, slightly impressed above. Inflorescences dense axillary or terminal racemose spikes; rachis ferruginous-brown-sericeous. Bracts ovate, 5-7 mm long, caducous. Receptacle subcylindrical, 8-9 mm long, ferruginous-sericeous on exterior, glabrous within except for deflexed hairs at throat; pedicels 1 mm long. Calyx lobes rounded. Petals 5, white, with ciliate margins. Stamens c. 25, inserted in a complete circle. Ovary pilose. Style densely pubescent for 3/4 its length. Fruit ellipsoid; epicarp smooth, glabrous; pericarp thick, fragile, glabrous within.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types









Terra Firme Forest

## Geographic Distribution

### Confirmed occurrences

North (Amazonas)

## HERBARIUM MATERIAL

G.T. Prance, 20729, NY, FHO, G, US, 19062,  (US01856098), MG, 19062 (MG048981), INPA, 44706,  (INPA0044706) Spruce, R., 1414, K,  (K000220940), K,  (K000220941), NY,  (NY00428110), P (P00741091), P (P00741092), RB, 19062,  (RB00537017), RB, 19062,  (RB00568965), RB, 19062,  (RB00568966), Amazonas, **Typus**

## REFERENCE

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 2, Acioa to Magnistipula. In: A. E. Orchard & A. J. G. Wilson (eds), Species Plantarum: Flora of the World 10. Australian Biological Resources Study, Canberra.  
Prance, G.T. 1972. Chrysobalanaceae. Flora Neotropica 9: 1-409.

# *Couepia maguirei* Prance

## DESCRIPTION

**Leaf:** shape oblong/lanceolate; **indumentum** tomentose/arachnoid. **Inflorescence:** type panicle. **Flower:** receptacle shape campanulate; **stamen number** 55 - 60; **filament fusion** free. **Fruit:** epicarp glabrous/smooth.

## ADDITIONAL DESCRIPTION

Shrubs or small trees. Branches sparsely pubescent when young. Leaves: stipules linear, 1-2 mm long, caducous; petioles 4-5.5 mm long, pubescent, canaliculate above; lamina oblong-lanceolate, coriaceous, 5-11 × 1.5-4 cm, acuminate at apex with acumen 3-6 mm long, rounded to cordate at base, glabrous and shiny above, densely arachnoid-tomentose beneath; primary veins 11-16 pairs, prominent beneath. Inflorescences of terminal panicles; rachis and branches sparsely grey-pubescent. Bracts and bracteoles c. 5 mm long, caducous. Receptacle subcampanulate, 8 mm long, sparsely grey-tomentose on exterior, glabrous within except for ring of deflexed hairs around throat; pedicels 2-3 mm long. Calyx lobes rounded. Petals 5, deciduous; margins shortly ciliate. Stamens 55-60, inserted around complete circle. Ovary densely pilose. Style pilose. Fruit ovoid, exocarp glabrous, smooth; endocarp granular thin, fragile, glabrous within.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types



Riverine Forest and/or Gallery Forest

## Geographic Distribution

### Confirmed occurrences

North (Amazonas)

## HERBARIUM MATERIAL

G.T. Prance, 16035, NY, K, FHO, RB, MG (MG044580), P (P05562749), P (P05562750), US,  (US01856092), INPA, 34254,  (INPA0034254), Amazonas

B. Maguire, 32714, NYBG, 428111,  (NY00428111), Amazonas, **Typus**

## REFERENCE

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 2, *Acioa* to *Magnistipula*. In: A. E. Orchard & A. J. G. Wilson (eds), *Species Plantarum: Flora of the World 10*. Australian Biological Resources Study, Canberra.

Prance, G.T. 1972. Chrysobalanaceae. *Flora Neotropica* 9: 1-409.

# *Couepia marleneae* Prance

## DESCRIPTION

**Leaf:** shape oblong/lanceolate; **indumentum** lanate-pubescent. **Inflorescence:** type raceme. **Flower:** receptacle shape cylindrical; **stamen number** more than 60; **filament fusion** free. **Fruit:** epicarp glabrous/smooth.

## ADDITIONAL DESCRIPTION

Trees to 8 m tall. Branches sparsely puberulous when young, soon becoming glabrous. Leaves: stipules triangular, 1 mm long; petioles 4-7 mm long, sparsely puberulous or glabrous, canaliculate above; lamina oblong-lanceolate, coriaceous, 5-8 × 1.5-2.4 cm, subcuneate at base, acuminate at apex with acumen 5-15 mm long, with 2 glands towards base at junction with petiole, glabrous above, with sparsely lanate pubescence beneath; midrib glabrous and prominulous above, prominent beneath; primary veins 7-10 pairs, prominent beneath. Inflorescences of terminal racemes; rachis grey-puberulous. Bracts small and caducous. Receptacle cylindrical, swollen towards base, 15-18 mm long, sparsely puberulous on exterior, ±glabrous within but densely pilose around base of stamens. Calyx lobes 5, rounded, sparsely puberulous on exterior; margins ciliate. Petals 5, white; margins ciliate. Stamens numerous, inserted around a complete circle. Ovary densely pilose. Style pilose for 1/2 of length. Fruit when young ovoid; exocarp smooth, glabrous; mesocarp fleshy; endocarp hard, fragile.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Is endemic from Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types

Terra Firme Forest




## Geographic Distribution

### Confirmed occurrences

North (Amazonas)

Northeast (Ceará)

## HERBARIUM MATERIAL

Silva, M.F., 822, INPA, RB, NY, INPA, 36913,  (INPA0036913), Amazonas, **Typus**  
C. Todzia, 2295, K, 36913,  (K001242013), US, 36913,  (US01856104), INPA, 124562,  (INPA0124562), Amazonas

## REFERENCE

- Prance, G.T. 1989. Chrysobalanaceae (Supplement). *Flora Neotropica* 9: 1-267  
Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 2, *Acioa* to *Magnistipula*. In: A. E. Orchard & A. J. G. Wilson (eds), *Species Plantarum: Flora of the World* 10. Australian Biological Resources Study, Canberra.

# *Couepia meridionalis* Prance

## DESCRIPTION

**Leaf:** shape elliptic/oblong-elliptic; **indumentum** tomentose/lanate. **Inflorescence:** type panicle. **Flower:** receptacle shape cylindrical; **stamen number** 14 - 30; **filament fusion** free. **Fruit:** epicarp unknown.

## ADDITIONAL DESCRIPTION

Trees. Leaves: stipules small, caducous; petioles 5-10 mm long, canaliculate; lamina elliptic to oblong-elliptic, 6.5-11.5 × 3-6 cm, rounded at base, acuminate at apex with acumen 3-5 mm long, glabrous above, densely lanate tomentose beneath; primary veins 10-13 pairs. Inflorescence of little-branched terminal panicles, sericeous-tomentose. Receptacle cylindrical, 8-9 mm long, densely sericeous-tomentose on exterior; pedicels 1.5-2 mm long; petals pubescent on exterior. Stamens c. 25 inserted around complete circle. Ovary densely pilose; style pilose almost to apex. Fruit not seen.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Is endemic from Brazil

## Phytogeographic Domains

Atlantic Rainforest

## Vegetation Types


Ombrophyllous Forest (Tropical Rain Forest)

## Geographic Distribution

### Confirmed occurrences

Southeast (São Paulo)

## HERBARIUM MATERIAL

Mosén, H., 3377, LE, K,  (K000220988), P (P00741093), S (S-R-8166), S (S10-19710), S (S10-19711), São Paulo, **Typus**

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. Flora Neotropica 9: 1-409.

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 2, Acioa to Magnistipula. In: A. E. Orchard & A. J. G. Wilson (eds), Species Plantarum: Flora of the World 10. Australian Biological Resources Study, Canberra.

# *Couepia monteclarensis* Prance

## DESCRIPTION

**Leaf:** shape oblong; **indumentum** pubescent/lanate. **Inflorescence:** type panicle. **Flower:** receptacle shape cylindrical; **stamen number** 14 - 30; **filament fusion** free. **Fruit:** epicarp glabrous/smooth.

## ADDITIONAL DESCRIPTION

Trees. Branches glabrous when young, conspicuously lenticellate. Leaves: stipules caducous (not seen); petioles 8-10 mm long, glabrescent, canaliculate, with a single gland on 1 side or eglandular; lamina oblong, chartaceous, 7.5-11 × 3.3-4.6 cm, subcuneate at base, apiculate at apex with apex 4-6 mm long, glabrous above, with a short brown-lanate pubescence beneath; midrib prominulous above, prominent beneath; primary veins 8-10 pairs, plane above, prominent beneath. Inflorescences of terminal panicles, 6-8 cm long, with a central rachis and short dichotomous branches bearing 2 to 4 flowers; rachis and branches grey-puberulous. Receptacle cylindrical, 5-7 mm long, grey puberulous externally, glabrous within except for deflexed hairs at throat; pedicels 3-5 mm long, articulated at middle and with lower part persistent after flower dehiscence. Calyx lobes 5, rounded to slightly acute, 2-3 mm long, grey puberulous on exterior. Petals 5, white, glabrous except for ciliate margins. Stamens 18-20, inserted almost around complete circle. Ovary inserted near mouth of tube, lanate. Style hirsute for 3/4 of length. Fruit when young ovoid; exocarp smooth, glabrous; mesocarp granular; endocarp bony, glabrous within.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Is endemic from Brazil

## Phytogeographic Domains

Atlantic Rainforest

## Vegetation Types

Ombrophyllous Forest (Tropical Rain Forest)

## Geographic Distribution


### Confirmed occurrences

Northeast (Bahia)

Southeast (Minas Gerais, Rio de Janeiro, São Paulo)

## HERBARIUM MATERIAL

C. Farney, 1451, NY, RB, K,  (K001241913), Rio de Janeiro

M. A. Lopes, 113, NY,  (NY00452434), Minas Gerais, **Typus**

## REFERENCE

Prance, G.T. 1989. Chrysobalanaceae (Supplement). *Flora Neotropica* 9: 1-267

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 2, *Acioa* to *Magnistipula*. In: A. E. Orchard & A. J. G. Wilson (eds), *Species Plantarum: Flora of the World* 10. Australian Biological Resources Study, Canberra.





# *Couepia morii* Prance

## DESCRIPTION

**Leaf:** shape oblong; **indumentum** lanate-pubescent. **Inflorescence:** type panicle. **Flower:** receptacle shape cylindrical; **stamen number** 14 - 30; **filament fusion** free. **Fruit:** epicarp unknown.

## ADDITIONAL DESCRIPTION

Trees to 30 m tall. Branches sparsely puberulous when young soon becoming glabrous.

Leaves: stipules caducous (not seen); petioles 6-10 mm long, sparsely puberulous soon becoming glabrous, eglandular, rugose, canaliculate above; lamina oblong, coriaceous, 7-13.5 × 3-5.8 cm; base rounded to subcuneate; apex abruptly acuminate with acumen

5-12 mm long; glabrous above, densely appressed lanate pubescent beneath; midrib glabrous and prominent above, prominent beneath; primary veins 16-19 pairs, plane above, prominent beneath. Inflorescences of terminal and axillary little-branched panicles, 2-5 cm long; rachis and branches tomentellous; flowers borne on rachis or on small branches in groups of 2 or 3. Bracts and bracteoles large and enclosing groups of buds but very early caducous and only visible in young inflorescences, 3-15 mm long, membranous tomentellous on exterior, puberulous within. Receptacle cylindrical, tomentellous on exterior, glabrous within except at throat. Calyx lobes 5, tomentellous on exterior. Petals 5, glabrous except for ciliate margins. Stamens c. 20, inserted around complete circle, with a mass of deflexed hairs around base. Ovary tomentellous, inserted at mouth of receptacle. Style hirsute for 1/2 of length. Fruit not seen.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Is endemic from Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types

Terra Firme Forest

## Geographic Distribution

Confirmed occurrences

North (Amazonas)

## HERBARIUM MATERIAL

S.A. Mori, 21398, INPA, K,  (K000220951), NY,  (NY00428116), UB, 11701,  (UB0036788), Amazonas, **Typus**

## REFERENCE

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 2, *Acioa* to *Magnistipula*. In: A. E. Orchard & A. J. G. Wilson (eds), *Species Plantarum: Flora of the World 10*. Australian Biological Resources Study, Canberra.

# *Couepia multiflora* Benth.

## Has as synonym

basionym *Moquilea multiflora* (Benth.) Walp.

## DESCRIPTION

**Leaf:** shape oblong-elliptic/oblong; **indumentum** arachnoid. **Inflorescence:** type panicle. **Flower:** receptacle shape cylindrical; **stamen number** 25 - 45; **filament fusion** free. **Fruit:** epicarp glabrous/smooth.

## ADDITIONAL DESCRIPTION

Trees to 6 m tall. Leaves: stipules linear, to 9 mm long, caducous, membranous; petioles 4-7 mm long, pubescent, terete, eglandular; lamina oblong to oblong-elliptic, 9-15 × 4-9 cm, rounded to cordate at base, rounded to short-acuminate at apex with acumen 1-5 mm long, glabrous above, densely grey-arachnoid beneath; midrib prominent beneath, pubescent above; primary veins 12-14 pairs, prominent beneath, slightly impressed above. Inflorescences terminal panicles; rachis and branches densely brown-tomentose. Bracts and bracteoles 2-5 mm long, oblong to lanceolate, caducous. Receptacle c. 7 mm long, cylindrical, curved anteriorly in bud, with short thick brown tomentum on exterior, glabrous within except for deflexed hairs at throat; pedicels 1 mm long. Calyx lobes rounded. Petals 5, white; margins glabrous or with a few isolated hairs. Stamens c. 28, inserted in an arc of c. 240°, with a sterile portion of circle opposite. Ovary pilose. Style pubescent for 1/2 its length. Fruit ellipsoid, 6.5 × 3.5 cm; exocarp smooth, glabrous; mesocarp c. 3 mm thick when dry, fleshy; endocarp thin, fibrous.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types






Amazonian Savanna

## Geographic Distribution

### Confirmed occurrences

North (Roraima)

## HERBARIUM MATERIAL

Amaral, I.L., 1448, NY, RB, UB, K,  (K001244171), US,  (US01856117), INPA, 122250,  (INPA0122250), Roraima Schomburgk, Robert Hermann, 112, E, 3301480,  (E00056049), K, 3301480,  (K000220980), P, 3301480 (P00741094), P, 3301480 (P00741095), **Typus**

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. *Flora Neotropica* 9: 1-409.

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 2, *Acioa* to *Magnistipula*. In: A. E. Orchard & A. J. G. Wilson (eds), *Species Plantarum: Flora of the World* 10. Australian Biological Resources Study, Canberra.

# *Couepia obovata* Ducke

## DESCRIPTION

**Leaf:** shape obovate; **indumentum** indumentum. **Inflorescence:** type raceme. **Flower:** receptacle shape cylindrical; **stamen number** 14 - 30; **filament fusion** free. **Fruit:** epicarp glabrous/smooth.

## ADDITIONAL DESCRIPTION

Trees, small to medium-sized. Leaves: stipules 1-2 mm long, lanceolate, caducous; petioles 3-7 mm long; lamina obovate, 4-10 × 2-5 cm, subcuneate at base, bluntly acuminate at apex with acumen 2-5 mm long, glabrous above, with a sparse covering of appressed grey hairs beneath; primary veins 8-10 pairs, prominent beneath. Inflorescences terminal and axillary racemes, 3-6 cm long; rachis with sparse silver-grey pubescence. Bracts and bracteoles 1.5-3.5 mm long, ovate, persistent. Receptacle cylindrical, 7-9 mm long curved, with a few short appressed hairs on exterior, glabrous within except for deflexed hairs at throat, subsessile. Calyx lobes rounded. Petals 5, white, ciliate on margins. Stamens 16-21, inserted in a complete circle. Ovary lanate. Style glabrous except at base. Fruit ovoid, 2-3 × 1.5-2.5 cm; epicarp smooth, glabrous; endocarp thick, hard, of a granular texture, glabrous within.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types




Terra Firme Forest




## Geographic Distribution

### Confirmed occurrences

North (Amazonas, Pará)

## HERBARIUM MATERIAL

Costa, M.A.S., 350, K,  (K001242003), MG (MG154384), RB, 334967,  (RB00068578), INPA, 183366,  (INPA0183366), Amazonas

Ducke, A., 24996, K, U.1203629,  (K000220969), P, U.1203629 (P00741096), RB, 24996,  (RB00537020), G, G00359622,  (G00359622), Amazonas, **Typus**

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. Flora Neotropica 9: 1-409.

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 2, Acioa to Magnistipula. In: A. E. Orchard & A. J. G. Wilson (eds), Species Plantarum: Flora of the World 10. Australian Biological Resources Study, Canberra.

# *Couepia ovalifolia* (Schott) Benth. ex Hook.f.

## Has as synonym

basionym *Chrysobalanus ovalifolius* Schott

homotype *Couepia ovatifolia* Benth.

heterotypic *Couepia hypoleuca* Miq.

heterotypic *Moquilea hypoleuca* (Miq.) B.D.Jacks.

## DESCRIPTION

**Leaf:** shape ovate; **indumentum** arachnoid. **Inflorescence:** type panicle. **Flower:** receptacle shape campanulate; **stamen number** 14 - 30; **filament fusion** free. **Fruit:** epicarp glabrous/smooth.

## ADDITIONAL DESCRIPTION

Shrubs, dwarf to medium-sized trees. Leaves: stipules to 2 mm long, caducous; petioles 4-7 (-10) mm long, pubescent when young, shallowly canaliculate; lamina ovate, 4-10.5 x 2.5-7 cm, rounded to cordate at base, short-acuminate at apex with acumen 1-7 mm long, glabrous above, densely silver-grey-arachnoid beneath, sometimes becoming glabrous with age; midrib prominent beneath, pubescent above when young; primary veins 11-15 pairs, prominent beneath, impressed above. Inflorescences terminal panicles; rachis and branches with short light brown pubescence. Bracts and bracteoles oblong-ovate, 3-6.5 mm long, caducous. Receptacle subcampanulate, 4-5 mm long, densely light-brown-pubescent on exterior, glabrous within except for deflexed hairs at throat; pedicels 1.5-4 mm long. Calyx lobes rounded, 3-4 mm long. Petals 5, white, ciliate on margins. Stamens 16-19, inserted in an arc of 240 degrees, with a sterile portion opposite. Ovary densely pilose. Style pubescent for 1/2 its length. Fruit elliptic; epicarp smooth, glabrous or softly pubescent when young; mesocarp thin, fleshy; endocarp thin, fragile, granular, glabrous within.

## Life Form

Shrub, Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Is endemic from Brazil

## Phytogeographic Domains

Atlantic Rainforest

## Vegetation Types

Ombrophyllous Forest (Tropical Rain Forest), Coastal Forest (Restinga)

## Geographic Distribution

### Confirmed occurrences


Northeast (Bahia)

Southeast (Espírito Santo, Minas Gerais, Rio de Janeiro)

## HERBARIUM MATERIAL

Schott, s.n., G, G00177588,  (G00177588), NY, 181770,  (NY00428124), K, 181770,  (K000220958), Rio de Janeiro,

### Typus

G.L. Farias, 73, K, G00177588,  (K001244071), Espírito Santo

G. Martinelli, 80, RB, 181770,  (RB00068740), Rio de Janeiro

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. *Flora Neotropica* 9: 1-409.

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 2, *Acioa* to *Magnistipula*. In: A. E. Orchard & A. J. G. Wilson (eds), *Species Plantarum: Flora of the World* 10. Australian Biological Resources Study, Canberra.

# *Couepia oxossii* Amorim & Asprino

## DESCRIPTION

**Leaf:** shape elliptic/ovate/oblong; **indumentum** arachnoid. **Inflorescence:** type panicle. **Flower:** receptacle shape cylindrical; **stamen number** 14 - 30; **filament fusion** free. **Fruit:** epicarp glabrous/smooth/rugose.

## ADDITIONAL DESCRIPTION

Trees to 15 m tall. Leaves: stipules 2.2–3 mm long, early caducous, eglandular; petiole 3–5 mm long, sparsely velutinous-arachnoid to glabrescent, eglandular; lamina 2.2– 3.6(–6) x 1.4–2.7(–3.5) cm, coriaceous, oblong to ovate, rarely widely elliptic, base obtuse to rounded or subcordate, apex obtuse to rounded, margins revolute 5–10(–11) pairs of secondary veins; lamina dense velutinous-arachnoid, midvein prominent, secondary veins plane, tertiary veins and reticulation not visible. Inflorescence a terminal or subterminal panicle, erect, rachis velutinous-arachnoid; bracts and bracteoles 1–1.2 mm long, triangular, caducous; pedicel 2–3 mm long. Flowers 9–11 mm long; receptacle cylindrical, often slightly curved, outside sparsely velutinous-arachnoid, inside glabrous except for dehiscent hairs near throat; calyx lobes widely ovate, 3–3.5 x 2–3 mm, margin eglandular or sometimes bearing tiny sessile glands; petals 5, oblong, glabrous, whitish, caducous; stamens 15–18, inserted in a complete circle or semi-circle, filaments 6–12 mm long, glabrous; ovary lanate; style 10–11 mm long, bifid, hirsute up to 3/4 of length, stigma truncate. Drupe 3.3–3.5 x 2.0–2.2 cm, fleshy, ellipsoid, tapering towards apex, green when immature; epicarp smooth to slightly rugose, glabrous; pericarp 1.0–2.0 mm thick, hard, granular, glabrous within; seeds ca. 2.7 x 1.4 cm.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Is endemic from Brazil

## Phytogeographic Domains

Atlantic Rainforest

## Vegetation Types

Ombrophylous Forest (Tropical Rain Forest)



## Geographic Distribution

### Confirmed occurrences

Northeast (Bahia)

## HERBARIUM MATERIAL

T. S. Santos, 322, CEPEC,  (CEPEC00005084), Bahia

Amorim, A. M., 9530, CEPEC, ,  (CEPEC00142073), Bahia

A.M. Amorim, 9530, RB,  (RB00994603), Bahia

## REFERENCE

Amorim, A.M., Barbosa-Silva, R.G., Sothers, C.A. & Asprino, R.C. (2018). A tribute to the Orixás: A new *Couepia* Aubl. (Chrysobalanaceae) from Bahia, Brazil. *Journal of the Torrey Botanical Society*, 145(3):271-277.

# *Couepia paraensis* (Mart. & Zucc.) Benth.

This treatment is composed of the following taxa: *Couepia paraensis*, *Couepia paraensis* subsp. *cerradoana*, *Couepia paraensis* subsp. *glaucescens*, *Couepia paraensis* subsp. *paraensis*.

## Has as synonym

basionym *Moquilea paraensis* Mart. & Zucc.

## DESCRIPTION

**Leaf: shape** ovate/oblong; **indumentum** glabrous/puberulous/arachnoid. **Inflorescence: type** panicle. **Flower: receptacle shape** campanulate/subcylindrical; **stamen number** 25 - 45; **filament fusion** free. **Fruit: epicarp** smooth.

## ADDITIONAL DESCRIPTION

Trees to 20 m tall, usually smaller. Leaves: stipules 1-2 mm long, caducous; petioles 4-7 mm long, pubescent, canaliculate above; lamina ovate to oblong, 5.5-16 x 2.5-8.5 cm, rounded to cordate at base, blunt or short-acuminate at apex, with acumen 15 mm long, glabrous above, usually densely grey to brown lanate-arachnoid beneath, rarely glabrous or puberulous, with 2 glands at base of lower surface of lamina; primary veins 10-15 pairs, prominent beneath; midrib glabrous or pubescent above. Inflorescences terminal panicles, sparsely appressed pubescent. Bracts and bracteoles 0.5-2.5 mm long, ovate, caducous. Receptacle subcylindrical to subcampanulate, 812 mm long, sparsely appressed-pubescent on exterior, completely hairy within or glabrous except for deflexed hairs at throat. Calyx lobes rounded. Petals 5, white, ciliate on margins. Stamens 25-45, inserted in 1/2 to 2/3 of a circle, with short staminodes opposite. Ovary pilose. Style densely pubescent for 3/4 of its length. Fruit ellipsoid, 3.5-4 cm long x 2-3 cm broad; epicarp smooth, glabrous; mesocarp thin, fleshy; endocarp thin, fragile, granular in texture, with interior glabrous.

## COMMENTS

This species has three subspecies.

### **Life Form**

Tree

### **Substrate**

Terrestrial, Unknown

## DISTRIBUTION

Native, Not endemic to Brazil

### **Phytogeographic Domains**

Amazon Rainforest, Central Brazilian Savanna

### **Vegetation Types**

Cerrado (lato sensu), Riverine Forest and/or Gallery Forest, Terra Firme Forest

### **Geographic Distribution**

#### Confirmed occurrences

North (Acre, Amazonas, Pará, Rondônia, Roraima, Tocantins)

Northeast (Maranhão)

Central-west (Goiás, Mato Grosso)

## IDENTIFICATION KEY

- 1 Interior of receptacle hairy throughout.....subsp. *paraensis*
  - 1: Interior of receptacle glabrous except for deflexed hairs at throat
  - 2 Bark of young stem thin; on forest and savanna margins.....subsp. *glaucescens*
  - 2: Young stem with a thick corky bark; in cerrado.....subsp. *cerradoana*



## REFERENCE

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 2, *Acioa* to *Magnistipula*. In: A. E. Orchard & A. J. G. Wilson (eds), *Species Plantarum: Flora of the World 10*. Australian Biological Resources Study, Canberra.

# *Couepia paraensis* (Mart. & Zucc.) Benth. subsp. *paraensis*

## Has as synonym

heterotypic *Couepia rivalis* Spruce

heterotypic *Couepia vismioides* Klotzsch ex Hook.f.

## DESCRIPTION

Bark of young stem thin. Receptacle interior hairy throughout.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest, Central Brazilian Savanna

## Vegetation Types

Cerrado (lato sensu), Riverine Forest and/or Gallery Forest, Terra Firme Forest

## Geographic Distribution

### Confirmed occurrences


North (Amazonas, Pará, Rondônia, Tocantins)


Central-west (Goiás, Mato Grosso)

## HERBARIUM MATERIAL

G. Martinelli, 12267, RB, NY, K, INPA

Spruce, R., [Not on sheet], S (S-R-8169), Pará, **Typus**

G. Martinelli, 12267, RB, 412252,  (RB00072763), Pará

Martinelli, G. (Martinelli, Gustavo), 12267, US,  (US01856134), Pará

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. Flora Neotropica 9: 1-409.

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 2, Acioa to Magnistipula. In: A. E. Orchard & A. J. G. Wilson (eds), Species Plantarum: Flora of the World 10. Australian Biological Resources Study, Canberra.

# *Couepia paraensis* subsp. *cerradoana*

## Prance

### DESCRIPTION

Bark of young stem thick and corky. Receptacle interior glabrous, except for deflexed hairs at throat.

#### **Life Form**

Tree

#### **Substrate**

Terrestrial

### DISTRIBUTION

Native, Is endemic from Brazil

#### **Phytogeographic Domains**

Amazon Rainforest, Central Brazilian Savanna

#### **Vegetation Types**

Cerrado (lato sensu)

#### **Geographic Distribution**

##### Confirmed occurrences

North (Pará, Tocantins)

Northeast (Maranhão)

Central-west (Mato Grosso)

### HERBARIUM MATERIAL

G.T. Prance, 58519, F, M, MO, UB, NY,  (NY00428126), Tocantins, **Typus**

### REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. Flora Neotropica 9: 1-409.

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 2, Acioa to Magnistipula. In: A. E. Orchard & A. J. G. Wilson (eds), Species Plantarum: Flora of the World 10. Australian Biological Resources Study, Canberra.

# *Couepia paraensis* subsp. *glaucescens* (Spruce ex Hook.f.) Prance

## Has as synonym

basionym *Couepia glaucescens* Spruce ex Hook.f.

heterotypic *Couepia duckei* Huber

## DESCRIPTION

Bark of young stem thin. Receptacle interior glabrous except for deflexed hairs at throat.

## Life Form

Tree

## Substrate

Terrestrial, Unknown

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest, Central Brazilian Savanna

## Vegetation Types

Riverine Forest and/or Gallery Forest

## Geographic Distribution

### Confirmed occurrences




North (Acre, Amazonas, Pará, Rondônia, Roraima, Tocantins)

Central-west (Mato Grosso)

## HERBARIUM MATERIAL

C. Ferreira, 10527, NY, INPA

C.A.C. Ferreira, 10527, K,  (K001241874), Acre

R. Spruce, 1752, GH,  (GH00046183), K,  (K000220934), NY,  (NY00428094), Amazonas, **Typus**

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. Flora Neotropica 9: 1-409.

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 2, Acioa to Magnistipula. In: A. E. Orchard & A. J. G. Wilson (eds), Species Plantarum: Flora of the World 10. Australian Biological Resources Study, Canberra.

# *Couepia parvifolia* Prance

## DESCRIPTION

**Leaf:** shape oblanceolate/oblong; **indumentum** tomentose/lanate. **Inflorescence:** type panicle. **Flower:** receptacle shape campanulate; **stamen number** 25 - 45; **filament fusion** free. **Fruit:** epicarp glabrous/smooth.

## ADDITIONAL DESCRIPTION

Trees. Branches tomentellous when young, soon becoming glabrous. Leaves: stipules to 2 mm long, caducous; petioles 5-7 mm long, lanate-pubescent, glabrescent, eglandular, canaliculate above; lamina oblong to oblong lanceolate, 2.5-6.5 × 0.8-2.5 cm, acuminate at apex with acumen 5-7 mm long, cuneate at base, glabrous above, densely lanate-tomentose beneath; midrib glabrous; primary veins 7-9 pairs, prominent beneath. Inflorescences little-branched terminal panicles; rachis and branches brown-tomentose. Bracts and bracteoles 1-2.5 mm long, ovate, caducous. Receptacle subcampanulate, 5-6 mm long, brown-tomentose on exterior, glabrous within except for around throat beneath stamens; pedicels short, 0.25 mm long. Calyx lobes rounded. Petals 5, densely pubescent; margins ciliate. Stamens c. 28, inserted around complete circle. Ovary densely lanate pubescent. Fruit ovoid, 3.5 × 2.2 cm; exocarp smooth, glabrous; endocarp thin, granular on exterior, fragile, glabrous within.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Is endemic from Brazil

## Phytogeographic Domains

Atlantic Rainforest

## Vegetation Types








Ombrophyllous Forest (Tropical Rain Forest)

## Geographic Distribution

### Confirmed occurrences

Southeast (Rio de Janeiro)

## HERBARIUM MATERIAL

Oliveira, C.A.L., 1713, GUA, NY, K,  (K001242060), K,  (K001242061), SPF,  (SPF00148796), Rio de Janeiro  
Duarte, A.P., 1508, RB, 65362,  (RB00537022), RB, 65362,  (RB00537146), NY, 65362,  (NY01085712), SP, 413187,   
(SP001520), Rio de Janeiro, **Typus**

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. Flora Neotropica 9: 1-409.

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 2, Acioa to Magnistipula. In: A. E. Orchard & A. J. G. Wilson (eds), Species Plantarum: Flora of the World 10. Australian Biological Resources Study, Canberra.

# *Couepia pernambucensis* Prance

## DESCRIPTION

**Leaf:** shape elliptic/ovate/oblong; **indumentum** pubescent/arachnoid. **Inflorescence:** type panicle. **Flower:** receptacle shape cylindrical; **stamen number** 14 - 30; **filament fusion** free. **Fruit:** epicarp glabrous/smooth.

## ADDITIONAL DESCRIPTION

Trees. Branches puberulous when young, soon becoming glabrous and lenticellate. Leaves: stipules small, caducous; petioles 4-5 mm long, lanate-pubescent, eglandular, canaliculate above; lamina ovate-elliptic to oblong, 5-6.5 × 2-2.8 cm, acuminate at apex with acumen 2-6 mm long, rounded at base, glabrous above, sparsely arachnoid pubescent beneath; midrib pubescent towards base; primary veins 8-10 pairs, prominent beneath. Inflorescences of terminal and axillary panicles; rachis and branches densely tomentellous. Bracts and bracteoles to 2.5 mm long, caducous. Receptacle cylindrical, 5-6 mm long, slightly curved, densely tomentellous on exterior, glabrous within except for ring of hairs around throat; pedicels c. 1 mm long. Calyx lobes acute. Petals 5, caducous, white; margins ciliate. Stamens 14-17, inserted around complete circle. Ovary pilose. Style pilose. Fruit ellipsoid, exocarp smooth, glabrous; endocarp thin, granular, fragile, glabrous within.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Is endemic from Brazil

## Phytogeographic Domains

Atlantic Rainforest

## Vegetation Types



Ombrophyllous Forest (Tropical Rain Forest)

## Geographic Distribution

### Confirmed occurrences

Northeast (Alagoas, Bahia, Pernambuco)

## HERBARIUM MATERIAL

Andrade-Lima, 53-1206, IPA, 5531,  (IPA0005531), PEUFR, 985,  (PEUFR000985), Pernambuco, **Typus**

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. Flora Neotropica 9: 1-409.

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 2, Acioa to Magnistipula. In: A. E. Orchard & A. J. G. Wilson (eds), Species Plantarum: Flora of the World 10. Australian Biological Resources Study, Canberra.

Sothers C.A., Prance G.T., Buerki S., Kok, R. de & Chase, M.W. (2014). Taxonomic novelties in Neotropical Chrysobalanaceae: towards a monophyletic *Couepia*. *Phytotaxa* 172: 176 – 200.

# *Couepia rankiniae* Prance

## DESCRIPTION

**Leaf:** shape oblong-elliptic/oblong; **indumentum** lanate. **Inflorescence:** type paniculate. **Flower:** receptacle shape campanulate; **stamen number** more than 60; **filament fusion** free. **Fruit:** epicarp glabrous/verrucose.

## ADDITIONAL DESCRIPTION

Trees to 20 m tall. Branches puberulous when young, soon becoming glabrous. Leaves: stipules axillary, lanceolate, c. 3 mm long, membranous, caducous; petioles 7-12 mm long, slightly canaliculate above, usually with 1 or 2 glands on lower surface and glands sometimes extending to midrib, sparsely puberulous, rugose; lamina oblong to oblongelliptic, chartaceous, 7.5-18.5 × 3.5-5.0 cm, rounded at base, abruptly acuminate at apex with acumen 3-10 mm long, glabrous above, with a dense appressed lanate pubescence beneath; midrib prominent and sparsely puberulous, glabrescent beneath, prominulous and glabrous above; primary veins 12-16 pairs, prominent beneath, plane or slightly impressed above. Inflorescence (only 1 partial inflorescence seen) paniculate, with flowers borne in small groups on a single rachis 6-8 cm long; rachis and branches tomentellous. Bracts and bracteoles caducous. Flower bud 12 mm long. Receptacle campanulate, tomentellous on exterior, glabrous within except for pilose mass around throat. Calyx lobes 5, acute, tomentellous on exterior. Petals 5. Stamens numerous, inserted around complete circle. Ovary inserted at mouth of receptacle. Style hirsute at base. Fruit when young globose, glabrous, densely lenticellate on exterior.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types






Terra Firme Forest

## Geographic Distribution

### Confirmed occurrences

North (Amazonas)

## HERBARIUM MATERIAL

Oliveira, A.A., 433, NY, SPF, K,  (K001242057), UNIP (UNIP00569), INPA, 171590,  (INPA0171590), Amazonas Mars, L., 3304.1149, K, 171590,   (K000220991), K, 171590,  (K000220992), Amazonas, **Typus**

## REFERENCE

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 2, Acioa to Magnistipula. In: A. E. Orchard & A. J. G. Wilson (eds), Species Plantarum: Flora of the World 10. Australian Biological Resources Study, Canberra.

# *Couepia reflexa* Ducke

## DESCRIPTION

**Leaf:** shape oblong-elliptic; **indumentum** glabrous. **Inflorescence:** type paniculate/racemose. **Flower:** receptacle shape cylindrical; **stamen number** 25 - 45; **filament fusion** free. **Fruit:** epicarp unknown.

## ADDITIONAL DESCRIPTION

Trees, medium-sized. Leaves: stipules c. 2 mm long, caducous; petioles 5-8 mm long, glabrous, terete; lamina membranous, oblong-elliptic, 10-17 × 4-8 cm, subcuneate at base, acuminate at apex with acumen 9-10 mm long, glabrous on both surfaces; primary veins 10-13 pairs, prominent on both surfaces. Inflorescences axillary reflexed racemose panicles to 8 cm long; rachis and branches sparsely silver-grey pubescent. Bracts and bracteoles 1-3 mm long, lanceolate, persistent. Receptacle cylindrical, c. 7 mm long, sparsely silver-grey pubescent on exterior, glabrous within except for deflexed hairs at throat; pedicels 3 mm long. Calyx lobes oblong, rounded. Petals 5, white, ciliate on margins. Stamens c. 35, inserted in a complete circle. Ovary pilose. Style glabrous except at base. Fruit unknown.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Is endemic from Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types






Terra Firme Forest

## Geographic Distribution

### Confirmed occurrences

North (Pará)

## HERBARIUM MATERIAL

A. Ducke, s.n., U, IAN, K,  (K000220975), NY,  (NY00428136), P (P00741106), P (P00741107), RB, 19757,  (RB00537025), MG, 19757 (MG195559), G, G00359624,  (G00359624), US, 1441635,  (US00130945), Pará, **Typus**

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. Flora Neotropica 9: 1-409.

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 2, Acioa to Magnistipula. In: A. E. Orchard & A. J. G. Wilson (eds), Species Plantarum: Flora of the World 10. Australian Biological Resources Study, Canberra.



# *Couepia robusta* Huber

## DESCRIPTION

**Leaf:** shape elliptic/oblong; **indumentum** arachnoid. **Inflorescence:** type panicle. **Flower:** receptacle shape campanulate; **stamen number** 25 - 45; **filament fusion** free. **Fruit:** epicarp glabrous/smooth.

## ADDITIONAL DESCRIPTION

Trees to 30 m tall. Leaves: stipules to 5 mm long, lanceolate, caducous; petioles 5-8 mm long, with short brown pubescence; lamina oblong to elliptic, 9-23 × 4-11 cm, rounded to cordate at base, rounded or shortly acuminate at apex with acumen 1-5 mm long, glabrous above, densely rufous-brown-arachnoid beneath; primary veins 15-21 pairs, prominent beneath. Inflorescences terminal little-branched panicles; rachis and branches with reddishbrown tomentum. Bracts and bracteoles 3-7 mm long, ovate, caducous. Receptacle subcampanulate, 7-9 mm long, densely reddish-brown-pubescent on exterior, glabrous within except for deflexed hairs at throat; pedicels 2 mm long. Calyx lobes rounded, 6-7 mm long, densely reddish-brown-pubescent on exterior, densely light-brown-pubescent within. Petals 5, white, ciliate on margins. Stamens c. 43, inserted in an arc of c. 240°, with a toothed ridge of staminodes opposite. Ovary densely villous, often with 2 carpels developing. Style pubescent for 1/2 its length. Fruit ovoid, 5-6 × 3.5-4 cm; epicarp smooth, glabrous; mesocarp thick, fleshy, fibrous; endocarp thin, fragile, granular, sparsely pubescent within.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Is endemic from Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types

Terra Firme Forest







## Geographic Distribution

### Confirmed occurrences

North (Amazonas, Amapá, Pará)

Northeast (Maranhão)

## HERBARIUM MATERIAL

Rodrigues, R. S., 9651, G, G00177565,  (G00177565), MG, V0360007F (MG009651), Pará, **Typus**  
C.A. Sothers, 167, K, V0360007F,  (K001244195), MBM, V0360007F (MBM224373), MG, V0360007F (MG151509), MG,  
V0360007F (MG154645), US, V0360007F,  (US01856253), Amazonas  
Sothers, C.A., 171, NY, INPA, 178397,  (INPA0178397), K, V0360007F,  (K001244197), MG, V0360007F (MG151510),  
MG, V0360007F (MG154652), RB, 334853,  (RB00068658), Amazonas

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. Flora Neotropica 9: 1-409.

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 2, *Acioa* to *Magnistipula*. In: A. E. Orchard & A. J. G. Wilson (eds), *Species Plantarum: Flora of the World 10*. Australian Biological Resources Study, Canberra.

# *Couepia rufa* Ducke

## Has as synonym

heterotypic *Couepia glazioviana* Pilg.

heterotypic *Pleragina rufa* Arruda

## DESCRIPTION

**Leaf: shape** elliptic; **indumentum** arachnoid. **Inflorescence: type** panicle. **Flower: receptacle shape** turbinate; **stamen number** 55 - 60; **filament fusion** free. **Fruit: epicarp** verrucose.

## ADDITIONAL DESCRIPTION

Trees. Leaves: stipules linear, to 17 mm long, caducous; petioles 5-10 mm long, thick; lamina elliptic, 10-27 x 6.5-11.5 cm, subcordate at base, rounded to shortly acuminate at apex, glabrous above, densely rufous-arachnoid beneath; margins undulate, revolute; primary veins 15-25 pairs, prominent beneath, impressed above. Inflorescences terminal many-flowered panicles to 15 cm long; rachis and branches striate, thick, shortly grey-brown-pubescent. Bracts and bracteoles oblong to oblong-lanceolate, to 7 cm long, caducous. Receptacle turbinate, thick-walled, c. 12 mm long, shortly light-brown-pubescent on exterior, glabrous within except for deflexed hairs at throat; pedicels 1-3.5 mm long. Calyx lobes rounded, 5-7 mm long. Petals 5, white, with ciliate margins. Stamens c. 60, inserted in a complete circle. Ovary pilose. Style pubescent for 3/4 of its length. Fruit ovoid, to 11 x 6 cm; epicarp verrucose; mesocarp thin, fleshy; endocarp thick, fragile.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Is endemic from Brazil

## Phytogeographic Domains

Atlantic Rainforest

## Vegetation Types

Ombrophylous Forest (Tropical Rain Forest)

## Geographic Distribution


### Confirmed occurrences

Northeast (Alagoas, Bahia, Pernambuco)

Southeast (Minas Gerais, Rio de Janeiro)

## HERBARIUM MATERIAL

Lutz, 3575, US, 1044068,  (US00525471), US, 1044067,  (US00130947), G, G00177564,  (G00177564), RB, 15107,  (RB00068664), P (P00741112), Pernambuco, **Typus**

A.F.M. Glaziou, 18217, P (P00741110), K,  (K000220986), Rio de Janeiro

A.M. Carvalho, 6477, NY, K, G, CEPEC, Bahia

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. Flora Neotropica 9: 1-409.

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 2, Acioa to Magnistipula. In: A. E. Orchard & A. J. G. Wilson (eds), Species Plantarum: Flora of the World 10. Australian Biological Resources Study, Canberra.

Sothers C.A., Prance G.T., Buerki S., Kok, R. de & Chase, M.W. (2014). Taxonomic novelties in Neotropical Chrysobalanaceae: towards a monophyletic *Couepia*. *Phytotaxa* 172: 176 – 200.



# *Couepia schottii* Fritsch

## Has as synonym

basionym *Chrysobalanus macrophyllus* Schott

## DESCRIPTION

**Leaf:** shape oblong; **indumentum** arachnoid. **Inflorescence:** type panicle. **Flower:** receptacle shape campanulate; **stamen number** 14 - 30; **filament fusion** free. **Fruit:** epicarp glabrous/smooth.

## ADDITIONAL DESCRIPTION

Trees to 25 m tall. Leaves: stipules c. 2 mm long, caducous; petioles 12-15 mm long, sparsely pubescent, shallowly canaliculate; lamina oblong, 10-18 x 4-7 cm, subcordate at base, rounded to short-acuminate at apex with acumen 1-3 mm long, glabrous above, densely grey-brown-arachnoid beneath; primary veins 16-20 pairs, prominent beneath, impressed above. Inflorescences terminal panicles; rachis and branches with short light brown pubescence. Bracts and bracteoles ovate, acute, to 4 mm long, caducous. Receptacle subcampanulate, 5-6 mm long, with short light brown pubescence on exterior, glabrous within except for deflexed hairs at throat; pedicels 2 mm long. Calyx lobes rounded. Petals 5, ciliate on margins. Stamens 15-16, inserted in a semicircle, with a few small filamentous staminodes opposite. Ovary densely villous. Style pubescent for 1/2 its length. Fruit spherical, c. 3.5 cm in diam.; epicarp smooth, glabrous; mesocarp thin, fleshy; endocarp thin, granular, fragile, glabrous within.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Is endemic from Brazil

## Phytogeographic Domains

Atlantic Rainforest

## Vegetation Types

Coastal Forest (Restinga)




## Geographic Distribution

### Confirmed occurrences

Northeast (Bahia)

Southeast (Espírito Santo, Rio de Janeiro)

## HERBARIUM MATERIAL

Spada, J.S., 148, RB, 162366,  (RB00068656), INPA, 39610,  (INPA0039610), Espírito Santo  
M.C.Souza, 635, RB, 464245,  (RB00522750), Rio de Janeiro

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. Flora Neotropica 9: 1-409.

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 2, Acioa to Magnistipula. In: A. E. Orchard & A. J. G. Wilson (eds), Species Plantarum: Flora of the World 10. Australian Biological Resources Study, Canberra.

# *Couepia spicata* Ducke

## DESCRIPTION

**Leaf:** shape oblong/lanceolate; **indumentum** arachnoid. **Inflorescence:** type racemose. **Flower:** receptacle shape turbinate; **stamen number** 14 - 30; **filament fusion** free. **Fruit:** epicarp unknown.

## ADDITIONAL DESCRIPTION

Trees, medium-sized. Leaves: stipules to 4 mm long, lanceolate, caducous; petioles 3-6 mm long, pubescent, shallowly canaliculate; lamina oblong-lanceolate, 4.6-9 × 1.4-2.8 cm, cuneate at base, acuminate at apex with acumen 6-11 mm long, glabrous above, densely reddishbrown-arachnoid beneath; midrib prominent above with lower portion pubescent; primary veins 9-12 pairs, prominent on lower surface. Inflorescences dense-flowered terminal and axillary spikes; rachis with ferruginous-brown sericeous pubescence. Bracts and bracteoles ovate, 3-4 mm long, equalling the flowers, persistent. Receptacle sessile, turbinate, 3-4 mm long, ferruginous-brown pubescent on exterior, glabrous within except for deflexed hairs at throat. Calyx lobes rounded. Petals 5, white, ciliate on margins. Stamens 14-18, inserted in a semicircle, with a sterile portion opposite. Ovary pilose. Style glabrous except at base. Fruit unknown.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Is endemic from Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types





Terra Firme Forest

## Geographic Distribution

### Confirmed occurrences

North (Amazonas)

## HERBARIUM MATERIAL

A. Ducke, s.n., IAN, U, K,  (K000220947), NY,  (NY00428141), P (P00741113), RB, 25002,  (RB00537026), G, G00359625,  (G00359625), INPA, 16058,     (INPA0016058), Amazonas, **Typus**

## REFERENCE

- Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 2, Acioa to Magnistipula. In: A. E. Orchard & A. J. G. Wilson (eds), Species Plantarum: Flora of the World 10. Australian Biological Resources Study, Canberra.
- Prance, G.T. 1972. Chrysobalanaceae. Flora Neotropica 9: 1-409.

# *Couepia stipularis* Ducke

## DESCRIPTION

**Leaf:** shape oblanceolate/oblong; **indumentum** puberulous. **Inflorescence:** type panicle. **Flower:** receptacle shape subcylindrical; **stamen number** 25 - 45; **filament fusion** free. **Fruit:** epicarp unknown.

## ADDITIONAL DESCRIPTION

Trees to 30 m tall. Leaves: stipules lanceolate, to 15 mm long, persistent and adnate to base of petiole, silvery-grey-pubescent; petioles 9-15 mm long, silvery-grey-pubescent, terete, with 2 glands near lamina base; lamina oblong to oblong-lanceolate, 10-18 × 3.7-7 cm, rounded to subcordate at base, mucronate at apex with acumen 3-4 mm long, glabrous above, with a few short grey hairs beneath; primary veins 14-20 pairs, prominent beneath. Inflorescences terminal and axillary panicles 4.5-9 cm long, densely-flowered, with a thick erect striated rachis; rachis and branches with sparse appressed grey pubescence. Bracts and bracteoles 1-5 mm long, lanceolate, caducous. Receptacle c. 7 mm long, subcylindrical and curved anteriorly, grey-pubescent on exterior, glabrous within except for deflexed hairs at throat; pedicel 3 mm long. Calyx lobes rounded. Petals 5, white, caducous, glabrous or with a few isolated hairs on margins. Stamens 27-35, inserted in a nearly complete circle. Ovary pilose. Style glabrous except for base. Fruit ovoid, 3.5-5 × 2.5-3.5 cm; pericarp thin, fragile, composed of coarse fibres, glabrous within.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Is endemic from Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types










Terra Firme Forest

## Geographic Distribution

### Confirmed occurrences

North (Amazonas)

## HERBARIUM MATERIAL

A. Ducke, s.n., U, K,  (K000220974), NY,  (NY00428143), P (P00741114), RB, 35583,  (RB00537027), RB, 35583,  (RB00568964), S, 35583 (S-R-8172), G, G00177563,  (G00177563), INPA, 15954,    (INPA0015954), US, 1740725,  (US00130950), Amazonas, **Typus**

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. Flora Neotropica 9: 1-409.

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 2, Acioa to Magnistipula. In: A. E. Orchard & A. J. G. Wilson (eds), Species Plantarum: Flora of the World 10. Australian Biological Resources Study, Canberra.

# *Couepia subcordata* Benth. ex Hook.f.

## Has as synonym

heterotypic *Couepia amazonica* Fritsch

## DESCRIPTION

**Leaf:** shape oblong-elliptic; **indumentum** arachnoid. **Inflorescence:** type panicle. **Flower:** receptacle shape subcylindrical; **stamen number** 25 - 45; **filament fusion** free. **Fruit:** epicarp glabrous/smooth.

## ADDITIONAL DESCRIPTION

Trees, medium-sized. Leaves: stipules c. 2 mm long, deciduous; petioles 67 mm long, pubescent, terete, eglandular; lamina oblong-elliptic, 12-17 x 5.5-7.5 cm, membranous, cordate to rounded at base, acuminate at apex with acumen 3-8 mm long, glabrous above, with short, thick, silver-grey to brown-arachnoid pubescence beneath; primary veins 13-17 pairs, prominent beneath. Inflorescences terminal and axillary panicles; rachis and branches with short dense light brown pubescence. Bracts and bracteoles ovate, 6-11 mm long, often as long as the receptacle tube, persistent up to early flowering. Receptacle subcylindrical, 9-12 mm long, with short dense pubescence on exterior, glabrous within except for deflexed hairs at throat; pedicels 1-2 mm long. Calyx lobes acute. Petals 5, white, ciliate on margins. Stamens c. 35, inserted in a complete circle. Ovary villous. Style pubescent for 2/3 its length. Fruit ellipsoid, 4.5-9 x 3-5 cm; epicarp smooth, glabrous; mesocarp thick, fleshy; endocarp thin, fragile, fibrous, glabrous within.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types




Riverine Forest and/or Gallery Forest, Terra Firme Forest



## Geographic Distribution

### Confirmed occurrences

North (Amazonas, Pará)

## HERBARIUM MATERIAL

E. Lleras, P17392, FHO, NY, K,  (K001241932), MG (MG047147), US,  (US01856258), INPA, 40586,  (INPA0040586), Amazonas

Spruce, R., 1423, K, 2845289,  (K000220949), P, 2845289 (P00741117), P, 2845289 (P00741118), NYBG, 428144,  (NY00428144), Amazonas, **Typus**

## REFERENCE

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 2, *Acioa* to *Magnistipula*. In: A. E. Orchard & A. J. G. Wilson (eds), *Species Plantarum: Flora of the World 10*. Australian Biological Resources Study, Canberra.

Prance, G.T. 1972. Chrysobalanaceae. *Flora Neotropica* 9: 1-409.



# *Couepia trapezioana* Cuatrec.

## DESCRIPTION

**Leaf:** shape ovate/oblong-elliptic; **indumentum** arachnoid. **Inflorescence:** type panicle. **Flower:** receptacle shape cylindrical; **stamen number** 14 - 30; **filament fusion** fused basally. **Fruit:** epicarp glabrous/smooth.

## ADDITIONAL DESCRIPTION

Trees, medium-sized to large. Leaves: stipules to 2 mm long, linear, caducous; petioles 5-10 mm long, sparsely pubescent, shallowly canaliculate; lamina ovate to oblong-elliptic, 10-15 × 4-10 cm, rounded at base, acuminate at apex with acumen 3-5 mm long, glabrous above, dense grey or brown-appressed-arachnoid beneath; primary veins 14-18 pairs, prominent beneath. Inflorescences terminal panicles; rachis and branches with short light brown pubescence. Bracts and bracteoles oblong-ovate, acute, 6-8 mm long, caducous to subsistent. Receptacle cylindrical, 7-8 mm long, densely light-brown-pubescent on exterior, glabrous within except for deflexed hairs at throat; pedicels 1 mm long. Calyx lobes narrow, rounded to acute. Petals 5; margins ciliate. Stamens c. 24, inserted in a nearly complete circle; filaments connate at base. Ovary villous. Style pubescent for 1/2 its length. Fruit (immature) ellipsoid; epicarp smooth, glabrous; mesocarp thin, fleshy; endocarp thin, fragile, granular, glabrous within.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types

Terra Firme Forest

## Geographic Distribution

Confirmed occurrences

North (Amazonas)

## HERBARIUM MATERIAL

Pires, JM, 315, IAN (IAN028271), Amazonas

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. Flora Neotropica 9: 1-409.

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 2, Acioa to Magnistipula. In: A. E. Orchard & A. J. G. Wilson (eds), Species Plantarum: Flora of the World 10. Australian Biological Resources Study, Canberra.

# *Couepia uiti* (Mart. & Zucc.) Benth. ex Hook.f.

## Has as synonym

basionym *Moquilea uiti* Mart. & Zucc.

heterotypic *Couepia dahlgrenii* Standl.

heterotypic *Couepia martiana* Hook.f.

heterotypic *Couepia paraguariensis* Hassl.

## DESCRIPTION

**Leaf:** shape elliptic/ovate; **indumentum** arachnoid. **Inflorescence:** type panicle. **Flower:** receptacle shape campanulate; **stamen number** 25 - 45/55 - 60; **filament fusion** free. **Fruit:** epicarp glabrous/verrucose.

## ADDITIONAL DESCRIPTION

Trees to 4 m tall or shrub. Leaves: stipules to 6 mm long, linear, membranous; petioles 2 mm long, densely pubescent, often with 2 conspicuous glands at lamina base, shallowly canaliculate; lamina orbicular to elliptic, 2.5-5.5 x 1.5-3.5 cm, rounded to cordate at base, short-acuminate or apiculate at apex with acumen 13 mm long, sparsely tomentose above when young, becoming glabrous with age, densely grey-arachnoid beneath; midrib pubescent above; primary veins 5-9 pairs, prominent beneath. Inflorescences terminal panicles; rachis and branches with short grey-brown tomentum. Bracts and bracteoles ovate to lanceolate, to 8 mm long, deciduous. Receptacle subcampanulate, 5-8 mm long, with short light brown pubescence on exterior, glabrous within except for deflexed hairs at throat; pedicels 3-5 mm long. Calyx lobes rounded. Petals 5, white, sparsely pubescent, ciliate on margins. Stamens 30-60, inserted in a complete circle. Ovary densely pilose. Style pubescent for 2/3 its length. Fruit ovoid, 3-3.5 x 1.5-2 cm; epicarp verrucose, glabrous; mesocarp thick, fleshy; endocarp thin, fragile, of a granular texture, glabrous within.

## Life Form

Shrub, Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest, Caatinga, Central Brazilian Savanna

## Vegetation Types

Cerrado (lato sensu), Riverine Forest and/or Gallery Forest

## Geographic Distribution

### Confirmed occurrences

North (Rondônia)


Northeast (Alagoas, Bahia, Pernambuco, Piauí, Sergipe)

Central-west (Goiás, Mato Grosso do Sul, Mato Grosso)




Southeast (Minas Gerais, São Paulo)

## HERBARIUM MATERIAL

L.P. Queiroz, 4857, HUEFS (HUEFS0025475), K (K001244043), Bahia

G. Gardner, 1284, K,  (K000220953)

G.T. Prance, 26302, K, HUEFS, CEN, 23480 (CEN00003408), Mato Grosso

G.T. Prance, 6722, INPA, 23480,   (INPA0023480), MG (MG038782), US,  (US01856266), Rondônia

## REFERENCE

- Prance, G.T. 1972. Chrysobalanaceae. *Flora Neotropica* 9: 1-409.
- Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 2, *Acioa* to *Magnistipula*. In: A. E. Orchard & A. J. G. Wilson (eds), *Species Plantarum: Flora of the World* 10. Australian Biological Resources Study, Canberra.

# *Couepia ulei* Pilg.

## DESCRIPTION

**Leaf:** shape elliptic; **indumentum** pubescent. **Inflorescence:** type panicle. **Flower:** receptacle shape subcylindrical; **stamen number** 25 - 45; **filament fusion** free. **Fruit:** epicarp glabrous/verrucose.

## ADDITIONAL DESCRIPTION

Trees to 15 m tall, or shrubs. Leaves: stipules to 3 mm long, linear, caducous; petioles 3-7 mm long, pubescent, shallowly canaliculate, eglandular; lamina elliptic, 5-10.5 × 2.5-4.5 cm, rounded at base, acuminate at apex with acumen 3-11 mm long, glabrous above, densely greyto rufous-pubescent beneath; primary veins 10-13 pairs, prominent beneath. Inflorescences terminal few-branched panicles; rachis and branches with short grey-brown pubescence. Bracts and bracteoles 1-2 mm long, ovate, caducous. Receptacle subcylindrical, 5-7 mm long, shortly grey pubescent on the longitudinally striate exterior, glabrous within except for deflexed hairs at throat; pedicels 1-2 mm long. Calyx lobes rounded to acute. Petals 5, white, pubescent on exterior, ciliate on margins. Stamens c. 35, inserted in a complete circle. Ovary villous. Style pubescent for 1/2 its length. Fruit elongate ellipsoid, 5 × 2 cm; epicarp glabrous, verrucose; mesocarp fleshy, thin; endocarp thin, fragile, granular, densely pubescent within.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types












Riverine Forest and/or Gallery Forest, Terra Firme Forest

## Geographic Distribution

### Confirmed occurrences

North (Acre, Amazonas, Rondônia)

## HERBARIUM MATERIAL

Sothers, C.A., 992, G, L, K, V0053882F,  (K001244178), MG, V0053882F (MG157922), RB, 339654,  (RB00068737), INPA, 190963,   (INPA0190963), Amazonas  
E.H.G. Ule, 5547, L, G, G00177562,  (G00177562), K,  (K000220981), MG (MG005493), RB, 35556,  (RB00537029), INPA, 16051,     (INPA0016051), Amazonas, **Typus**

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. Flora Neotropica 9: 1-409.  
Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 2, Acioa to Magnistipula. In: A. E. Orchard & A. J. G. Wilson (eds), Species Plantarum: Flora of the World 10. Australian Biological Resources Study, Canberra.

# *Couepia venosa* Prance

## DESCRIPTION

**Leaf:** shape oblong-elliptic; **indumentum** tomentose. **Inflorescence:** type panicle. **Flower:** receptacle shape campanulate; **stamen number** 25 - 45/55 - 60; **filament fusion** free. **Fruit:** epicarp glabrous/smooth.

## ADDITIONAL DESCRIPTION

Trees or shrubs. Leaves: stipules minute, caducous; petioles 7-13.5 mm long, terete; lamina oblong-elliptic, 8.5-15 × 3.5-6 cm, rounded to subcuneate at base, acuminate at apex with acumen 7-10 mm long, glabrous and shining above, densely tomentose beneath; primary veins 11-14 pairs. Inflorescence of terminal panicles, shortly brown-tomentose. Bracts and bracteoles small, oblong, caducous. Receptacle subcampanulate, 6-7 mm long, densely brown-tomentose on exterior; pedicels 2-3 mm long. Calyx lobes rounded. Petals pubescent on exterior. Stamens 37-50, inserted around complete circle. Ovary densely tomentose; style pilose almost to apex. Fruit ellipsoid, exocarp smooth, glabrous.

## Life Form

Shrub, Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Is endemic from Brazil

## Phytogeographic Domains

Atlantic Rainforest

## Vegetation Types







Ombrophyllous Forest (Tropical Rain Forest)

## Geographic Distribution

### Confirmed occurrences

Southeast (Minas Gerais, Rio de Janeiro, São Paulo)

## HERBARIUM MATERIAL

G. Martinelli, 11935, NY, RB, 291440,   (RB00068696), Rio de Janeiro  
Hoehne, F.C., 17197, K, 291440,  (K000220984), NY, 291440,  (NY00428152), SPF, 291440,  (SPF00072166), SP,  
17197,  (SP000470), São Paulo, **Typus**

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. Flora Neotropica 9: 1-409.

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 2, *Acioa* to *Magnistipula*. In: A. E. Orchard & A. J. G. Wilson (eds), Species Plantarum: Flora of the World 10. Australian Biological Resources Study, Canberra.

# *Couepia williamsii* J.F.Macbr.

## DESCRIPTION

**Leaf:** shape oblanceolate/oblong; **indumentum** lanate. **Inflorescence:** type raceme. **Flower:** receptacle shape cylindrical; **stamen number** more than 60; **filament fusion** free. **Fruit:** epicarp glabrous/verrucose.

## ADDITIONAL DESCRIPTION

Trees, small. Leaves: stipules to 3 mm long, linear, caducous; petioles 5-7 mm long, with a few stiff erect hairs, shallowly canaliculate above, with 2 inconspicuous glands at lamina base; lamina oblong to oblong-lanceolate, 9-17 × 2.5-5 cm, cuneate to subcuneate at base, abruptly acuminate at apex with acumen 12-22 mm long, glabrous above, densely appressedlanate beneath; primary veins 12-15 pairs, prominent beneath; midrib prominent above. Inflorescences terminal and axillary few-flowered racemes; rachis sparsely puberulous. Bracts and bracteoles to 3 mm long, early caducous. Receptacle slender, tubular, 14-19 mm long, curved, glabrous on exterior or with a few appressed hairs, glabrous within except for deflexed hairs at throat; pedicels 3-5 mm long. Calyx lobes rounded. Petals 5, white, ciliate on margins. Stamens c. 70, inserted in a complete circle. Ovary villous. Style pubescent for 2/3 its length. Fruit globose, c. 6.5 cm in diameter; epicarp glabrous, verrucose; mesocarp thick, fleshy; endocarp thin, fragile, granular, glabrous within.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types





Terra Firme Forest, Inundated Forest (Várzea)

## Geographic Distribution

### Confirmed occurrences

North (Acre, Amazonas)

## HERBARIUM MATERIAL

C. Ferreira, 10599, NY, K,  (K001242009), INPA, 200366,  (INPA0200366), Acre  
G.T. Prance, 2484, K,  (K001242010), MG (MG033317), US,  (US01856282), Amazonas

## REFERENCE

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 2, Acioa to Magnistipula. In: A. E. Orchard & A. J. G. Wilson (eds), Species Plantarum: Flora of the World 10. Australian Biological Resources Study, Canberra.

# Exellodendron Prance

This treatment is composed of the following taxa: *Exellodendron*, *Exellodendron barbatum*, *Exellodendron cordatum*, *Exellodendron coriaceum*, *Exellodendron gardneri*, *Exellodendron gracile*.

## HOW TO CITE

Sothers, C.A., Prance, G.T. 2020. *Exellodendron* in **Flora do Brasil 2020**. Jardim Botânico do Rio de Janeiro. Available at: <http://floradobrasil.jbrj.gov.br/reflora/floradobrasil/FB16784>.

## DESCRIPTION

Trees or shrubs. Leaves with a pair of small glands or ill-defined glandular areas on upper surface at junction of lamina and the glandular petiole; stipules small, lateral, narrowly deltate, caducous; lower surface of lamina glabrous or with a dense arachnoid indumentum which is easily rubbed off. Inflorescence a simple or branched raceme of small congested cymes. Bracts and bracteoles glandular, small, not enclosing the young flowers in small groups. Flowers bisexual, slightly zygomorphic. Receptacle-tube subcampanulate, slightly swollen on 1 side, hollow, hairy inside throughout. Sepals 5, deltate, acute. Petals 5, as long as sepals, subsistent. Stamens c. 7; filaments more or less equalling sepals, slightly expanded at base; staminodes c. 7, minute, forming a denticulate rim to the faucal annulus. Ovary monocarpellary, 2-locular, inserted at mouth of receptacle-tube. Drupe fleshy; epicarp smooth; endocarp smooth, with a bony ridge on 1 side at base, without basal obturators, sparsely to densely hairy inside.

## COMMENTS

Genus with five species endemic to tropical South America, occurring in Venezuela, the Guianas and Brazil. All five species occur in Brazil. *Exellodendron* is distinguished by the glabrous or arachnoid pubescent leaves, the unilaterally arranged, exserted stamens, the bilocular ovary represented by five species and is distinguished

### Life Form

Shrub, Tree

### Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

### Phytogeographic Domains

Amazon Rainforest, Caatinga, Central Brazilian Savanna, Atlantic Rainforest

### Vegetation Types

Cerrado (lato sensu), Inundated Forest (Igapó), Terra Firme Forest, Ombrophyllous Forest (Tropical Rain Forest)

### Geographic Distribution

#### Confirmed occurrences

North (Acre, Amazonas, Pará, Rondônia, Roraima, Tocantins)

Northeast (Alagoas, Bahia, Maranhão, Piauí)

Central-west (Goiás)

Southeast (Espírito Santo, Minas Gerais)

## IDENTIFICATION KEY

1 Leaf base distinctly cordate to subcordate; lamina 3-5.5 cm long.....*E. cordatum*

1: Leaf base rounded to cuneate; lamina 3-11.5 cm long

2 Leaf lower surface and receptacle persistently dense white-arachnoid; lamina ovate-elliptic; inflorescences densely clustered.....*E. coriaceum*

- 2: Leaf lower surface glabrous or with a sparse easily removed indumentum; lamina oblong; inflorescences rather lax  
3 Lamina 8.5-11 cm long, with a distinct well-developed acumen 1.5-2.5 cm long .....*E. barbatum*  
3: Lamina to 7 cm long, with acumen less than 8 mm long  
4 Leaves coriaceous, with a distinct but shorter acumen 2-3 mm long; primary veins prominent on lower surface.....*E. gardneri*  
4: Leaves chartaceous, long-apiculate (c. 1 cm long); primary veins inconspicuous.....*E. gracile*

## REFERENCE

- Prance, G.T. 1972. Chrysobalanaceae. Flora Neotropica 9: 1-409.  
Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), Species Plantarum: Flora of the World 9. Australian Biological Resources Study, Canberra.



# *Exellodendron barbatum* (Ducke) Prance

## Has as synonym

homotype *Parinari barbata* Ducke

homotype *Parinari barbatum* Ducke

## DESCRIPTION

**Leaf: abaxial indumentum** glabrous; **shape** oblong; **petiole length** 4 to 5 mm. **Fruit: epicarp** glabrous/smooth; **shape** oblong.

## ADDITIONAL DESCRIPTION

Tree to 20 m tall. Leaves: stipules to 1.5 mm long, caducous; petioles 4-5 mm long, canaliculate above, usually covered by silvery grey hairs; lamina oblong, 8-11 × 2.5-3.5 cm, cuneate at base, acumens 1-2.5 cm long, glabrous on both surfaces; midrib prominent on both surfaces; primary veins 10-15 pairs, not prominent. Inflorescences lax terminal or axillary panicles, with short grey pubescence. Bracts and bracteoles 1-3 mm long, membranous. Receptacle sub-campanulate, swollen slightly to one side, silvery grey-tomentose on interior and exterior. Calyx lobes sharply pointed. Petals 5, white, caducous. Stamens 7, with 7 or 8 filamentous staminodes opposite. Ovary and base of style villous. Fruit oblong, 2-2.5 cm x, 1-1.5 cm; epicarp smooth, glabrous; mesocarp thin, fleshy; endocarp thin, hard, surface smooth, sparsely hirsutulous within.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types

Inundated Forest (Igapó), Terra Firme Forest


## Geographic Distribution


### Confirmed occurrences


North (Amazonas, Pará, Roraima)

Northeast (Maranhão)

## HERBARIUM MATERIAL

A. Ducke, s.n., NY, 16385,  (NY00428157), F, RB, 16385, R, P, Amazonas, **Typus**

W. Milliken, 2006, K,  (K001172439), Amazonas

A. Ducke, 18224, K,  (K000220829)

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. Flora Neotropica 9: 1-409.

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), Species Plantarum: Flora of the World 9. Australian Biological Resources Study, Canberra.

# *Exellodendron cordatum* (Hook.f.) Prance

## Has as synonym

basionym *Parinari cordata* Hook.f.

homotype *Ferolia cordata* (Hook.f.) Kuntze

homotype *Parinarium cordatum* Hook.f.

## DESCRIPTION

**Leaf: abaxial indumentum** glabrous/lanate; **shape** ovate; **petiole length** 4 to 8 mm. **Fruit: epicarp** glabrous/smooth; **shape** oblong.

## ADDITIONAL DESCRIPTION

Shrub or small tree. Leaves: stipules to 1.5 mm long, caducous; petioles 4-8 mm long, canaliculate above, pubescent, with 2 glands at lamina base; lamina ovate, 3.5-9 × 2.25-3.5 cm, usually distinctly cordate, rarely rounded at base, rounded at apex, or with a small acumen to 3 cm long, glabrous above, glabrous or with densely lanate easily rubbed off pubescence on lower surface; midrib prominent on both surfaces; primary veins 9-12 pairs, not prominent. Inflorescences terminal and axillary panicles. Bracts and bracteoles 1-2 mm long, caducous. Receptacle subcampanulate, swollen slightly at 1 side, silvery grey-tomentose on exterior, villous to base within. Calyx lobes acute. Petals 5, white. Stamens 7, with 7 filamentous staminodes opposite them. Ovary and base of style villous. Fruit (immature) oblong; epicarp smooth, glabrous; mesocarp thin; endocarp thin, hard, with a smooth surface, densely brown pubescent within.

## Life Form

Shrub, Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Is endemic from Brazil

## Phytogeographic Domains

Caatinga, Central Brazilian Savanna

## Vegetation Types

Cerrado (lato sensu)

## Geographic Distribution

### Confirmed occurrences

North (Tocantins)


Northeast (Bahia, Maranhão, Piauí)

Central-west (Goiás)

## HERBARIUM MATERIAL

B.A.S. Pereira, 1612, K, IBGE,  (IBGE00028485), Goiás

P. I. Oliveira, 508, CEPEC,  (CEPEC00032273), Bahia

G. Gardner, 2560, K,  (K000220827), Piauí, **Typus**

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. *Flora Neotropica* 9: 1-409.

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), *Species Plantarum: Flora of the World* 9. Australian Biological Resources Study, Canberra.

# *Exellodendron coriaceum* (Benth.) Prance

## Has as synonym

homotype *Parinari coriaceum* Benth.

homotype *Parinarium coriaceum* Benth.

heterotypic *Ferolia coriacea* (Benth.) Kuntze

heterotypic *Parinari coriacea* Benth.

## DESCRIPTION

**Leaf: abaxial indumentum** arachnoid; **shape** oblong-elliptic; **petiole length** 5 to 6 mm. **Fruit: epicarp** glabrous/smooth; **shape** ovate/globose.

## ADDITIONAL DESCRIPTION

Tree to 10 m tall. Leaves: stipules to 2 mm long, caducous; petioles 5-6 mm long, canaliculate above; lamina oblong-elliptic, 9-12 × 3-7.5 cm, cuneate to sub-cuneate at base, with acumen 1-1.5 cm long, glabrous above, densely arachnoid beneath; midrib prominent on both surfaces; primary veins 13-19 pairs, not prominent. Inflorescences dense flowered axillary or terminal panicles, with silver-grey pubescence. Bracts and bracteoles 1-3 mm long, caducous. Receptacle sub-campanulate, swollen slightly to one side, silver-grey-tomentose on both interior and exterior. Calyx lobes sharply pointed. Petals 5, white, caducous. Stamens 7, staminodes represented solely by swellings in the staminal circle or occasionally with 1 or 2 short filaments. Ovary and style densely villous. Fruit globose to ovate, narrowed at base, 1.5-2.5 cm long, 1.2-2 cm broad; epicarp smooth and glabrous; mesocarp thin and fleshy; endocarp thin, hard, with a smooth surface, sparsely lined on interior with short straight silvery hairs.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types


Cerrado (lato sensu), Inundated Forest (Igapó)

## Geographic Distribution

### Confirmed occurrences

North (Acre, Amazonas, Pará, Roraima)

## HERBARIUM MATERIAL

Schomburgk, 65, K,  (K000220825), **Typus**

A. Vicentini, 1209, IAN (IAN171511), Amazonas

G.T. Prance, 24216, INPA, NY

Fróes, RL, 22991, IAN (IAN036242), Acre

A.L.K.M. Albernaz, 149, K (K001241099), Pará

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. Flora Neotropica 9: 1-409.

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), Species Plantarum: Flora of the World 9. Australian Biological Resources Study, Canberra.

# *Exellodendron gardneri* (Hook.f.) Prance

## Has as synonym

basionym *Parinarium gardneri* Hook.f.

homotype *Ferolia gardneri* (Hook.f.) Kuntze

homotype *Parinari gardneri* Hook.f.

## DESCRIPTION

**Leaf: abaxial indumentum** glabrous; **shape** ovate/oblong; **petiole length** 2 to 3 mm. **Fruit: epicarp** glabrous/smooth; **shape** ellipsoid.

## ADDITIONAL DESCRIPTION

Shrub to 1.5 m tall. Leaves: stipules to 1 mm long, caducous; petioles 2-3 mm long, shallowly canaliculate, silvery grey-lanate; lamina oblong-ovate, 3.5-6.5 × 2-3 cm, base cuneate to rounded, apex short-acuminate with acumen 3-5 mm long, glabrous above, glabrous or with sparse caducous pubescence beneath; midrib prominent on both surfaces; primary veins 6-8 pairs, prominulous on both surfaces. Inflorescences terminal panicles; rachis and branches grey-puberulous. Bracts and bracteoles 0.5-2 mm long. Receptacle subcampanulate, swollen slightly at one side, silvery grey-puberulous to glabrescent on exterior. Calyx lobes 5, pointed. Petals 5. Stamens 7, short filamentous staminodes opposite them. Ovary and base of style pilose. Fruit 2 × 1.2 cm, ellipsoid; exocarp smooth, glabrous; mesocarp thin, fleshy; endocarp thin, hard, bony, densely lanate inside.

## Life Form

Shrub

## Substrate

Terrestrial

## DISTRIBUTION

Native, Is endemic from Brazil

## Phytogeographic Domains

Central Brazilian Savanna

## Vegetation Types

Cerrado (lato sensu)

## Geographic Distribution

### Confirmed occurrences


North (Rondônia, Tocantins)

Northeast (Alagoas, Bahia)

Central-west (Goiás)

Southeast (Minas Gerais)

## HERBARIUM MATERIAL

W.R. Anderson, 6873, NYBG, 00835206,  (NY00835206), UB, Goiás

G. Gardner, 3139, K,  (K000220830), Bahia

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. *Flora Neotropica* 9: 1-409.

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), *Species Plantarum: Flora of the World* 9. Australian Biological Resources Study, Canberra.

# *Exellodendron gracile* (Kuhlm.) Prance

## Has as synonym

homotype *Parinari gracilis* Kuhlm.

## DESCRIPTION

**Leaf: abaxial indumentum** glabrous/lanate; **shape** oblong/lanceolate; **petiole length** 2 to 6 mm. **Fruit: epicarp** glabrous/smooth; **shape** ellipsoid.

## ADDITIONAL DESCRIPTION

Tree, medium sized. Branchlets grey-arachnoid. Leaves: stipules linear, 2-6 mm long, caducous; petioles 3-5 mm long, canaliculate above, tomentose; lamina 3-6 × 1.3-2.2 cm, oblong-lanceolate, glabrous above, with a sparse easily rubbed off lanate indumentum beneath, cuneate at base, narrowed to an acute apex, sometimes acuminate; midrib slightly prominent on both surfaces; primary veins 6-8 pairs, not prominent. Inflorescences terminal panicles 2 cm long; rachis and branches shortly pilose. Bracts and bracteoles 1-1.5 mm long, caducous. Receptacle grey-tomentellous on exterior. Fruit ellipsoid, 3 cm long, 1.2 cm broad, basally narrowed to a stipe 5-6 mm long; epicarp smooth and glabrous; mesocarp thin and fibrous; endocarp hard and thin, with a smooth surface, with interior filled by a lanate mass of long brown hairs.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Is endemic from Brazil

## Phytogeographic Domains

Atlantic Rainforest

## Vegetation Types




Ombrophylous Forest (Tropical Rain Forest)

## Geographic Distribution

### Confirmed occurrences

Southeast (Espírito Santo)

## HERBARIUM MATERIAL

G. Martinelli, 2189, RB, 212604,  (RB00070305), Espírito Santo  
D.A. Folli, 6489, RB, 600381,  (RB00860870), Espírito Santo  
Kuhlmann, J.G., 279, UFMT, 11140,  (UFMT00011140), Espírito Santo, **Typus**

## REFERENCE

- Prance, G.T. 1972. Chrysobalanaceae. Flora Neotropica 9: 1-409.  
Prance, G.T. 1989. Chrysobalanaceae (Supplement). Flora Neotropica 9: 1-267  
Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), Species Plantarum: Flora of the World 9. Australian Biological Resources Study, Canberra.

# Gaulettia Sothers & Prance

This treatment is composed of the following taxa: *Gaulettia*, *Gaulettia amaraliae*, *Gaulettia canomensis*, *Gaulettia cognata*, *Gaulettia elata*, *Gaulettia parillo*, *Gaulettia racemosa*.

## HOW TO CITE

Sothers, C.A., Prance, G.T. 2020. *Gaulettia* in **Flora do Brasil 2020**. Jardim Botânico do Rio de Janeiro. Available at: <http://floradobrasil.jbrj.gov.br/reflora/floradobrasil/FB604712>.

## DESCRIPTION

Trees or shrubs; leaf venation reticulate on the abaxial surface and with hair-filled stomatal cavities, leaves often with a whitish bloom on abaxial surface; prominent parallel secondaries at 90° to primaries; often with a pair of glands at base of leaf; inflorescence and axis densely ferruginous (except for *G. elata*); inflorescence panicles or racemes; calyx lobes acuminate (rounded to acute in *G. racemosa* and rounded in some *G. cognata*); receptacle 3–10(–22) mm long, receptacle interior glabrous except for the deflexed hairs at the throat; petals 5, white; stamens 12–65, in a complete circle, semi-circle or unilaterally placed around the disk; style mostly glabrous, pubescent at base only; ovary villous to densely villous, unilocular, inserted at mouth of receptacle; fruit hard, epicarp pubescent or verrucose.

## COMMENTS

Genus of nine species, occurring throughout northern South America, restricted to Amazonia. In Brazil represented by six species. *Gaulettia* is characterised by the deeply reticulate venation on the lower leaf surface, often with stomatal cavities, the free, exserted stamens, and the unilocular ovary at the mouth of the receptacle.

### Life Form

Shrub, Tree

### Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

### Phytogeographic Domains

Amazon Rainforest

### Vegetation Types

Anthropic area, Amazonian Campinarana, Terra Firme Forest, Amazonian Savanna

### Geographic Distribution

#### Confirmed occurrences

North (Acre, Amazonas, Amapá, Pará, Rondônia, Roraima)

## IDENTIFICATION KEY

1 Inflorescence a raceme or spike

2 Leaves prominently reticulate beneath; inflorescence with short silver-gray pubescence; receptacle turbinate; fruit exterior verrucose.....*G. elata*

2: Leaves prominently reticulate; inflorescence with dense ferruginous or grey-puberulous pubescence; receptacle cylindrical to obconical; fruit exterior tomentose/pubescent

4 Leaf acumen 5.5-18 mm long; receptacle long and slender, 11-22 mm long.....*G. parillo*

4: Leaf acumen 1-12 mm long; receptacle short and thick, 3-10 mm long.....*G. canomensis*

1: Inflorescence a panicle

**5** Leaves with deep well-defined stomatal cavities, 2.5-6 cm long, bluntly acute at apex.....*G. amaraliae*

**5:** Leaves without stomatal cavities, acuminate at apex, or with poorly defined shallow cavities, and then exceeding 6 cm in length

**6** Receptacle gradually tapering to a long slender pedicel; exterior of receptacle rufous-pubescent; primary veins not impressed on upper leaf surface.....*G. cognata*

**6:** Receptacle changing abruptly to a short thick pedicel; exterior of receptacle brown-pubescent; primary veins impressed on upper leaf surface.....*G. racemosa*

## REFERENCE

Sothers, C.A., Prance G. T., Buerki S., Kok, R. de & Chase, M. W. (2014). Taxonomic novelties in Neotropical Chrysobalanaceae: towards a monophyletic Couepia. *Phytotaxa* 172: 176 – 200.

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 2, Acioa to Magnistipula. In: A. E. Orchard & A. J. G. Wilson (eds), *Species Plantarum: Flora of the World* 10. Australian Biological Resources Study, Canberra.



# *Gaulettia amaraliae* (Prance) Sothers & Prance

## Has as synonym

basionym *Couepia amaralae* Prance

## DESCRIPTION

**Leaf: abaxial indumentum** prominent reticulate/stomatal-cavity; **shape** oblong-elliptic. **Inflorescence: type** paniculate/racemose. **Flower: stamen insertion** semi circular; **stamen number** 35 - 40. **Fruit: epicarp** glabrous/verrucose.

## ADDITIONAL DESCRIPTION

Shrub 1-4 m tall. Branches appressed lanate pubescent when young, becoming glabrous with age. Leaves: stipules caducous; petioles 4-5 mm long, lanate when young, rugulose, terete, eglandular; lamina oblong to oblong-elliptic, coriaceous, 2.5-6 x 1.5-3.2 cm, rounded at base, acute or bluntly acuminate at apex, glabrous above, prominently reticulate beneath with conspicuous deep stomatal cavities filled with short grey pubescence; midrib prominent and sparsely lanate beneath, slightly impressed above; primary veins 9-10 pairs, prominent and lanate beneath, plane to slightly impressed above. Inflorescences of few-branched panicles or racemes, axillary and terminal; rachis and branches brown-tomentellous. Bracts and bracteoles ovate, caducous, tomentellous on both surfaces. Receptacle campanulate-turbinate, 3-4 mm long, tomentellous on exterior, glabrous within except for deflexed hairs at throat. Calyx lobes 5, acute, 2 mm long, tomentellous on both surfaces. Petals 5, white, glabrous. Stamens 35-40, inserted around 1/2 of circle. Ovary densely villous. Style glabrous except for deflexed hairs at base. Fruit globose, 5 cm diam.; epicarp glabrous, lenticellate; pericarp 2-2.5 mm thick, hard, woody, tomentose within.

## Life Form

Shrub

## Substrate

Terrestrial

## DISTRIBUTION

Native, Is endemic from Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types




Amazonian Campinarana

## Geographic Distribution

### Confirmed occurrences

North (Amazonas)

## HERBARIUM MATERIAL

G.T. Prance, 29261, US, 3208017,  (US00323979), INPA, 132896, ,  (INPA0132896), MO (MO255305), Amazonas

## REFERENCE

Sothers C.A., Prance G.T., Buerki S., Kok, R. de & Chase, M.W. (2014). Taxonomic novelties in Neotropical Chrysobalanaceae: towards a monophyletic *Couepia*. *Phytotaxa* 172: 176 – 200.

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 2, *Acioa* to *Magnistipula*. In: A. E. Orchard & A. J. G. Wilson (eds), *Species Plantarum: Flora of the World 10*. Australian Biological Resources Study, Canberra.

# *Gaulettia canomensis* (Mart.) Sothers & Prance

## Has as synonym

basionym *Moquilea canomensis* Mart.

homotype *Couepia canomensis* (Mart.) Benth. ex Hook.f.

homotype *Hirtella canomensis* (Mart.) Spreng.

heterotypic *Parinari pilosa* Standl.

## DESCRIPTION

**Leaf: abaxial indumentum** prominent reticulate/pubescent; **shape** ovate/oblong-elliptic. **Inflorescence: type** racemose. **Flower: stamen insertion** complete circular; **stamen number** 40 - 51. **Fruit: epicarp** velutinous.

## ADDITIONAL DESCRIPTION

Shrub or small tree to 10 m tall. Leaves: stipules 3-8 mm long, linear, persistent; petioles 6-11 mm long, with dense ferrugineous pubescence; lamina ovate to oblong elliptic, 8.5-18 x 3-8 cm, rounded to subcuneate at base, short-acuminate at apex with acumen 2.5-12 mm long, glabrous above, prominently reticulate beneath with short grey-brown pubescence between reticulations; primary veins 1015 pairs, prominent beneath, slightly impressed above; midrib impressed, usually pubescent above. Inflorescences densely-flowered axillary racemes; rachis and branches ferrugineous-hirtellous. Bracts and bracteoles 2.5-7 mm long, persistent. Receptacle subcampanulate-cylindrical, 5.5-10 mm long, dense ferrugineous-brown pubescent on exterior, glabrous within except for deflexed hairs at throat; pedicels c. 1 mm long. Calyx lobes acute, hirsute on exterior. Petals 5, white, glabrous on margins. Stamens 40-51, inserted in a nearly complete circle, with a short row of toothed staminodes opposite. Ovary densely villous. Style pubescent at base only. Fruit round to oblong, 3.5-5 x 2.5-3.5 cm; epicarp short-velutinous; endocarp thin, fragile, granular, sparsely-pubescent within.

## Life Form

Shrub, Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types

Amazonian Campinarana, Terra Firme Forest

## Geographic Distribution

### Confirmed occurrences

North (Acre, Amazonas, Amapá, Pará, Rondônia)

## HERBARIUM MATERIAL

C.F.P. Martius, sn, K,  (K000220937), Amazonas, **Typus**

M.A.D. Souza, 467, K (K001251249), Amazonas

## REFERENCE

Sothers C.A., Prance G.T., Buerki S., Kok, R. de & Chase, M.W. (2014). Taxonomic novelties in Neotropical Chrysobalanaceae: towards a monophyletic *Couepia*. *Phytotaxa* 172: 176 – 200.

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 2, *Acioa* to *Magnistipula*. In: A. E. Orchard & A. J. G. Wilson (eds), *Species Plantarum: Flora of the World 10*. Australian Biological Resources Study, Canberra.

# *Gaulettia cognata* (Steud.) Sothers & Prance

## Has as synonym

basionym *Hirtella cognata* Steud.  
 homotype *Couepia cognata* (Steud.) Fritsch var. *cognata*  
 homotype *Couepia cognata* (Steud.) Fritsch  
 homotype *Couepia steudeliana* Miq.  
 homotype *Licania exiguifolia* Standl.  
 homotype *Parinari hostmannii* Fritsch

## DESCRIPTION

**Leaf: abaxial indumentum** prominent reticulate/lanate pubescent; **shape** lanceolate. **Inflorescence: type** paniculate. **Flower: stamen insertion** unilateral; **stamen number** 12 - 25. **Fruit: epicarp** glabrous/verrucose.

## ADDITIONAL DESCRIPTION

Shrub or small tree 1-10 m tall (rarely large trees). Leaves: stipules to 9 mm long, linear-filamentous, deciduous; petioles 2 mm long, densely pubescent; lamina oblong to oblong-lanceolate, 2.5-6 (-15) × 1-2 (-4.5) cm, cuneate to rounded at base, acuminate at apex with acumen 2-12 mm long, glabrous or sparsely appressed-pubescent above, with grey- to brown-lanate pubescence beneath which usually obscures the prominently reticulate parallel venation; midrib prominent beneath, impressed above, pubescent on both surfaces; primary veins 7-10 (-15) pairs, prominent beneath. Inflorescences terminal panicles; rachis and branches brown-villous. Bracts and bracteoles lanceolate, to 6 mm long, caducous. Receptacle cylindrical, curved anteriorly, 5-8 mm long, reddish-brown and often villous on exterior, glabrous within except for deflexed hairs at throat; pedicels 1-3 mm long. Calyx lobes acute. Petals 5, white or pale pink, glabrous. Stamens 12-25, unilateral, with a few teeth-like staminodes opposite. Ovary villous. Style pubescent. Fruit globose; epicarp pubescent when young, verrucose and glabrous when mature; pericarp hard and thick, undifferentiated, densely lanate within.

## Life Form

Shrub, Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types

Amazonian Savanna

## Geographic Distribution

### Confirmed occurrences

North (Amazonas)

## HERBARIUM MATERIAL

W.R.Hostmann, 795, P (P00741079), K,  (K000220978), K,  (K000220977), **Typus**  
 Frões, RL, 28080, IAN (IAN074882), Amazonas

## REFERENCE

- Sothers C.A., Prance G.T., Buerki S., Kok, R. de & Chase, M.W. (2014). Taxonomic novelties in Neotropical Chrysobalanaceae: towards a monophyletic *Couepia*. *Phytotaxa* 172: 176 – 200.
- Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 2, *Acioa* to *Magnistipula*. In: A. E. Orchard & A. J. G. Wilson (eds), *Species Plantarum: Flora of the World* 10. Australian Biological Resources Study, Canberra.

# *Gaulettia elata* (Ducke) Sothers & Prance

## Has as synonym

basionym *Couepia elata* Ducke

## DESCRIPTION

**Leaf: abaxial indumentum** prominent reticulate/pubescent; **shape** ovate. **Inflorescence: type** racemose. **Flower: stamen insertion** semi circular; **stamen number** 35 - 40. **Fruit: epicarp** glabrous/verrucose.

## ADDITIONAL DESCRIPTION

Large tree. Leaves: stipules minute; petioles 4-6 mm long, shortly pubescent; lamina ovate 4-7 x 2.5-3 cm, obtuse to subcuneate at base, caudately acuminate at apex with acumen 6-9 mm long, glabrous above, prominently reticulate beneath with silver-grey pubescence between reticulations; midrib impressed above, pubescent on lower portion; primary veins 6-8 pairs, prominent beneath. Inflorescences terminal and axillary few flowered lax racemes, with short grey-pubescence. Bracts and bracteoles minute, caducous. Receptacle obconical-turbinate, 4-5 mm long, sparsely pubescent on exterior, glabrous within except for deflexed hairs at throat; pedicels 2.5-3.5 mm long. Calyx lobes acute. Petals 5, white, glabrous on margins, deciduous. Stamens 35-40, inserted in 1/2 a circle, with a row of short-toothed staminodes opposite. Ovary densely villous. Style glabrous except at base. Fruit globose, 5-6 cm diameter; epicarp densely verrucose; mesocarp thick; endocarp fragile, thick, granular.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types




Amazonian Campinarana, Terra Firme Forest




## Geographic Distribution

### Confirmed occurrences

North (Acre, Amazonas)

## HERBARIUM MATERIAL

G.T. Prance, 11943, K, 25001 (K001251230), MG, 25001 (MG042745), P, 25001 (P05562754), RB, 25001,   (RB00068399), US, 25001,  (US01855941), Acre

A. Ducke, 25001, S, 25001 (S-R-8161), RB, 25001,  (RB00541117), RB, 25001,  (RB00537009), P (P00741081), K,  (K000220961), Amazonas, **Typus**

## REFERENCE

Sothers C.A., Prance G.T., Buerki S., Kok, R. de & Chase, M.W. (2014). Taxonomic novelties in Neotropical Chrysobalanaceae: towards a monophyletic *Couepia*. *Phytotaxa* 172: 176 – 200.

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 2, *Acioa* to *Magnistipula*. In: A. E. Orchard & A. J. G. Wilson (eds), *Species Plantarum: Flora of the World 10*. Australian Biological Resources Study, Canberra.

# *Gaulettia parillo* (DC.) Sothers & Prance

## Has as synonym

basionym *Couepia parillo* DC.

basionym *Moquilea parillo* (DC.) Steud.

heterotypic *Couepia pauciflora* Huber

heterotypic *Couepia villosa* Fanshawe & Maguire

## DESCRIPTION

**Leaf: abaxial indumentum** prominent reticulate/pubescent; **shape** oblong-elliptic. **Inflorescence: type** racemose. **Flower: stamen insertion** complete circular; **stamen number** 45 - 62. **Fruit: epicarp** velutinous.

## ADDITIONAL DESCRIPTION

Trees to 20 m, or shrubs. Leaves: stipules 1.5-5 mm long, linear; petioles 2-9 mm long; lamina oblong or oblong-elliptic, 5-15.5 x 1.7-5.8 cm, acuminate at apex with acumen 5.5-18 mm long, rounded to cuneate at base, glabrous above, prominently reticulate beneath, with silver-grey pubescence between reticulations; midrib impressed, pubescent above; primary veins 10-15 pairs, prominent beneath, slightly impressed above. Inflorescences racemes of 5-21 flowers, or rarely flowers solitary; rachis with ferruginous-brown pubescence. Bracts and bracteoles 2-6 mm long, linear, persistent. Receptacle slender, tubular, 11-22 mm long, with thick dense hirtellous pubescence and some longer hairs on exterior, glabrous within or with hairs nearly to base on proximal side beneath ovary only; pedicels 1-3 mm long. Calyx lobes acute. Petals 5, white, glabrous on margins. Stamens 45-62, inserted almost in a complete circle, with a short portion of toothed staminodes. Ovary densely villous. Style sparsely pubescent at base. Fruit globose, c. 2.5 cm diameter; epicarp soft yellow-brown velutinous; endocarp thin, fragile, granular in texture, sparsely hirsute within.

## Life Form

Shrub, Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types


Anthropic area, Amazonian Campinarana, Terra Firme Forest, Amazonian Savanna

## Geographic Distribution


### Confirmed occurrences

North (Acre, Amazonas, Amapá, Pará, Roraima)

## HERBARIUM MATERIAL

C.A. Cid Ferreira, 5336, RB, 375838,  (RB00068640), Acre

S. Mori, 17186, K, 375838 (K001251293), MG, 375838 (MG109532), Amapá

Souza, MAD, 460, SPF, 375838,  (SPF00141574), K, 375838 (K001251287), Amazonas

## REFERENCE

Sothers C.A., Prance G.T., Buerki S., Kok, R. de & Chase, M.W. (2014). Taxonomic novelties in Neotropical Chrysobalanaceae: towards a monophyletic *Couepia*. *Phytotaxa* 172: 176 – 200.

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 2, *Acioa* to *Magnistipula*. In: A. E. Orchard & A. J. G. Wilson (eds), *Species Plantarum: Flora of the World 10*. Australian Biological Resources Study, Canberra.





# *Gaulettia racemosa* (Benth. ex Hook.f.) Sothers & Prance

## Has as synonym

basionym *Couepia racemosa* Benth. ex Hook.f.

heterotypic *Couepia calophlebia* Standl.

heterotypic *Couepia racemosa* var. *reticulata* Pilg.

## DESCRIPTION

**Leaf: abaxial indumentum** prominent reticulate/stomatal-cavity; **shape** elliptic/oblong-elliptic. **Inflorescence: type** paniculate. **Flower: stamen insertion** unilateral; **stamen number** 24 - 30. **Fruit: epicarp** glabrous/verrucose.

## ADDITIONAL DESCRIPTION

Tree to 30 m. Leaves: stipules c. 1.5 mm long, caducous; petioles 8-12 mm long, with 2 sessile glands near to lamina base; lamina elliptic to oblong, 5-18.5 x 2-7.5 cm, rounded to cuneate at base, acuminate at apex with acumen 4.5-20 mm long, glabrous above, prominently reticulate beneath, or with stomatal cavities, with short appressed grey pubescence; midrib prominent beneath, slightly impressed above; primary veins 8-12 pairs, prominent beneath, slightly impressed above. Inflorescences little branched densely-flowered panicles; rachis and branches with short brown tomentellous pubescence. Bracts and bracteoles ovate to oblong, 2-6 mm long, caducous. Receptacle cylindrical-turbinate, 5-7.5 mm long, with a short brown pubescence on exterior, glabrous within except for deflexed hairs at throat. Calyx lobes rounded to acute. Petals 5, white, exceeding calyx lobes, glabrous on margins. Stamens 24-30, unilateral, with a smooth glabrous untoothed portion of the circle opposite them. Ovary densely villous. Style pubescent at base only. Fruit elliptic, pointed at apex, 3-4.5 x 2-3.5 cm; epicarp verrucose; pericarp undifferentiated, rather fragile, sparsely pubescent within.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types


Amazonian Campinarana


## Geographic Distribution

### Confirmed occurrences

North (Acre, Amazonas, Amapá, Pará, Rondônia)

## HERBARIUM MATERIAL

R. Spruce, 1776, K,  (K000220965), P (P00741105), Amazonas, **Typus**

D.G. Campbell, 22563, US,  (US01856217), P (P04735906), K (K001251222), Pará

## REFERENCE

Sothers C.A., Prance G.T., Buerki S., Kok, R. de & Chase, M.W. (2014). Taxonomic novelties in Neotropical Chrysobalanaceae: towards a monophyletic *Couepia*. *Phytotaxa* 172: 176 – 200.

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 2, *Acioa* to *Magnistipula*. In: A. E. Orchard & A. J. G. Wilson (eds), *Species Plantarum: Flora of the World 10*. Australian Biological Resources Study, Canberra.

# Hirtella L.

This treatment is composed of the following taxa: *Hirtella*, *Hirtella angustifolia*, *Hirtella araguariensis*, *Hirtella arenosa*, *Hirtella bahiensis*, *Hirtella barnebyi*, *Hirtella barrosoi*, *Hirtella bicornis*, *Hirtella brachystachya*, *Hirtella bullata*, *Hirtella burchellii*, *Hirtella ciliata*, *Hirtella conduplicata*, *Hirtella corymbosa*, *Hirtella couepiiflora*, *Hirtella davisii*, *Hirtella dorvalii*, *Hirtella duckei*, *Hirtella elongata*, *Hirtella eriandra*, *Hirtella excelsa*, *Hirtella fasciculata*, *Hirtella floribunda*, *Hirtella glabrata*, *Hirtella glandistipula*, *Hirtella glandulosa*, *Hirtella glaziovii*, *Hirtella gracilipes*, *Hirtella guainiae*, *Hirtella hebeclada*, *Hirtella hispidula*, *Hirtella hoehnei*, *Hirtella insignis*, *Hirtella juruensis*, *Hirtella kuhlmannii*, *Hirtella lancifolia*, *Hirtella longifolia*, *Hirtella longipedicellata*, *Hirtella macrophylla*, *Hirtella magnifolia*, *Hirtella martiana*, *Hirtella mucronata*, *Hirtella myrmecophila*, *Hirtella obidensis*, *Hirtella paniculata*, *Hirtella paraensis*, *Hirtella parviunguis*, *Hirtella physophora*, *Hirtella pilosissima*, *Hirtella pimichina*, *Hirtella piresii*, *Hirtella prancei*, *Hirtella punctillata*, *Hirtella racemosa*, *Hirtella radamii*, *Hirtella rasa*, *Hirtella rodriguesii*, *Hirtella santosii*, *Hirtella scaberula*, *Hirtella scabra*, *Hirtella schultesii*, *Hirtella sprucei*, *Hirtella subscandens*, *Hirtella suffulta*, *Hirtella tentaculata*, *Hirtella tenuifolia*, *Hirtella tocatina*, *Hirtella triandra*, *Hirtella ulei*.

## HOW TO CITE

Asprino, R.C. 2020. *Hirtella* in **Flora do Brasil 2020**. Jardim Botânico do Rio de Janeiro. Available at: <http://floradobrasil.jbrj.gov.br/reflora/floradobrasil/FB16788>.

## Has as synonym

heterotypic *Brya* Vell.  
 heterotypic *Causea* Scop.  
 heterotypic *Salmasia* Schreb.  
 heterotypic *Sphenista* Raf.  
 heterotypic *Tachibota* Aubl.  
 heterotypic *Zamzela* Raf.

## DESCRIPTION

Árvores de pequeno a médio porte, arbustos ou subarbustos. Ramos jovens glabrescentes ou pilosos, frequentemente lenticelados. Folhas com lâmina glabrescente ou pilosa, frequentemente com glândulas discoides esparsas ou concentradas na base e/ou no ápice; pecíolo eglandular; estípulas laterais subpersistentes, raramente com glândulas na margem. Inflorescências em racemos eretos ou pendentes, ocasionalmente glomeriformes, ou em panículas pouco a muito ramificadas, ocasionalmente corimbiformes; pedicelos 0,5 a 20 mm compr.; brácteas e bractéolas com ou sem glândulas sésseis ou estipitadas, as bractéolas às vezes reduzidas a uma ou duas glândulas estipitadas inseridas no pedicelo. Flores bissexuadas, zigomorfas; receptáculo campanulado a tubular, levemente giboso, internamente glabro exceto por tricomas reflexos próximos à extremidade; disco nectarífero formando um anel bem definido na borda do receptáculo; cálice 5-mero, sépalas com ou sem glândulas diminutas na margem, externamente pilosas ou glabrescentes, internamente glabras; corola 5-mera, pétalas caducas, glabras, brancas a róseas, lilases ou azuladas; estames 3–9, dispostos unilateralmente, inseridos na margem do disco nectarífero, exsertos, filetes livres, glabros, completamente brancos ou parcialmente róseos, lilases ou azulados; estaminódios filiformes ou denticulados opostos aos estames frequentemente presentes; ovário inserido no ápice do receptáculo, 1-carpelar, 1-ocular, estilete parcialmente piloso. Drupas carnosas, epicarpo liso, glabrescente ou piloso, endocarpo delgado, com 4–7 linhas longitudinais de deiscência germinativa, frequentemente visíveis no epicarpo dos frutos imaturos ou de material herborizado.

## COMMENTS

*Hirtella* é o maior gênero de Chrysobalanaceae, com 110 espécies, das quais 108 ocorrem em regiões tropicais e subtropicais das Américas, e duas no leste da África e Madagascar. Estudos filogenéticos utilizando sequências de DNA demonstraram que as duas espécies de *Hirtella* encontradas no continente africano não pertencem ao mesmo clado que as espécies neotropicais, e sugerem então o reestabelecimento do gênero *Thelira* para acomodá-las (Bardon *et al.* 2016, Chave *et al.* 2020). No Brasil, são registradas 68 espécies de *Hirtella*, constituindo o segundo gênero de Chrysobalanaceae mais representativo no país.

## Life Form

Shrub, Subshrub, Tree

**Substrate**

Terrestrial

**DISTRIBUTION**

Native, Not endemic to Brazil

**Phytogeographic Domains**

Amazon Rainforest, Caatinga, Central Brazilian Savanna, Atlantic Rainforest

**Vegetation Types**

Amazonian Campinarana, Cerrado (lato sensu), Riverine Forest and/or Gallery Forest, Inundated Forest (Igapó), Terra Firme Forest, Seasonally Semideciduous Forest, Ombrophyllous Forest (Tropical Rain Forest), Coastal Forest (Restinga), Amazonian Savanna, Rock outcrop vegetation

**Geographic Distribution**Confirmed occurrences

North (Acre, Amazonas, Amapá, Pará, Rondônia, Roraima, Tocantins)

Northeast (Alagoas, Bahia, Ceará, Maranhão, Paraíba, Pernambuco, Piauí, Rio Grande do Norte, Sergipe)

Central-west (Distrito Federal, Goiás, Mato Grosso do Sul, Mato Grosso)

Southeast (Espírito Santo, Minas Gerais, Rio de Janeiro, São Paulo)

South (Paraná, Rio Grande do Sul, Santa Catarina)

Possible occurrences

North (Amazonas, Roraima)

Northeast (Maranhão)

Central-west (Distrito Federal, Goiás, Mato Grosso do Sul)

Southeast (Espírito Santo, Rio de Janeiro)

**IDENTIFICATION KEY**1. Leaf base with myrmecophilous swellings...**2**1'. Leaf base without myrmecophilous swellings...**6**2. Inflorescence glomeruliform racemes, sometimes cauliflorous...**3**2'. Inflorescence an elongate raceme or panicle, never cauliflorous...**4**3. Stamens 4-5; leaves 9-19 cm long, cartaceous to coriaceous, lower surface bullate...***H. myrmecophila***3'. Stamens 6; leaves 17-30 cm long, membranaceous, lower surface slightly bullate or plane...***H. physophora***4. Inflorescence a panicle, with many small lateral branches; leaves ovate; bracteoles with stipitate glands...***H. dorvalii***4'. Inflorescence an elongate raceme; leaves oblong, elliptic or lanceolate; bracteoles eglandular...**5**5. Young branches hispid, flowers with exterior of receptacle and calyx lobes hirsute; stamens 4-5...***H. guainiae***5'. Young branches hispid to glabrescent, flowers with exterior of receptacle and calyx lobes hispid; stamens 5-8...***H. duckei***6. Inflorescence paniculate...**7**6'. Inflorescence racemose...**42**7. Bracts and/or bracteoles glandular, with either sessile or stipitate glands (bracteoles sometimes reduced to one or two solitary stalked glands arising from pedicels)...**8**7'. Bracts, bracteoles and pedicels eglandular...**28**8. Leaves glabrescent beneath when mature...**9**8'. Leaves hirsute beneath when mature, at least on principal venation...**17**9. Stamens 5-7...**10**9'. Stamens 3...**14**

10. Inflorescence a long rachis bearing clusters of 1-3 flowers on short branches giving a racemose appearance, bracts and bracteoles with few sessile glands only...**11**  
 10'. Inflorescence spreading, with many distinct lateral branches, flowers not in distinct clusters; bracts and bracteoles with stipitate glands...**12**
11. Inflorescences 10-25 cm long, rachis and flower exterior hirsute, pedicels 0,5-1 mm long...*H. araguariensis*  
 11'. Inflorescences 8-12 cm long, rachis and flower exterior glabrescent, pedicels 4-7 mm long...*H. barnebyi*
12. Inflorescence corymbose, rachis and flower exterior glabrescent...*H. insignis*  
 12'. Inflorescence panicle, rachis and flower exterior pubescent...**13**
13. Bracteoles with a single stipitate gland on apex, enclosing buds in small groups; stamens 5-6...*H. suffulta*  
 13'. Bracteoles with numerous stalked glands, not enclosing buds in small groups; stamens 6-7...*H. ulei*
14. Bracteolar glands few, usually either sessile or shortly stipitate on margins, or a single gland terminating apex...**15**  
 14'. Bracteolar glands numerous, stipitate...**16**
15. Leaves 10-15 cm long; bracts membranous, with several sessile or shortly stipitate glands on margins; inflorescence 7-18 cm long...*H. tocantina*  
 15'. Leaves 4-9 cm long; bracts coriaceous, with single sessile apical gland; inflorescence 3-11 cm long...*H. piresii*
16. Leaves 1.8-4.5 cm long, rounded to acuminate at apex, thickly coriaceous; primary veins 4-7 pairs...*H. bahiensis*  
 16'. Leaves 6-13.5 cm long, acuminate at apex, thinly coriaceous; primary veins 9-10 pairs...*H. davisii*
17. Calyx lobes with small stipitate glands...**18**  
 17'. Calyx lobes eglandular...**20**
18. Leaves 3-6.5 cm long, retuse to mucronate at apex (rarely acuminate); trunk with corky bark; receptacle pubescent within to base...*H. ciliata*  
 18'. Leaves 4.5-23 cm long, acute to acuminate at apex; trunk with thin bark; receptacle glabrous within except at throat...**19**
19. Venation of leaves prominulous above; inflorescence subcorymbose, bearing numerous tightly clustered flowers; stamens 7...*H. hoehnei*  
 19'. Venation of leaves impressed or prominulous above; inflorescence lax, spreading, not subcorymbose, with flowers loosely arranged; stamens 5...*H. glandulosa*
20. Venation of leaves impressed above, or the leaf surface bullate...**21**  
 20'. Venation of leaves prominulous or plane above, the leaf surface never bullate...**23**
21. Inflorescence and flowers rufous-tomentose; bracts bearing very few sessile glands, these often obscured by pubescence...*H. obidensis*  
 21'. Inflorescence and flowers tomentellous to puberulous, not rufous; bracts bearing many obvious stalked or sessile glands...**22**
22. Leaf surface usually distinctly bullate; base usually subcordate...*H. bullata*  
 22'. Leaf upper surface plane, but with impressed venation; base rounded to subcuneate...*H. tentaculata*
23. Exocarp tomentose; endocarp thick and fibrous; bracts with few inconspicuous sessile glands...*H. eriandra*  
 23'. Exocarp glabrescent; endocarp thin and bony; bracts with many conspicuous stipitate glands...**24**
24. Inflorescence hirsute; bracteoles with short-stalked glands arising from their margins; gland secretory tip small, ellipsoid...*H. paniculata*  
 24'. Inflorescence puberulous to tomentellous; bracteoles either reduced to numerous, long-stalked clavate glands arising from the junction of the pedicels with the stem, or ovate with glands borne on their margins; gland secretory tip large, flattened, forming an expanded head...**25**
25. Glands arising from junction of pedicel and stem, with a long slender stalk and a small secretory tip, clavate; young branches puberulous or sparsely tomentellous...*H. macrophylla*  
 25'. Glands arising from the bracts, each gland with a thick stalk and a large secretory tip, flattened to form an expanded head; young branches with short dense compact pubescence...*H. glabrata*

28. Leaf apex retuse, rounded, or acute, never acuminate...**29**  
 28'. Leaf apex distinctly acuminate, sometimes abruptly so and cuspidate...**31**
29. Stamens 5-6; leaf apex mostly rounded to retuse (or mucronate)...*H. punctillata*  
 29'. Stamens 3; leaf apex acute...**30**
30. Subshrub, up to 1 m tall; leaves thick-coriaceous; inflorescence corymbose, to 3 cm long...*H. corymbosa*  
 30'. Shrubs or trees, 3 to 20 m tall; leaves chartaceous; inflorescence a panicle lax and spreading, 3,5-17 cm long...*H. triandra*
31. Stamens 3...**32**  
 31'. Stamens 4-7...**34**
32. Leaves lanceolate; inflorescence and exterior of flowers glabrescent...*H. barrosoi*  
 32'. Leaves ovate, oblong or elliptic; inflorescence and exterior of flowers pubescent...**33**
33. Leaf apex distinctly cuspidate with a long acumen; inflorescences 1-4 cm long...*H. bicornis*  
 33'. Leaf apex acuminate but never cuspidate; inflorescences 3,5-17 cm long...*H. triandra*
34. Inflorescence appearing racemose, but in fact either a long central rachis bearing groups of flowers on short branches, or with a few branches with only 3 flowers each...**35**  
 34'. Inflorescence a much-branched panicle without a long central rachis...**38**
35. Bracteoles exceeding receptacle in length, persistent, enclosing buds; leaf base cuneate; exocarp glabrous...*H. suffulta*  
 35'. Bracteoles much shorter than receptacle, not persistent, not enclosing buds; leaf bases subcordate to subcuneate; exocarp tomentose or glabrous...**36**
36. Leaves 18-40 x 8-16.5 cm, with 14-18 pairs of primary veins; 2 glands at junction of upper surface of lamina and petiole; inflorescence rufous-tomentellous...*H. magnifolia*  
 36'. Leaves 8-23 x 3.3-8 cm, with 10-13 pairs of primary veins; lamina base eglandular; inflorescence grey-puberulous or brown-tomentellous...**37**
37. Leaves subcordate at base; lower lamina surface glabrescent; exocarp glabrous...*H. elongata*  
 37'. Leaves rounded to subcuneate at base; lower lamina surface pubescent; exocarp tomentose...*H. eriandra*
38. Inflorescence and exterior of flowers tomentose or hirsute...**39**  
 38'. Inflorescence and exterior of flowers grey-puberulous to glabrescent...**40**
39. Inflorescence and young branches sparsely hirsute to hirsute; leaves membranous...*H. rodriguesii*  
 39'. Inflorescence and young branches tomentose; leaves chartaceous to coriaceous...*H. obidensis*
40. Lamina 9-15 cm long, with distinct basal glands; inflorescence lax and spreading, 7-19 cm long...*H. rasa*  
 40'. Lamina 2-5.8 (-9.5) cm long, with base eglandular or with inconspicuous glands; inflorescence short and compact, 1.8 cm long...**41**
41. Inflorescence and exterior of flowers pubescent; leaves thick and coriaceous, with prominent venation; apex acuminate but never cuspidate...*H. scabra*  
 41'. Inflorescence and exterior of flowers glabrescent to puberulous; leaves chartaceous, with plane to prominulous venation; apex acuminate to cuspidate...*H. bicornis*
42. Bracts and/or bracteoles glandular, with either sessile or stipitate glands (bracteoles sometimes reduced to one or two solitary stalked glands arising from pedicels)...**43**  
 42'. Bracts, bracteoles and pedicels eglandular...**69**
43. Bracts and bracteoles bearing sessile glands only or with translucent glandular secretions; stipitate glands absent from bracts, bracteoles and pedicels...**44**  
 43'. Either bracts or bracteoles bearing stipitate glands, or with 1 or more solitary stipitate glands arising from some pedicels...**52**
44. Leaves oblong-lanceolate...**45**

- 44'. Leaves oblong, elliptic or ovate...**46**
45. Leaves 9-14 cm long; pedicels 5-10 mm long; stipules eglandular...*H. tenuifolia*  
45'. Leaves 5-8 cm long; pedicels 12-16 mm long; stipules with numerous stipitate glands...*H. radamii*
46. Young branches hirsute...**47**  
46'. Young branches pubescent to glabrescent or tomentose...**48**
47. Flowers with pedicels 8-12 mm long, receptacle tubular, stamens 5-7...*H. racemosa*  
47'. Flowers with pedicels 1,5-3 mm long, receptacle campanulate, stamens 3-6...*H. pilosissima*
48. Bracts and bracteoles caducous, with minute translucent secretions; pedicels 6-25 mm long...**49**  
48'. Bracts and bracteoles persistent, with sessile glands only, without any translucent secretions; pedicels 1.5-10.5 mm long...**50**
49. Bracts with sessile glands in addition to translucent secretion; pedicels 6-16 mm long, thick; inflorescence 4.5-14 cm long; leaves sparsely pubescent on venation or glabrescent beneath...*H. gracilipes*  
49'. Bracts with translucent glandular secretions only, other glands absent; pedicels 12-25 mm long, very slender; inflorescence 1.5-5 cm long; leaves glabrescent beneath...*H. brachystachya*
50. Primary veins 6-10 pairs; leaves 3.5-18.5 (-19.5) cm long, glabrescent or sparsely pubescent beneath; surface of mature leaves plane, not bullate...*H. racemosa*  
50'. Primary veins 11-15 pairs; leaves 19.5-25 cm long or if smaller (7-13 cm long) then hirsutulous beneath; mature leaves slightly bullate...**51**
51. Leaves 15-25 cm long; primary veins 13-15 pairs; lower surface glabrescent...*H. juruensis*  
51'. Leaves 6.5-13 cm long; primary veins 11-13 pairs; lower surface pubescent at least on midvein...*H. kuhlmannii*
52. Bracts and bracteoles eglandular, or with sessile glands and a glandular apex only; all or some pedicels with 1-2 stipitate glands...**53**  
52'. Bracts and bracteoles with numerous stipitate glands; pedicels eglandular...**61**
53. Primary veins 17-19 pairs; leaves 19-26 cm long; pedicels 8-12 mm long...*H. longifolia*  
53'. Primary veins 8-15 pairs; leaves 8-18 cm long (to 24 cm in 1 species with short pedicels 0.5-2 mm long); pedicels 0.5-9 mm long...**54**
54. Pedicels slender, 4.5-9 mm long (or if 3.5-5 mm then leaf constricted above base); leaves glabrous beneath except for pubescence on midrib and margin of extreme base of lamina; bracteoles eglandular or glandular...**55**  
54'. Pedicels thick, 1-3 mm long; leaves hirsute beneath or glabrous with hirsute margin and midrib; bracteoles with glandular apex and often sessile glands...**58**
55. Leaves elliptic to oblong, 3.5-8 cm long; bracts usually with sessile and apical glands...*H. racemosa*  
55'. Leaves oblong; narrowly oblong or oblanceolate, 8-18 cm long; bracts eglandular...**56**
56. Leaves subauriculate because of slight constriction above base; primary veins 11-13 pairs...*H. schultesii*  
56'. Leaves not constricted above base; primary veins 8-15 pairs...**57**
57. Young branches hirsute; primary veins 12-15 pairs; secondary venation slightly impressed; stamens 4-5...*H. paraensis*  
57'. Young branches sparsely hirsute to glabrescent; primary veins 8-10 pairs; tertiary venation prominulous; stamens 6...*H. sprucei*
58. Leaves bullate above, with distinctly impressed venation, secondary venation and reticulations extremely prominent beneath...*H. lancifolia*  
58'. Leaves not bullate above, with venation prominent or plane, secondary venation and reticulations prominulous only beneath...**59**
59. Leaves acuminate at apex; lower surface glabrous to sparsely hirsute...*H. burchellii*  
59'. Leaves usually mucronate at apex; lower surface densely hirsute or glabrous...**60**
60. Inflorescence densely tomentose; leaves mucronate at apex, hirsute beneath...*H. mucronata*

- 60'. Inflorescence puberulous; leaves acuminate at apex, glabrescent beneath... *H. racemosa*
61. Bracts and bracteoles enclosing flower buds; flowers with receptacle cylindrical, elongate... *H. couepiiflora*  
61'. Bracts and bracteoles not enclosing flower buds; flowers with receptacle campanulate to tubular... **62**
62. Leaves usually orbicular, rounded to retuse at apex; pedicels 7-20 mm long... *H. longipedicellata*  
62'. Leaves oblong to elliptic, acuminate at apex; pedicels 4-11 (-15) mm long... **63**
63. Stipules bearing numerous stipitate glands... *H. glandistipula*  
63'. Stipules eglandular... **64**
64. Young branches lanate; inflorescence short, compact, densely flowered; calyx bearing numerous glands; leaves drying grey... *H. martiana*  
64'. Young branches hirsute, hispid or glabrescent; inflorescence lax; calyx eglandular or the glands scarce; leaves drying green to brown... **65**
65. Young branches glabrescent; flowers with 3 stamens... *H. excelsa*  
65'. Young branches hirsute or hispid; flowers with 4-7 stamens... **66**
66. Shrub with scandent branches; young branches hispid; dried material with silver metallic sheen... *H. subscandens*  
66'. Shrubs or trees without scandent branches; young branches hirsute; dried material without silver metallic sheen... **67**
67. Leaves ovate, 2.5-6 cm long x 1.1-2.6 cm broad; inflorescence 3-5 cm long... *H. pimichina*  
67'. Leaves oblong, elliptic, and less frequently ovate, 5.5-21.5 cm long x 2.2-9 cm broad; inflorescence 4.5-20.5 cm long... **68**
68. Bracteoles linear-lanceolate, with long stalked glands; apices always terminating in a long stalked gland; stamens 4-5... *H. hispidula*  
68'. Bracteoles ovate to widely ovate, with sessile or short stipitate glands; stamens 5-7... *H. santosii*
69. Stamens 3-4... **70**  
69'. Stamens 5-9... **71**
70. Inflorescence short and clustered racemes; leaves slightly bullate, 8-12.5 cm long; fertile stamens 4, filaments far exceeding calyx lobes... *H. fasciculata*  
70'. Inflorescence of elongate racemes; leaves plane, 3.5-5.5 cm long; fertile stamens 3, filaments only slightly exceeding calyx lobes... *H. glaziovii*
71. Leaves usually orbicular, predominantly retuse to rounded at apex; pedicels 7-20 mm long... *H. longipedicellata*  
71'. Leaves ovate, oblong, elliptic or lanceolate, acuminate at apex; pedicels to 15 mm long, usually shorter... **72**
72. Lower surface of leaf hirsute or pubescent at least on primary and secondary venation... **73**  
72'. Lower surface of leaf glabrous or with few sparse short hairs on midrib... **77**
73. Young branches and inflorescences with a tomentose or velutinous indumentum of densely arranged trichomes, providing a characteristic yellowish-brown coloration... **74**  
73'. Young branches and inflorescences with a hirsute or pubescent indumentum, with no characteristic coloration... **75**
74. Young branches and inflorescences tomentose; stipules 3-7 mm long; leaves 2.5-9 cm wide, plane or slightly bullate on adaxial surface... *H. hebeclada*  
74'. Young branches and inflorescences velutinous; stipules 6-10 mm long; leaves 10.3-18 cm wide, strongly bullate on adaxial surface ... *H. prancei*
75. Young branches pubescent; leaves 3.5-5.5 cm wide; pedicel 2-3 mm long; stamens 5-7... *H. scaberula*  
75'. Young branches hirsute to densely hirsute; leaves 1.1-3.3 cm wide; pedicel 8-16 mm long; stamens 7-9... **76**
76. Leaves oblong or elliptic, venation deeply impressed above; inflorescences 3-9 cm long; flowers 4 mm long... *H. floribunda*  
76'. Leaves oblong, elliptic or lanceolate, venation plane above; inflorescences 8-23.5 cm long; flowers c. 6 mm long... *H. angustifolia*



77. Plants from the Atlantic rainforest in eastern Brazil...**78**

77'. Plants from the Amazon Basin...**79**

78. Petals slightly clawed, leaf base cuneate; young branches sparsely pubescent; inflorescence of densely crowded racemes, 3-5.5 cm long...***H. parviunguis***

78'. Petals not clawed; leaf base subcordate; young branches hirsute; inflorescence of slender racemes, 8-23.5 cm long...***H. angustifolia***

79. Shrubs 1.5-4 m tall; young branches sparsely pubescent; leaf apex rounded or acute...***H. arenosa***

79'. Trees up to 20 m tall; young branches sparsely hirsute; leaf apex caudate...***H. conduplicata***

(modified from Prance & Sothers 2003)

## REFERENCE

- Bardon, L.; Sothers, C.; Prance, G.T.; Male, P.-J.; Xi, Z.; Davis, C.C.; Murienne, J.; Garcia-Villacorta, R.; Coissac, E.; Lavergne, S. & Chave, J. 2016. Unravelling the biogeographic history of Chrysobalanaceae from plastid genomes. *American Journal of Botany* 103(6): 1089–1102.
- Chave, J.; Sothers, C.; Iribar, A.; Suescun, U.; Chase, M.W. & Prance, G.T. 2020. Rapid diversification rates in Amazonian Chrysobalanaceae inferred from plastid genome phylogenetics. *Botanical Journal of the Linnean Society* 194(3): 271-289.
- Prance, G.T. 1972. Chrysobalanaceae. *Flora Neotropica Monograph* 9: 1- 409.
- Prance, G.T. & Sothers, C.A. 2003. Chrysobalanaceae 2, *Acioa* to *Magnistipula*. In: A.E. Orchard & A.J.G. Wilson (eds), *Species Plantarum: Flora of the World* 10. Australian Biological Resources Study, Canberra.

# *Hirtella angustifolia* Schott ex Spreng.

## DESCRIPTION

**Stem: indumentum shoot when young** hirsute. **Leaf: cavity myrmecophyllous** absent; **form blade** lanceolate/oblong/elliptic. **Inflorescence: type** racemose; **gland(s) on the bract(s)** absent; **gland(s) on the bracteole(s)** absent. **Flower: number of the stamen** 7/8.

## ADDITIONAL DESCRIPTION

Diferencia-se de espécies morfológicamente próximas pelas folhas oblongas, elípticas ou lanceoladas, com 5-15 cm compr., nervação plana na face adaxial, e flores com ca. 6 mm compr.

### Life Form

Shrub, Tree

### Substrate

Terrestrial

## DISTRIBUTION

Native, Is endemic from Brazil

### Phytogeographic Domains

Atlantic Rainforest

### Vegetation Types

Ombrophylous Forest (Tropical Rain Forest), Coastal Forest (Restinga)

### Geographic Distribution



#### Confirmed occurrences

Northeast (Bahia)

Southeast (Espírito Santo, Rio de Janeiro, São Paulo)

## HERBARIUM MATERIAL

H.W. Schott, 4970, NY,  (NY00428168), Rio de Janeiro, **Typus**

H.C.de Lima, 4539, CEPEC, 292200,  (CEPEC00122043), RB, 292200,  (RB00441634), Rio de Janeiro

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. Flora Neotropica Monograph 9: 1- 409.

# *Hirtella araguariensis* Prance

## DESCRIPTION

**Stem: indumentum shoot when young** hirsute. **Leaf: cavity myrmecophyllous** absent; **form blade** oblong. **Inflorescence: type** paniculate; **gland(s) on the bract(s)** sessile/absent; **gland(s) on the bracteole(s)** absent. **Flower: number of the stamen** 5.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types

Terra Firme Forest



## Geographic Distribution

### Confirmed occurrences

North (Amazonas, Amapá)

## HERBARIUM MATERIAL

J.M. Pires, 51537, K,  (K000220846), Amapá, **Typus**

C. A. Cid Ferreira, 640, RB, 395576,  (RB00069353), NY,  (NY01173479), Amazonas

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. Flora Neotropica 9: 1-409.

# *Hirtella arenosa* Prance

## DESCRIPTION

**Stem:** indumentum shoot when young sparsely pubescent. **Leaf:** cavity myrmecophyllous absent; form blade elliptic. **Inflorescence:** type racemose; gland(s) on the bract(s) absent; gland(s) on the bracteole(s) absent. **Flower:** number of the stamen 5/6.

### Life Form

Shrub

### Substrate

Terrestrial

## DISTRIBUTION

Native, Is endemic from Brazil

### Phytogeographic Domains

Amazon Rainforest

### Vegetation Types

Amazonian Campinarana, Terra Firme Forest

### Geographic Distribution

#### Confirmed occurrences

North (Amazonas, Rondônia)

## HERBARIUM MATERIAL

E. J. Ferreira, 58320, NY,  (NY00428172), Amazonas

## REFERENCE

Prance, G.T. 1989. Chrysobalanaceae (Supplement). Flora Neotropica 9: 1-267

# *Hirtella bahiensis* Prance

## DESCRIPTION

**Stem:** indumentum shoot when young pubescent. **Leaf:** cavity myrmecophyllous absent; **form blade** obovate/elliptic. **Inflorescence:** type paniculate; **gland(s) on the bract(s)** absent; **gland(s) on the bracteole(s)** stipitate. **Flower:** number of the stamen 3.

### Life Form

Tree

### Substrate

Terrestrial

## DISTRIBUTION

Native, Is endemic from Brazil

### Phytogeographic Domains

Atlantic Rainforest

### Vegetation Types

Ombrophyllous Forest (Tropical Rain Forest), Coastal Forest (Restinga)




### Geographic Distribution

#### Confirmed occurrences

Northeast (Bahia)

Southeast (Espírito Santo)

## HERBARIUM MATERIAL

R.P. Belém, 2756, RB, 384373,  (RB00537030), NY,  (NY00428174), Bahia, **Typus**  
S.A. Mori, 10936, RB, 206092,  (RB00287743), Bahia

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. Flora Neotropica Monograph 9: 1- 409.

# *Hirtella barnebyi* Prance

## DESCRIPTION

**Stem: indumentum shoot when young** glabrescent. **Leaf: cavity myrmecophyllous** absent; **form blade** oblong. **Inflorescence: type** paniculate; **gland(s) on the bract(s)** sessile/absent; **gland(s) on the bracteole(s)** sessile. **Flower: number of the stamen** 6.

### Life Form

Shrub

### Substrate

Terrestrial

## DISTRIBUTION

Native, Is endemic from Brazil

### Phytogeographic Domains

Amazon Rainforest

### Vegetation Types

Ombrophyllous Forest (Tropical Rain Forest)

### Geographic Distribution

Confirmed occurrences

North (Rondônia)

## HERBARIUM MATERIAL

M.R. Cordeiro, 703, INPA, IAN

## REFERENCE

Prance, G.T. 1989. Chrysobalanaceae (Supplement). *Flora Neotropica* 9: 1-267

# *Hirtella barrosoi* Prance

## DESCRIPTION

**Stem: indumentum shoot when young** glabrescent. **Leaf: cavity myrmecophyllous** absent; **form blade** lanceolate. **Inflorescence: type** paniculate; **gland(s) on the bract(s)** absent; **gland(s) on the bracteole(s)** absent. **Flower: number of the stamen** 3.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Is endemic from Brazil

## Phytogeographic Domains

Atlantic Rainforest

## Vegetation Types




Ombrophyllous Forest (Tropical Rain Forest)


## Geographic Distribution

### Confirmed occurrences

Southeast (Espírito Santo, Rio de Janeiro)

## HERBARIUM MATERIAL

Pessoal do Horto Florestal, s.n., RB, 136922,  (RB00537032), NY, 136922,  (NY00428175), NY, 136922,  (NY01085719), Rio de Janeiro, **Typus**

V. Demuner, 4084, CEPEC, 136922,  (CEPEC00148022), Espírito Santo

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. Flora Neotropica Monograph 9: 1-409.

# *Hirtella bicornis* Mart. & Zucc.

This treatment is composed of the following taxa: *Hirtella bicornis*, *Hirtella bicornis* var. *bicornis*, *Hirtella bicornis* var. *pubescens*.

## DESCRIPTION

**Stem:** indumentum shoot when young sparsely pubescent. **Leaf:** cavity myrmecophyllous absent; **form blade** ovate/oblong/elliptic. **Inflorescence:** type paniculate; **gland(s) on the bract(s)** absent; **gland(s) on the bracteole(s)** absent. **Flower:** number of the stamen 3/4/5.

## ADDITIONAL DESCRIPTION

Diferencia-se de espécies morfológicamente próximas por apresentar folhas cartáceas, com ápice acuminado a cuspidado, base obtusa, arredondada ou cuneada, nervação plana a levemente saliente na face adaxial; inflorescências com 1-4 cm compr.; com a raque glabrescente a esparsamente pubescente; bractéolas mais curtas do que o receptáculo, e que não subtendem grupos de botões florais.

## Life Form

Shrub, Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest, Atlantic Rainforest

## Vegetation Types

Amazonian Campinarana, Terra Firme Forest, Seasonally Semideciduous Forest, Ombrophyllous Forest (Tropical Rain Forest)

## Geographic Distribution

### Confirmed occurrences

North (Amazonas, Amapá, Pará, Rondônia, Roraima)

Northeast (Bahia, Maranhão, Pernambuco, Piauí)

Central-west (Mato Grosso)


## IDENTIFICATION KEY


1. Lâmina foliar ovada a elíptica, ápice acuminado, acúmen 4-10 mm compr., base frequentemente arredondada; inflorescências glabrescentes; arbustos ou arvoretas de solo arenoso.....*Hirtella bicornis* var. *bicornis*

1'. Lâmina foliar frequentemente oblonga, ápice frequentemente cuspidado, acúmen 7-15 mm compr., base frequentemente cuneada; inflorescências pubescentes; árvores de grande porte de floresta ombrófila.....*Hirtella bicornis* var. *pubescens*

## HERBARIUM MATERIAL

D.L. Santana, 625, ALCB (ALCB042387), Bahia

A.G. Nave, 1520, RB, 585796,  (RB00811564), Mato Grosso

H.C. de Lima, 7705, RB, 582901,  (RB00800885), Pará

## REFERENCE



Prance, G.T. 1972. Chrysobalanaceae. Flora Neotropica Monograph 9: 1- 409.

# *Hirtella bicornis* Mart. & Zucc. var. *bicornis*

## Has as synonym

heterotypic *Hirtella praealta* Sagot

## DESCRIPTION

Arbustos ou arvoretas. Lâmina foliar ovada a elíptica; ápice acuminado, com acúmen 4-10 mm compr.; base frequentemente arredondada. Inflorescências glabrescentes.

## Life Form

Shrub, Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types

Amazonian Campinarana, Ombrophylloous Forest (Tropical Rain Forest)

## Geographic Distribution

### Confirmed occurrences

North (Amazonas, Amapá, Pará, Rondônia)

Northeast (Bahia, Pernambuco)

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. Flora Neotropica Monograph 9: 1-409.

# *Hirtella bicornis* var. *pubescens* Ducke

## Has as synonym

heterotypic *Hirtella caudata* Kleinhoonte

## DESCRIPTION

Árvores de grande porte. Lâmina foliar frequentemente oblonga; ápice frequentemente cuspidado, com acúmen 7-15 mm compr.; base frequentemente cuneada. Inflorescências pubescentes.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest, Atlantic Rainforest

## Vegetation Types

Terra Firme Forest, Ombrophyllous Forest (Tropical Rain Forest)

## Geographic Distribution

### Confirmed occurrences

North (Amazonas, Amapá, Pará, Rondônia, Roraima)

Northeast (Bahia)

Central-west (Mato Grosso)

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. Flora Neotropica Monograph 9: 1-409.

# *Hirtella brachystachya* Spruce ex Hook.f.

## DESCRIPTION

**Stem: indumentum shoot when young** glabrescent. **Leaf: cavity myrmecophyllous** absent; **form blade** oblong/elliptic. **Inflorescence: type** racemose; **gland(s) on the bract(s)** sessile translucent; **gland(s) on the bracteole(s)** sessile translucent. **Flower: number of the stamen** 6.

## ADDITIONAL DESCRIPTION

Diferencia-se de espécies morfológicamente próximas por apresentar folhas com a face abaxial glabrescente; inflorescência com 1,5-5 cm compr.; brácteas e bractéolas apenas com gotículas de secreção translúcida na margem, mas sem outros tipos de glândulas associadas; e pedicelos com 12-25 mm compr., muito delgados.

### Life Form

Shrub, Tree

### Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

### Phytogeographic Domains

Amazon Rainforest

### Vegetation Types

Riverine Forest and/or Gallery Forest, Ombrophyllous Forest (Tropical Rain Forest)

### Geographic Distribution

Confirmed occurrences

North (Amazonas)

## HERBARIUM MATERIAL

R. Spruce, 2268, BM, BR, C, CGE, GH, GOET, LD, LE, NY, OXF, P, RB, TCD, W

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. Flora Neotropica 9: 1-409.

# *Hirtella bullata* Benth.

## Has as synonym

heterotypic *Hirtella amplexicaulis* Pilg.

heterotypic *Hirtella aureohirsuta* Pilg.

heterotypic *Hirtella stipitadenia* Rusby

## DESCRIPTION

**Stem:** indumentum shoot when young tomentose. **Leaf:** cavity myrmecophyllous absent; **form blade** ovate/oblong.

**Inflorescence:** type paniculate; **gland(s) on the bract(s)** sessile/stipitate; **gland(s) on the bracteole(s)** sessile/stipitate. **Flower:** **number of the stamen** 4/5/6.

## ADDITIONAL DESCRIPTION

Diferencia-se de espécies morfológicamente próximas por apresentar base da lâmina foliar subcordada, e sépalas sem glândulas na margem.

## Life Form

Shrub, Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types

Cerrado (lato sensu), Riverine Forest and/or Gallery Forest, Terra Firme Forest

## Geographic Distribution

### Confirmed occurrences

North (Acre, Amazonas, Roraima)

## HERBARIUM MATERIAL

J.M. Pires, 16939, MG

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. Flora Neotropica 9: 1-409.

# *Hirtella burchellii* Britton

## Has as synonym

heterotypic *Hirtella collina* S.Moore

heterotypic *Hirtella plumbea* Pilg.

heterotypic *Hirtella pulchra* Fritsch

heterotypic *Hirtella sprucei* subsp. *meridionalis* Hassl.

## DESCRIPTION

**Stem:** indumentum shoot when young tomentose. **Leaf:** cavity myrmecophyllous absent; **form blade** oblong/elliptic. **Inflorescence:** type racemose; **gland(s) on the bract(s)** sessile; **gland(s) on the bracteole(s)** stipitate. **Flower:** number of the stamen 4/5.

## ADDITIONAL DESCRIPTION

Diferencia-se de espécies morfológicamente próximas por apresentar folhas com ápice acuminado e face abaxial glabra a esparsamente hirsuta.

## Life Form

Shrub, Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest, Central Brazilian Savanna

## Vegetation Types

Cerrado (lato sensu), Riverine Forest and/or Gallery Forest

## Geographic Distribution

### Confirmed occurrences

North (Acre, Amazonas, Pará, Rondônia)

Central-west (Goiás, Mato Grosso do Sul, Mato Grosso)

## HERBARIUM MATERIAL

W.J. Burchell, 6416, K,  (K000220893), Goiás, **Typus**

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. Flora Neotropica 9: 1-409.

# *Hirtella ciliata* Mart. & Zucc.

## Has as synonym

heterotypic *Grangeria brasiliensis* Hoffmanns. ex Mart. & Zucc.

heterotypic *Hirtella rotundata* Pilg.

heterotypic *Hirtella rubra* Benth.

## DESCRIPTION

**Stem:** indumentum shoot when young pubescent. **Leaf:** cavity myrmecophyllous absent; **form blade** wide obovate/oblong/wide elliptic. **Inflorescence:** type paniculate; **gland(s) on the bract(s)** sessile/shallowly stipitate; **gland(s) on the bracteole(s)** stipitate. **Flower:** number of the stamen 6/7.

## ADDITIONAL DESCRIPTION

Diferencia-se de espécies morfológicamente próximas por apresentar pecíolo com 0,5-2 mm compr.; lâmina foliar com ápice arredondado, mucronado, retuso ou raramente agudo, com 3-6,5 cm compr., e flores com receptáculo estreitamente campanulado.

## Life Form

Shrub, Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest, Caatinga, Central Brazilian Savanna, Atlantic Rainforest

## Vegetation Types

Cerrado (lato sensu), Terra Firme Forest, Seasonally Semideciduous Forest, Ombrophyllous Forest (Tropical Rain Forest), Coastal Forest (Restinga)

## Geographic Distribution

### Confirmed occurrences

North (Amapá, Pará, Tocantins)

Northeast (Alagoas, Bahia, Ceará, Maranhão, Paraíba, Pernambuco, Piauí, Rio Grande do Norte, Sergipe)

Central-west (Goiás)


Southeast (Espírito Santo, Minas Gerais)

### Possible occurrences

North (Amazonas, Roraima)


## HERBARIUM MATERIAL

G. Hatschbach, 50541, MBM (MBM108948), Bahia

L. Coradin, 5809, CEN, 9045 (CEN00009045), RB, 264965,  (RB00070969), Piauí

L.A. Mattos-Silva, 3004, CEPEC,  (CEPEC00061813), Sergipe

J.A. Ratter, 8305, K,  (K001172593), Minas Gerais

N.A. Rosa, 961, NY (NY01173498), RB, 215201,  (RB00068687), Pará

A.B. Sampaio, 407, CEN (CEN00040830), Tocantins

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. Flora Neotropica Monograph 9: 1- 409.

# *Hirtella conduplicata* Prance

## DESCRIPTION

**Stem:** indumentum shoot when young sparsely hirsute. **Leaf:** cavity myrmecophyllous absent; **form blade** ovate/elliptic. **Inflorescence:** type racemose; **gland(s) on the bract(s)** absent; **gland(s) on the bracteole(s)** absent. **Flower:** number of the stamen 6.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Is endemic from Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types

Ombrophyllous Forest (Tropical Rain Forest)

## Geographic Distribution

### Confirmed occurrences

North (Amazonas)

## HERBARIUM MATERIAL

Albuquerque, B.A., 887, INPA

## REFERENCE

Prance, G.T. 1989. Chrysobalanaceae (Supplement). *Flora Neotropica* 9: 1-267



# *Hirtella corymbosa* Cham. & Schltdl.

## DESCRIPTION

**Stem:** indumentum shoot when young pubescent. **Leaf:** cavity myrmecophyllous absent; form blade ovate/elliptic. **Inflorescence:** type paniculate corymbiform; gland(s) on the bract(s) absent; gland(s) on the bracteole(s) absent. **Flower:** number of the stamen 3.

### Life Form

Subshrub

### Substrate

Terrestrial

## DISTRIBUTION

Native, Is endemic from Brazil

### Phytogeographic Domains

Atlantic Rainforest

### Vegetation Types

Coastal Forest (Restinga)


### Geographic Distribution

#### Confirmed occurrences

Northeast (Bahia)

Southeast (Espírito Santo)

## HERBARIUM MATERIAL

S.A. Mori, 10470, RB, 395577 (RB00070698), CEPEC,  (CEPEC00014473), Bahia

F. Sellow, s.n., K,  (K000220865), **Typus**

H.C. Lima, 2965, RB, 286938,  (RB00070670), Espírito Santo

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. Flora Neotropica Monograph 9: 1- 409.

# *Hirtella couepiiflora* Prance

## DESCRIPTION

**Stem:** indumentum shoot when young sparsely tomentose. **Leaf:** cavity myrmecophyllous absent; **form blade** elliptic. **Inflorescence:** type racemose; **gland(s) on the bract(s)** shallowly stipitate; **gland(s) on the bracteole(s)** shallowly stipitate. **Flower:** number of the stamen 8/9.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types

Ombrophyllous Forest (Tropical Rain Forest)

## Geographic Distribution

### Confirmed occurrences

North (Amapá)

## HERBARIUM MATERIAL

H.S. Irwin, 17367, IAN, MG, NY, US

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. Flora Neotropica 9: 1-409.

# *Hirtella davisii* Sandwith

## DESCRIPTION

**Stem:** indumentum shoot when young sparsely pubescent/glabrescent. **Leaf:** cavity myrmecophyllous absent; **form blade** oblong/elliptic. **Inflorescence:** type paniculate; **gland(s) on the bract(s)** sessile; **gland(s) on the bracteole(s)** stipitate. **Flower:** number of the stamen 3.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types

Terra Firme Forest

## Geographic Distribution

### Confirmed occurrences

North (Pará)

Northeast (Maranhão)

## HERBARIUM MATERIAL

C. Ferreira, 259, NY, MG

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. Flora Neotropica 9: 1-409.

# *Hirtella dorvalii* Prance

## DESCRIPTION

**Stem: indumentum shoot when young** hirsute/densely hirsute. **Leaf: cavity myrmecophyllous** present; **form blade** ovate. **Inflorescence: type** paniculate; **gland(s) on the bract(s)** absent; **gland(s) on the bracteole(s)** stipitate. **Flower: number of the stamen** 6/7.

## Life Form

Shrub

## Substrate

Terrestrial

## DISTRIBUTION

Native, Is endemic from Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types

Amazonian Campinarana, Terra Firme Forest

## Geographic Distribution

### Confirmed occurrences

North (Amazonas, Roraima)

## HERBARIUM MATERIAL

A. Ducke, 1330, NY,  (NY00428204), RB,  (RB00537037), Amazonas, **Typus**

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. Flora Neotropica 9: 1-409.

# *Hirtella duckei* Huber

## Has as synonym

heterotypic *Hirtella formicaria* Suess.

## DESCRIPTION

**Stem:** indumentum shoot when young sparsely hispid/glabrescent. **Leaf:** cavity myrmecophyllous present; **form blade** oblong/elliptic. **Inflorescence:** type racemose; **gland(s) on the bract(s)** absent; **gland(s) on the bracteole(s)** absent. **Flower:** **number of the stamen** 5/6/7/8.

## Life Form

Shrub

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types



Terra Firme Forest

## Geographic Distribution

### Confirmed occurrences

North (Acre, Amazonas, Pará, Rondônia)

## HERBARIUM MATERIAL

G. Pereira-Silva, 15915, RON, 589798,  (RON00005492), RB, 589798,  (RB00825548), CEN, 15054 (CEN00081721), Rondônia

A. Ducke, s.n., RB, 15054,  (RB00540101), RB, 15054,  (RB00537038), Amazonas, **Typus**

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. Flora Neotropica Monograph 9: 1-409.

# *Hirtella elongata* Mart. & Zucc.

## DESCRIPTION

**Stem:** indumentum shoot when young sparsely pubescent. **Leaf:** cavity myrmecophyllous absent; **form blade** oblong/elliptic. **Inflorescence:** type paniculate; **gland(s) on the bract(s)** absent; **gland(s) on the bracteole(s)** absent. **Flower:** number of the stamen 6/7.

## ADDITIONAL DESCRIPTION

Diferencia-se de espécies morfológicamente próximas por apresentar base da lâmina foliar subcordada, inflorescência paniculada consistindo em uma longa raque central onde estão inseridos muitos ramos laterais curtos, bractéolas eglandulares, mais curtas do que o receptáculo, e que não subtendem grupos de botões florais.

## Life Form

Shrub, Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types

Riverine Forest and/or Gallery Forest

## Geographic Distribution

Confirmed occurrences

North (Acre, Amazonas)

## HERBARIUM MATERIAL

Amaral, I.L., 39, INPA, NY

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. Flora Neotropica 9: 1-409.

# *Hirtella eriandra* Benth.

## DESCRIPTION

**Stem:** indumentum shoot when young tomentose. **Leaf:** cavity myrmecophyllous absent; **form blade** oblong/elliptic. **Inflorescence:** type paniculate; **gland(s) on the bract(s)** sessile; **gland(s) on the bracteole(s)** absent. **Flower:** number of the stamen 6.

## ADDITIONAL DESCRIPTION

Diferencia-se de espécies morfológicamente próximas por apresentar inflorescência com indumento dourado; e frutos com epicarpo tomentoso.

### Life Form

Shrub, Tree

### Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

### Phytogeographic Domains

Amazon Rainforest, Central Brazilian Savanna

### Vegetation Types

Cerrado (lato sensu), Riverine Forest and/or Gallery Forest, Terra Firme Forest

### Geographic Distribution



#### Confirmed occurrences




North (Amazonas, Amapá, Pará, Rondônia)

Northeast (Maranhão)

Central-west (Mato Grosso)

## HERBARIUM MATERIAL

G.T. Prance, 15134, US,  (US01353250), NY,  (NY01172588), Amazonas

C.A. Ferreira, 9528, K, 349692,  (K001172716), RB, 349692,  (RB00069783), NY,  (NY01172562), Pará

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. Flora Neotropica 9: 1-409.

# *Hirtella excelsa* Standl. ex Prance

## DESCRIPTION

**Stem: indumentum shoot when young** glabrescent. **Leaf: cavity myrmecophyllous** absent; **form blade** oblong/elliptic. **Inflorescence: type** racemose; **gland(s) on the bract(s)** shallowly stipitate; **gland(s) on the bracteole(s)** shallowly stipitate. **Flower: number of the stamen** 3.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types

Terra Firme Forest, Ombrophyllous Forest (Tropical Rain Forest)



## Geographic Distribution


### Confirmed occurrences

North (Acre, Amazonas, Pará, Rondônia)

Central-west (Mato Grosso)

## HERBARIUM MATERIAL

B.A. Krukoff, 5491, NY,  (NY00428211), K,  (K000220902), Acre, **Typus**

H. Medeiros, 1270, RB, 589814,  (RB00825567), Acre

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. Flora Neotropica 9: 1-409.



# *Hirtella fasciculata* Prance

## DESCRIPTION

**Stem: indumentum shoot when young** sparsely tomentose/tomentose. **Leaf: cavity myrmecophyllous** absent; **form blade** elliptic. **Inflorescence: type** racemose; **gland(s) on the bract(s)** absent; **gland(s) on the bracteole(s)** absent. **Flower: number of the stamen** 4.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Is endemic from Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types

Terra Firme Forest, Ombrophyllous Forest (Tropical Rain Forest)

## Geographic Distribution

### Confirmed occurrences

North (Amazonas, Pará)

## HERBARIUM MATERIAL

Rodrigues, W.A., 5947, NY, INPA, 14891,  (INPA0014891)

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. Flora Neotropica 9: 1-409.

# *Hirtella floribunda* Cham. & Schltdl.

## DESCRIPTION

**Stem: indumentum shoot when young** hirsute/densely hirsute. **Leaf: cavity myrmecophyllous** absent; **form blade** oblong/elliptic. **Inflorescence: type** racemose; **gland(s) on the bract(s)** absent; **gland(s) on the bracteole(s)** absent. **Flower: number of the stamen** 7/8/9.

## ADDITIONAL DESCRIPTION

Diferencia-se de espécies morfológicamente próximas pelas folhas oblongas ou elípticas, com 3,5-8 cm compr., nervação fortemente impressa na face adaxial, e flores com ca. 4 mm compr.

### Life Form

Shrub, Tree

### Substrate

Terrestrial

## DISTRIBUTION

Native, Is endemic from Brazil

### Phytogeographic Domains

Central Brazilian Savanna

### Vegetation Types


Cerrado (lato sensu)

### Geographic Distribution

Confirmed occurrences

Southeast (Minas Gerais)

## HERBARIUM MATERIAL

G. Gardner, 4541, NY,  (NY00835286), P (P04735402), Minas Gerais

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. Flora Neotropica 9: 1-409.

# *Hirtella glabrata* Pilg.

## DESCRIPTION

**Stem:** indumentum shoot when young pubescent. **Leaf:** cavity myrmecophyllous absent; **form blade** elliptic/wide elliptic. **Inflorescence:** type paniculate; **gland(s) on the bract(s)** sessile; **gland(s) on the bracteole(s)** stipitate. **Flower:** number of the stamen 6/7.

## ADDITIONAL DESCRIPTION

Diferencia-se de espécies morfológicamente próximas por apresentar pecíolo com 4-6 mm compr.; e lâmina foliar com ápice agudo a acuminado, com 6,5-13 cm compr.

### Life Form

Shrub, Tree

### Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

### Phytogeographic Domains

Amazon Rainforest

### Vegetation Types

Cerrado (lato sensu), Terra Firme Forest

### Geographic Distribution

#### Confirmed occurrences

North (Amazonas, Pará, Roraima)

## HERBARIUM MATERIAL

G.T. Prance, 23508, K,  (K001172552), RB,  (RB01372780), US,  (US01353278), Amazonas

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. Flora Neotropica 9: 1-409.

# *Hirtella glandistipula* Ducke

## DESCRIPTION

**Stem: indumentum shoot when young** sparsely hirsute/hirsute. **Leaf: cavity myrmecophyllous** absent; **form blade** ovate/oblong. **Inflorescence: type** racemose; **gland(s) on the bract(s)** stipitate; **gland(s) on the bracteole(s)** stipitate. **Flower: number of the stamen** 3/4.

## ADDITIONAL DESCRIPTION

Diferencia-se de espécies morfológicamente próximas por apresentar estípulas com glândulas estipitadas na margem.

### Life Form

Tree

### Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

### Phytogeographic Domains

Amazon Rainforest

### Vegetation Types

Terra Firme Forest, Ombrophyllous Forest (Tropical Rain Forest)

### Geographic Distribution

Confirmed occurrences

North (Amapá, Pará)

## HERBARIUM MATERIAL

A. Ducke, s.n., RB, 15057, K, S, US

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. Flora Neotropica 9: 1-409.

# *Hirtella glandulosa* Spreng.

## Has as synonym

heterotypic *Hirtella damaziana* Beauverd  
heterotypic *Hirtella hookeri* Pilg.  
heterotypic *Hirtella velutina* Pilg.  
heterotypic *Hirtella wachenheimii* Benoist

## DESCRIPTION

**Stem:** indumentum shoot when young tomentose. **Leaf:** cavity myrmecophyllous absent; **form blade** oblong/elliptic. **Inflorescence:** type paniculate; **gland(s) on the bract(s)** sessile/stipitate; **gland(s) on the bracteole(s)** stipitate. **Flower:** number of the stamen 5.

## ADDITIONAL DESCRIPTION

Diferencia-se de espécies morfológicamente próximas por apresentar base da lâmina foliar cuneada a arredondada, e sépalas com glândulas curtamente estipitadas diminutas na margem.

## Life Form

Shrub, Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest, Central Brazilian Savanna, Atlantic Rainforest

## Vegetation Types




Cerrado (lato sensu), Riverine Forest and/or Gallery Forest, Coastal Forest (Restinga)

## Geographic Distribution

### Confirmed occurrences

North (Amazonas, Amapá, Pará, Rondônia, Tocantins)  
Northeast (Bahia, Ceará, Maranhão, Piauí)  
Central-west (Distrito Federal, Goiás, Mato Grosso do Sul, Mato Grosso)  
Southeast (Minas Gerais)

## HERBARIUM MATERIAL

P.B. Cavalcante, 3373, NY,  (NY01109633), Pará  
R.C. Asprino, 99, HUEFS (HUEFS0211151), Bahia  
H.S. Irwin, 16435, US,  (US01353373), P (P04735497), K,  (K001172676), IAN (IAN123285), Mato Grosso

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. Flora Neotropica Monograph 9: 1-409.

# *Hirtella glaziovii* Taub.

## DESCRIPTION

**Stem:** indumentum shoot when young pubescent. **Leaf:** cavity myrmecophyllous absent; form blade elliptic. **Inflorescence:** type racemose; gland(s) on the bract(s) absent; gland(s) on the bracteole(s) absent. **Flower:** number of the stamen 3.

### Life Form

Tree

### Substrate

Terrestrial

## DISTRIBUTION

Native, Is endemic from Brazil

### Phytogeographic Domains

Atlantic Rainforest

### Vegetation Types

Ombrophyllous Forest (Tropical Rain Forest)

### Geographic Distribution

#### Confirmed occurrences

Southeast (Rio de Janeiro, São Paulo)

## HERBARIUM MATERIAL

R.J.F. Garcia, 1398, SPF,  (SPF00165358), São Paulo

A.F.M. Glaziou, 4946, K,  (K000220910), NY,  (NY00428223), P (P00741034), Rio de Janeiro, **Typus**

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. Flora Neotropica Monograph 9: 1-409.

# *Hirtella gracilipes* (Hook.f.) Prance

## Has as synonym

basionym *Hirtella americana* var. *gracilipes* Hook.f.

## DESCRIPTION

**Stem:** indumentum shoot when young pubescent/glabrescent. **Leaf:** cavity myrmecophyllous absent; **form blade** ovate/oblong/elliptic. **Inflorescence:** type racemose; **gland(s) on the bract(s)** sessile translucent; **gland(s) on the bracteole(s)** sessile translucent. **Flower:** number of the stamen 6.

## ADDITIONAL DESCRIPTION

Diferencia-se de espécies morfológicamente próximas por apresentar folhas com a face abaxial glabrescente ou esparsamente pubescente na nervura principal; inflorescência com 4,5-14 cm compr.; brácteas e bractéolas com glândulas sésseis associadas às gotículas de secreção translúcida na margem; e pedicelos com 6-16 mm compr., mais ou menos espessos.

## Life Form

Shrub, Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest, Central Brazilian Savanna, Atlantic Rainforest

## Vegetation Types

Cerrado (lato sensu), Riverine Forest and/or Gallery Forest, Seasonally Semideciduous Forest

## Geographic Distribution

### Confirmed occurrences

North (Pará, Rondônia, Tocantins)


Northeast (Bahia, Maranhão, Piauí)


Central-west (Distrito Federal, Goiás, Mato Grosso do Sul, Mato Grosso)


Southeast (Minas Gerais, Rio de Janeiro, São Paulo)

## HERBARIUM MATERIAL

R.M. Harley, 21649, US (US01353392), P (P04735474), NY, K, Bahia

B. Dubs, 2176, K,  (K001241390), Mato Grosso

R.A. Pacheco, 213, K,  (K001241436), Minas Gerais

A.P. Duarte, 9369, RB, 130648,  (RB00069022), Goiás

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. Flora Neotropica Monograph 9: 1- 409.

# *Hirtella guainiae* Spruce ex Hook.f.

## DESCRIPTION

**Stem:** indumentum shoot when young hispid. **Leaf:** cavity myrmecophyllous present; **form blade** lanceolate/oblong. **Inflorescence:** type racemose; **gland(s) on the bract(s)** sessile/absent; **gland(s) on the bracteole(s)** absent. **Flower:** number of the stamen 4/5.

### Life Form

Shrub, Tree

### Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

### Phytogeographic Domains

Amazon Rainforest

### Vegetation Types

Terra Firme Forest





### Geographic Distribution

#### Confirmed occurrences

North (Acre, Amazonas, Rondônia)

## HERBARIUM MATERIAL

G.T. Prance, 6008, K, INPA, US,  (US01353432), NY,  (NY00867033), Acre

C.A. Ferreira, 5259, US,  (US01353433), RB,  (RB01370682), NY,  (NY01172640), K,  (K001172523), Amazonas

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. Flora Neotropica Monograph 9: 1-409.



# *Hirtella hebeclada* Moric. ex DC.

## Has as synonym

heterotypic *Hirtella gardneri* Benth.

heterotypic *Hirtella selloana* Hook.f.

heterotypic *Hirtella tomentella* Schott

## DESCRIPTION

**Stem:** indumentum shoot when young tomentose. **Leaf:** cavity myrmecophyllous absent; **form blade** ovate/oblong/elliptic. **Inflorescence:** type racemose; **gland(s) on the bract(s)** absent; **gland(s) on the bracteole(s)** absent. **Flower:** number of the stamen 6/7/8.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Is endemic from Brazil

## Phytogeographic Domains

Central Brazilian Savanna, Atlantic Rainforest

## Vegetation Types

Cerrado (lato sensu), Seasonally Semideciduous Forest, Ombrophyllous Forest (Tropical Rain Forest)

## Geographic Distribution

### Confirmed occurrences



Southeast (Espírito Santo, Minas Gerais, Rio de Janeiro, São Paulo)

South (Paraná, Rio Grande do Sul, Santa Catarina)

## HERBARIUM MATERIAL

A. Lobão, 282, RB, 349060,  (RB00069044), Rio de Janeiro

J.R. Pirani, 372, SPF,  (SPF00060987), São Paulo

G. Hatschbach, 53725, US,  (US01353436), W,  (W19930002797), MBM (MBM134190), HUEFS (HUEFS0009820), Paraná

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. Flora Neotropica Monograph 9: 1-409.

# *Hirtella hispidula* Miq.

## Has as synonym

heterotypic *Hirtella egensis* Fritsch

heterotypic *Hirtella subsetosa* Fanshawe & Maguire

## DESCRIPTION

**Stem: indumentum shoot when young** hirsute. **Leaf: cavity myrmecophyllous** absent; **form blade** oblong/elliptic.

**Inflorescence: type** racemose; **gland(s) on the bract(s)** stipitate; **gland(s) on the bracteole(s)** stipitate. **Flower: number of the stamen** 4/5.

## ADDITIONAL DESCRIPTION

Diferencia-se de espécies morfológicamente próximas por apresentar estípulas eglandulares, e bractéolas lineares a lanceoladas com glândulas longamente estipitadas e delgadas na margem.

## Life Form

Shrub, Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types

Terra Firme Forest, Ombrophyllous Forest (Tropical Rain Forest)

## Geographic Distribution

### Confirmed occurrences

North (Acre, Amazonas, Pará, Rondônia, Roraima)

Northeast (Maranhão)

Central-west (Mato Grosso)

## HERBARIUM MATERIAL

J.A. Ratter, 1209, K,  (K001241703), Mato Grosso

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. Flora Neotropica 9: 1-409.

# *Hirtella hoehnei* Pilg.

## DESCRIPTION

**Stem:** indumentum shoot when young tomentose. **Leaf:** cavity myrmecophyllous absent; **form blade** ovate/elliptic. **Inflorescence:** type paniculate; **gland(s) on the bract(s)** sessile; **gland(s) on the bracteole(s)** shallowly stipitate. **Flower:** number of the stamen 7.

### Life Form

Shrub

### Substrate

Terrestrial

## DISTRIBUTION

Native, Is endemic from Brazil

### Phytogeographic Domains

Central Brazilian Savanna

### Vegetation Types

Cerrado (lato sensu), Riverine Forest and/or Gallery Forest

### Geographic Distribution

#### Confirmed occurrences



North (Pará)


Central-west (Goiás, Mato Grosso)

#### Possible occurrences

Central-west (Mato Grosso do Sul)

## HERBARIUM MATERIAL

G.J. Shepherd, 7443, RB, 413937,  (RB00072801), RB, 205242,  (RB00069523), Goiás

G.C.G. Argent, 6806, P, 413937 (P04735669), IAN, 413937 (IAN145353), RB, 147015,  (RB00069461), Mato Grosso

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. Flora Neotropica 9: 1-409.

# *Hirtella insignis* Briq. ex Prance

## DESCRIPTION

**Stem:** indumentum shoot when young sparsely hirsute/glabrescent. **Leaf:** cavity myrmecophyllous absent; form blade oblong/elliptic/wide elliptic. **Inflorescence:** type paniculate corymbiform; **gland(s) on the bract(s)** stipitate; **gland(s) on the bracteole(s)** stipitate. **Flower:** number of the stamen 5.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Is endemic from Brazil

## Phytogeographic Domains

Atlantic Rainforest

## Vegetation Types

Ombrophyllous Forest (Tropical Rain Forest), Coastal Forest (Restinga)



## Geographic Distribution



### Confirmed occurrences

Northeast (Alagoas, Bahia)

Southeast (Espírito Santo)

## HERBARIUM MATERIAL

W.W. Thomas, 8923, US,  (US01353496), RB, 344717,  (RB00069148), NY, K, CEPEC, Bahia

R.M. Harley, 18256, CEPEC,  (CEPEC00019182), P (P04735667), RB, 245154,  (RB00069180), US (US01353497), Bahia

A.M. Carvalho, 7128, CEPEC,  (CEPEC00090523), Alagoas

R.N. Oliveira, 443, VIES (VIES033353), Espírito Santo

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. Flora Neotropica Monograph 9: 1- 409.

# *Hirtella juruensis* Pilg.

## DESCRIPTION

**Stem:** indumentum shoot when young tomentose. **Leaf:** cavity myrmecophyllous absent; form blade oblong/elliptic. **Inflorescence:** type racemose; gland(s) on the bract(s) sessile; gland(s) on the bracteole(s) absent. **Flower:** number of the stamen 5/6.

## ADDITIONAL DESCRIPTION

Diferencia-se de espécies morfológicamente próximas por apresentar folhas com 15-25 cm compr., 13-15 pares de nervuras principais, e face abaxial glabrescente.

### Life Form

Shrub, Tree

### Substrate

Terrestrial

## DISTRIBUTION

Native, Is endemic from Brazil

### Phytogeographic Domains

Amazon Rainforest, Central Brazilian Savanna

### Vegetation Types

Amazonian Campinarana, Cerrado (lato sensu), Seasonally Semideciduous Forest

### Geographic Distribution

#### Confirmed occurrences

North (Pará, Rondônia)

Central-west (Mato Grosso)

## HERBARIUM MATERIAL

G. Martinelli, 20903, RB,  (RB01413321), Pará

L.A.S. Santos, 1744, RB,  (RB01183092), Rondônia

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. Flora Neotropica 9: 1-409.

# *Hirtella kuhlmannii* Pilg.

## DESCRIPTION

**Stem:** indumentum shoot when young tomentose. **Leaf:** cavity myrmecophyllous absent; form blade oblong. **Inflorescence:** type racemose; gland(s) on the bract(s) sessile; gland(s) on the bracteole(s) absent. **Flower:** number of the stamen 5/6.

## ADDITIONAL DESCRIPTION

Diferencia-se de espécies morfológicamente próximas por apresentar folhas com 6,5-13 cm compr., 11-13 pares de nervuras principais, e face abaxial pubescente ao menos na nervura principal.

### Life Form

Shrub, Tree

### Substrate

Terrestrial

## DISTRIBUTION

Native, Is endemic from Brazil

### Phytogeographic Domains

Amazon Rainforest

### Vegetation Types

Cerrado (lato sensu)

### Geographic Distribution

Confirmed occurrences

North (Pará)

Central-west (Mato Grosso)

## HERBARIUM MATERIAL

W.A. Egler, 832, NY,  (NY01173554), Pará

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. Flora Neotropica 9: 1-409.

# *Hirtella lancifolia* Ducke

## DESCRIPTION

**Stem: indumentum shoot when young** hirsute/densely hirsute. **Leaf: cavity myrmecophyllous** absent; **form blade** ovate/oblong. **Inflorescence: type** racemose; **gland(s) on the bract(s)** absent; **gland(s) on the bracteole(s)** stipitate. **Flower: number of the stamen** 4.

### Life Form

Shrub, Tree

### Substrate

Terrestrial

## DISTRIBUTION

Native, Is endemic from Brazil

### Phytogeographic Domains

Amazon Rainforest

### Vegetation Types

Terra Firme Forest

### Geographic Distribution

Confirmed occurrences

North (Pará)

## HERBARIUM MATERIAL

C.R. Sperling, 6327, NY,  (NY01173574), Pará

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. Flora Neotropica 9: 1-409.

# *Hirtella longifolia* Benth. ex Hook.f.

## DESCRIPTION

**Stem: indumentum shoot when young** hirsute. **Leaf: cavity myrmecophyllous** absent; **form blade** lanceolate/narrowly oblong. **Inflorescence: type** racemose; **gland(s) on the bract(s)** sessile/absent; **gland(s) on the bracteole(s)** sessile/absent. **Flower: number of the stamen** 5/6.

### Life Form

Tree

### Substrate

Terrestrial

## DISTRIBUTION

Native, Is endemic from Brazil

### Phytogeographic Domains

Amazon Rainforest

### Vegetation Types

Ombrophyllous Forest (Tropical Rain Forest)

### Geographic Distribution

#### Confirmed occurrences

North (Amazonas)

## HERBARIUM MATERIAL

R. Spruce, 2904, P (P00741040), K,  (K000220887), Amazonas, **Typus**

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. Flora Neotropica 9: 1-409.



# *Hirtella longipedicellata* Prance

## DESCRIPTION

**Stem: indumentum shoot when young** sparsely pubescent. **Leaf: cavity myrmecophyllous** absent; **form blade** orbicular/ovate/elliptic. **Inflorescence: type** racemose corymbiform; **gland(s) on the bract(s)** absent; **gland(s) on the bracteole(s)** shallowly stipitate/absent. **Flower: number of the stamen** 6.

### Life Form

Shrub

### Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

### Phytogeographic Domains

Amazon Rainforest

### Vegetation Types

Amazonian Savanna

### Geographic Distribution

#### Confirmed occurrences

North (Amazonas)

## HERBARIUM MATERIAL

A.C. Weber, 1704, NY,  (NY01173576), Amazonas

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. Flora Neotropica 9: 1-409.

# *Hirtella macrophylla* Benth. ex Hook.f.

## DESCRIPTION

**Stem:** indumentum shoot when young sparsely pubescent/glabrescent. **Leaf:** cavity myrmecophyllous absent; **form blade** oblong/elliptic. **Inflorescence:** type paniculate; **gland(s) on the bract(s)** sessile; **gland(s) on the bracteole(s)** stipitate. **Flower:** **number of the stamen** 4/5/6.

## ADDITIONAL DESCRIPTION

Diferencia-se de espécies morfológicamente próximas por apresentar lâminas foliares com face abaxial glabrescente quando maduras.

### Life Form

Tree

### Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

### Phytogeographic Domains

Amazon Rainforest

### Vegetation Types

Ombrophylous Forest (Tropical Rain Forest)

### Geographic Distribution

Confirmed occurrences

North (Amazonas, Pará)

Central-west (Mato Grosso)

## HERBARIUM MATERIAL

N.A. Rosa, 3607, NY, MG

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. Flora Neotropica 9: 1-409.

# *Hirtella magnifolia* Prance

## DESCRIPTION

**Stem: indumentum shoot when young** sparsely tomentose/tomentose. **Leaf: cavity myrmecophyllous** absent; **form blade** oblong. **Inflorescence: type** paniculate; **gland(s) on the bract(s)** absent; **gland(s) on the bracteole(s)** absent. **Flower: number of the stamen** 5/6/7.

### Life Form

Tree

### Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

### Phytogeographic Domains

Amazon Rainforest

### Vegetation Types


Terra Firme Forest

### Geographic Distribution

#### Confirmed occurrences

North (Amazonas)

## HERBARIUM MATERIAL

G.T. Prance, 23974, NY,  (NY00428247), MG (MG052413), **Typus**

## REFERENCE

Prance, G.T. 1989. Chrysobalanaceae (Supplement). *Flora Neotropica* 9: 1-267

# *Hirtella martiana* Hook.f.

## DESCRIPTION

**Stem:** indumentum shoot when young lanate. **Leaf:** cavity myrmecophyllous absent; **form blade** narrowly oblong/oblong. **Inflorescence:** type racemose; **gland(s) on the bract(s)** sessile; **gland(s) on the bracteole(s)** sessile/shallowly stipitate. **Flower:** number of the stamen 8.

### Life Form

Tree

### Substrate

Terrestrial

## DISTRIBUTION

Native, Is endemic from Brazil

### Phytogeographic Domains

Caatinga, Central Brazilian Savanna

### Vegetation Types

Cerrado (lato sensu), Riverine Forest and/or Gallery Forest

### Geographic Distribution

#### Confirmed occurrences


Northeast (Bahia)

Central-west (Distrito Federal, Goiás)

Southeast (Minas Gerais)

## HERBARIUM MATERIAL

J.F. Ramos, 6719, K,  (K001241696), Distrito Federal

G. Gardner, 4540, E (E00326639), GH (GH00046223), K (K000220897), NY,  (NY00428249), P (P00741042), Minas Gerais,

### Typus

G. Hatschbach, 53410, W (W19920016661), US (US01855504), MBM (MBM131184), CEPEC (CEPEC00056237), Bahia

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. Flora Neotropica Monograph 9: 1- 409.

# *Hirtella mucronata* Prance

## DESCRIPTION

**Stem: indumentum shoot when young** tomentose. **Leaf: cavity myrmecophyllous** absent; **form blade** obovate/elliptic. **Inflorescence: type** racemose; **gland(s) on the bract(s)** sessile/absent; **gland(s) on the bracteole(s)** stipitate. **Flower: number of the stamen** 5.

## ADDITIONAL DESCRIPTION

Diferencia-se de espécies morfológicamente próximas por apresentar folhas com ápice mucronado e face abaxial hirsuta.

### Life Form

Tree

### Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

### Phytogeographic Domains

Amazon Rainforest

### Vegetation Types



Terra Firme Forest, Ombrophyllous Forest (Tropical Rain Forest)

### Geographic Distribution

#### Confirmed occurrences

North (Amazonas)

## HERBARIUM MATERIAL

N.L. Cunha, 457, NY,  (NY01173679), K,  (K001241662), Amazonas

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. Flora Neotropica 9: 1-409.

# *Hirtella myrmecophila* Pilg.

This treatment is composed of the following taxa: *Hirtella myrmecophila*, .

## Has as synonym

heterotypic *Hirtella myrmecophila* var. *tetrandra* Huber

## DESCRIPTION

**Stem: indumentum shoot when young** hispid. **Leaf: cavity myrmecophyllous** present; **form blade** lanceolate/oblong. **Inflorescence: type** racemose glomeriform; **gland(s) on the bract(s)** sessile/absent; **gland(s) on the bracteole(s)** sessile/absent. **Flower: number of the stamen** 4/5.

## Life Form

Shrub, Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Is endemic from Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types




Terra Firme Forest

## Geographic Distribution

### Confirmed occurrences

North (Amazonas, Pará)

## HERBARIUM MATERIAL

C. Ferreira, 1899, NY,  (NY01173617), RB,  (RB00084332), US,  (US01855521), Pará

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. Flora Neotropica 9: 1-409.

# *Hirtella obidensis* Ducke

## Has as synonym

heterotypic *Hirtella coppenamensis* Kleinhoonte

heterotypic *Hirtella lanceolata* Kleinhoonte

## DESCRIPTION

**Stem:** indumentum shoot when young tomentose. **Leaf:** cavity myrmecophyllous absent; **form blade** obovate/elliptic. **Inflorescence:** type paniculate; **gland(s) on the bract(s)** sessile/absent; **gland(s) on the bracteole(s)** sessile/absent. **Flower:** **number of the stamen** 5/6/7.

## ADDITIONAL DESCRIPTION

Diferencia-se de espécies morfológicamente próximas por apresentar inflorescência com indumento ferrugíneo; e frutos com epicarpo glabrescente.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types

Terra Firme Forest

## Geographic Distribution

### Confirmed occurrences

North (Amazonas, Amapá, Pará)

## HERBARIUM MATERIAL

A. Ducke, s.n., RB, 17113

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. Flora Neotropica 9: 1-409.

# *Hirtella paniculata* Sw.

## Has as synonym

heterotypic *Hirtella aggregata* Poir.

heterotypic *Hirtella bracteosa* Steud.

heterotypic *Hirtella hirsuta* Lam.

heterotypic *Hirtella indecora* Schott

## DESCRIPTION

**Stem: indumentum shoot when young** sparsely hirsute/hirsute. **Leaf: cavity myrmecophyllous** absent; **form blade** orbicular/ovate/oblong. **Inflorescence: type** paniculate; **gland(s) on the bract(s)** sessile; **gland(s) on the bracteole(s)** sessile/stipitate. **Flower: number of the stamen** 5/6.

## Life Form

Shrub, Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types

Cerrado (lato sensu), Ombrophyllous Forest (Tropical Rain Forest), Amazonian Savanna

## Geographic Distribution

### Confirmed occurrences

North (Amazonas, Amapá, Pará, Roraima)

## HERBARIUM MATERIAL

L. Coradin, 4876, CEN (CEN00006447), Roraima

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. Flora Neotropica 9: 1-409.



# *Hirtella paraensis* Prance

## DESCRIPTION

**Stem:** indumentum shoot when young hirsute. **Leaf:** cavity myrmecophyllous absent; form blade oblanceolate/narrowly oblong. **Inflorescence:** type racemose; gland(s) on the bract(s) absent; gland(s) on the bracteole(s) stipitate. **Flower:** number of the stamen 4/5.

### Life Form

Shrub, Tree

### Substrate

Terrestrial

## DISTRIBUTION

Native, Is endemic from Brazil

### Phytogeographic Domains

Amazon Rainforest

### Vegetation Types

Terra Firme Forest, Ombrophyllous Forest (Tropical Rain Forest)

### Geographic Distribution

#### Confirmed occurrences

North (Amapá, Pará)

#### Possible occurrences

Northeast (Maranhão)

## HERBARIUM MATERIAL

R.C. Forzza, 9011, RB,  (RB01308073), Pará

N.T. Silva, 1533, NY,  (NY01173628), Pará

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. Flora Neotropica 9: 1-409.

# *Hirtella parviunguis* Prance

## DESCRIPTION

**Stem: indumentum shoot when young** sparsely pubescent/glabrescent. **Leaf: cavity myrmecophyllous** absent; **form blade** narrowly oblong/oblong. **Inflorescence: type** racemose; **gland(s) on the bract(s)** absent; **gland(s) on the bracteole(s)** absent. **Flower: number of the stamen** 7.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Is endemic from Brazil

## Phytogeographic Domains

Atlantic Rainforest

## Vegetation Types

Ombrophyllous Forest (Tropical Rain Forest)

## Geographic Distribution

### Confirmed occurrences

Southeast (Espírito Santo)

## HERBARIUM MATERIAL

T.S. Santos, 1512, NY,  (NY00428260), CEPEC,  (CEPEC00006736), Espírito Santo, **Typus**

## REFERENCE

Prance, G.T. 1989. Chrysobalanaceae. Flora Neotropica Monograph 9 (Supplement): 1-267

# *Hirtella physophora* Mart. & Zucc.

## Has as synonym

heterotypic *Hirtella cauliflora* Huber

heterotypic *Hirtella cotticaensis* Kleinhoonte

## DESCRIPTION

**Stem:** indumentum shoot when young hispid. **Leaf:** cavity myrmecophyllous present; **form blade** oblong/elliptic.

**Inflorescence:** type racemose glomeriform; **gland(s) on the bract(s)** absent; **gland(s) on the bracteole(s)** absent. **Flower:** number of the stamen 6.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types



Terra Firme Forest

## Geographic Distribution

### Confirmed occurrences

North (Acre, Amazonas, Amapá, Pará, Rondônia, Roraima)

## HERBARIUM MATERIAL

A. Ducke, 23587, RB,  (RB00079793), K,  (K001172518), Amazonas

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. Flora Neotropica 9: 1-409.

# *Hirtella pilosissima* Mart. & Zucc.

## Has as synonym

heterotypic *Hirtella purusana* Huber

## DESCRIPTION

**Stem: indumentum shoot when young** hirsute. **Leaf: cavity myrmecophyllous** absent; **form blade** oblong. **Inflorescence: type** racemose; **gland(s) on the bract(s)** sessile; **gland(s) on the bracteole(s)** sessile. **Flower: number of the stamen** 3/4/5/6.

## ADDITIONAL DESCRIPTION

Diferencia-se de espécies morfológicamente próximas por apresentar flores com pedicelos 1,5-3 mm compr.; receptáculo campanulado; e brácteas e bractéolas com glândulas sésseis diminutas.

## Life Form

Shrub, Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types

Terra Firme Forest

## Geographic Distribution

### Confirmed occurrences

North (Amazonas, Pará, Rondônia)

## HERBARIUM MATERIAL

N.A. Rosa, 3651, MG (MG073664), NY,  (NY01174067), Pará

G.T. Prance, 5404, NY,  (NY01174065), Rondônia

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. Flora Neotropica 9: 1-409.

# *Hirtella pimichina* Lasser & Maguire

## DESCRIPTION

**Stem: indumentum shoot when young** hirsute. **Leaf: cavity myrmecophyllous** absent; **form blade** ovate. **Inflorescence: type** racemose; **gland(s) on the bract(s)** stipitate; **gland(s) on the bracteole(s)** stipitate. **Flower: number of the stamen** 4/5/6.

## ADDITIONAL DESCRIPTION

Diferencia-se de espécies morfológicamente próximas por apresentar estípulas eglandulares; folhas ovadas, com 2,5-6 cm compr. x 1,1-2,6 cm larg.; e inflorescências com 3-5 cm compr.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types

Amazonian Campinarana

## Geographic Distribution

Confirmed occurrences

North (Amazonas)

# *Hirtella piresii* Prance

## DESCRIPTION

**Stem: indumentum shoot when young** glabrescent. **Leaf: cavity myrmecophyllous** absent; **form blade** oblong. **Inflorescence: type** paniculate; **gland(s) on the bract(s)** absent; **gland(s) on the bracteole(s)** stipitate. **Flower: number of the stamen** 3.

### Life Form

Tree

### Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

### Phytogeographic Domains

Amazon Rainforest

### Vegetation Types

Terra Firme Forest



### Geographic Distribution

#### Confirmed occurrences

North (Acre, Amazonas, Pará, Rondônia)

Central-west (Mato Grosso)

## HERBARIUM MATERIAL

C. A. Cid Ferreira, 1971, US,  (US01855573), NY,  (NY01174137), Pará

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. Flora Neotropica 9: 1-409.

# *Hirtella prancei* Asprino & Amorim

## DESCRIPTION

**Stem: indumentum shoot when young** velutinous. **Leaf: cavity myrmecophyllous** absent; **form blade** ovate/wide elliptic. **Inflorescence: type** racemose; **gland(s) on the bract(s)** absent; **gland(s) on the bracteole(s)** absent. **Flower: number of the stamen** 6/7/8.

### Life Form

Tree

### Substrate

Terrestrial

## DISTRIBUTION

Native, Is endemic from Brazil

### Phytogeographic Domains

Atlantic Rainforest

### Vegetation Types

Ombrophyllous Forest (Tropical Rain Forest)

### Geographic Distribution

#### Confirmed occurrences

Northeast (Bahia)

## HERBARIUM MATERIAL

D.M. Loureiro, 394, ALCB, 56317 (ALCB042675), Bahia

## REFERENCE

Asprino, R.C. & Amorim, A.M.A. 2016. Phytotaxa, 265(3): 259-266.

# *Hirtella punctillata* Ducke

## DESCRIPTION

**Stem: indumentum shoot when young** pubescent. **Leaf: cavity myrmecophyllous** absent; **form blade** orbicular/oblong. **Inflorescence: type** paniculate corymbiform; **gland(s) on the bract(s)** absent; **gland(s) on the bracteole(s)** absent. **Flower: number of the stamen** 5/6.

### Life Form

Shrub

### Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

### Phytogeographic Domains

Amazon Rainforest

### Vegetation Types

Cerrado (lato sensu), Riverine Forest and/or Gallery Forest, Rock outcrop vegetation


### Geographic Distribution

#### Confirmed occurrences

North (Amazonas, Amapá, Pará, Roraima)

## HERBARIUM MATERIAL

A. Ducke, s.n., MG, 15044 (MG016663), RB, 15044,  (RB00537045), Pará, **Typus**

G. Martinelli, 17196, RB, 15044,  (RB00686620), Amazonas

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. Flora Neotropica Monograph 9: 1-409.



# *Hirtella racemosa* Lam.

This treatment is composed of the following taxa: *Hirtella racemosa*, *Hirtella racemosa* var. *hexandra*, *Hirtella racemosa* var. *hispida*, *Hirtella racemosa* var. *racemosa*.

## DESCRIPTION

**Stem:** indumentum shoot when young sparsely pubescent/pubescent/hirsute. **Leaf:** cavity myrmecophyllous absent; **form blade** ovate/oblong/elliptic. **Inflorescence:** type racemose; **gland(s) on the bract(s)** sessile/absent; **gland(s) on the bracteole(s)** sessile/stipitate. **Flower:** number of the stamen 5/6/7.

## ADDITIONAL DESCRIPTION

*Hirtella racemosa* var. *hispida* diferencia-se de espécies morfológicamente próximas por apresentar flores com pedicelos 8-12 mm compr.; receptáculo tubular campanulado; e 5-7 estames.

*Hirtella racemosa* var. *hexandra* e *Hirtella racemosa* var. *racemosa* diferencia-se de espécies morfológicamente próximas por apresentarem folhas elípticas, oblongas, ou ovadas com 3,5-8 cm compr., e brácteas comumente com glândulas sésseis, podendo ser um par de glândulas grandes e côncavas, várias diminutas na margem, ou apenas uma apical.

## Life Form

Shrub, Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest, Caatinga, Central Brazilian Savanna, Atlantic Rainforest

## Vegetation Types

Cerrado (lato sensu), Riverine Forest and/or Gallery Forest, Terra Firme Forest, Seasonally Semideciduous Forest, Ombrophyllous Forest (Tropical Rain Forest), Coastal Forest (Restinga)

## Geographic Distribution

### Confirmed occurrences

North (Acre, Amazonas, Amapá, Pará, Rondônia, Roraima, Tocantins)

Northeast (Alagoas, Bahia, Ceará, Maranhão, Paraíba, Pernambuco, Piauí, Rio Grande do Norte, Sergipe)

Central-west (Distrito Federal, Goiás, Mato Grosso do Sul, Mato Grosso)

Southeast (Minas Gerais)

### Possible occurrences

Southeast (Espírito Santo, Rio de Janeiro)

## IDENTIFICATION KEY

1. Ramos jovens com indumento hirsuto.....*Hirtella racemosa* var. *hispida*



1'. Ramos jovens com indumento esparsamente pubescente a pubescente.....2

2. Lâmina foliar 7-19,5 cm compr., nervação inconspícua na face adaxial; pedicelos normalmente espessos, 1,5-7(-9) mm compr.....*Hirtella racemosa* var. *racemosa*

2'. Lâmina foliar 3,5-9,5(-11,5) cm long, nervação normamente reticulada e proeminente na face adaxial; pedicelos delgados, 3-11 mm compr.....*Hirtella racemosa* var. *hexandra*

## HERBARIUM MATERIAL

M.L.S. Guedes, 13635, ALCB (ALCB042494), Bahia

C.A. Ferreira, 9834, RB, 334819,  (RB00069165), K, 334819,  (K001241560), Pará

## REFERENCE

Prance, G.T. & Sothers, C.A. 2003. Chrysobalanaceae 2, *Acioa* to *Magnistipula*. In: A.E. Orchard & A.J.G. Wilson (eds), *Species Plantarum: Flora of the World 10*. Australian Biological Resources Study, Canberra.

# *Hirtella racemosa* Lam. var. *racemosa*

## Has as synonym

heterotypic *Hirtella nemorosa* Hoffmanns. ex Schult.  
heterotypic *Hirtella racemosa* var. *metallica* Cuatrec.  
heterotypic *Hirtella scandens* Hoffmanns. ex Schult.  
heterotypic *Hirtella violacea* Steud.  
heterotypic *Salmasia guianensis* (Aubl.) J.F.Gmel.  
heterotypic *Salmasia racemosa* Willd.  
heterotypic *Tachibota guianensis* Aubl.

## **Life Form**

Shrub, Tree

## **Substrate**

Terrestrial

## **DISTRIBUTION**

Native, Not endemic to Brazil

## **Phytogeographic Domains**

Amazon Rainforest, Central Brazilian Savanna

## **Vegetation Types**

Riverine Forest and/or Gallery Forest, Terra Firme Forest, Ombrophyllous Forest (Tropical Rain Forest)

## **Geographic Distribution**



### Confirmed occurrences


North (Acre, Amazonas, Amapá, Pará, Rondônia, Roraima, Tocantins)

Northeast (Maranhão, Piauí)

Central-west (Mato Grosso)

## **HERBARIUM MATERIAL**

H.C. Lima, 6129, RB, 397574,   (RB00069330), Pará

M.F. Simon, 1321, CEN, 397574 (CEN00080718), RON, 397574,  (RON00005855), Rondônia

## **REFERENCE**

Prance, G.T. 1972. Chrysobalanaceae. Flora Neotropica 9: 1-409.

# *Hirtella racemosa* var. *hexandra* (Willd. ex Roem. & Schult.) Prance

## Has as synonym

heterotypic *Hirtella acayacensis* Sessé & Moc. ex DC.  
heterotypic *Hirtella americana* var. *hexandra* (Willd. ex Schult.) Hook.f.  
heterotypic *Hirtella americana* var. *oblongifolia* (DC.) Hook.f.  
heterotypic *Hirtella coriacea* Mart. & Zucc.  
heterotypic *Hirtella filiformis* C.Presl  
heterotypic *Hirtella hexandra* Willd. ex Schult.  
heterotypic *Hirtella nitida* Humb. & Bonpl. ex Schult.  
heterotypic *Hirtella oblongifolia* DC.  
heterotypic *Hirtella racemosa* var. *oblongifolia* (DC.) Standl.  
heterotypic *Hirtella rosea* Sessé & Moc. ex DC.

## **Life Form**

Shrub, Tree

## **Substrate**

Terrestrial

## **DISTRIBUTION**

Native, Not endemic to Brazil

## **Phytogeographic Domains**

Amazon Rainforest, Caatinga, Central Brazilian Savanna, Atlantic Rainforest

## **Vegetation Types**

Cerrado (lato sensu), Riverine Forest and/or Gallery Forest, Seasonally Semideciduous Forest, Ombrophylous Forest (Tropical Rain Forest), Coastal Forest (Restinga)

## **Geographic Distribution**

### Confirmed occurrences

North (Acre, Amazonas, Amapá, Pará, Rondônia, Roraima, Tocantins)  
Northeast (Alagoas, Bahia, Ceará, Maranhão, Paraíba, Pernambuco, Piauí, Rio Grande do Norte, Sergipe)  
Central-west (Distrito Federal, Goiás, Mato Grosso do Sul, Mato Grosso)  
Southeast (Minas Gerais)

## **HERBARIUM MATERIAL**

J.G. Jardim, 715, HUEFS (HUEFS0102457), NY,  (NY00378341), CEPEC,  (CEPEC00067006), Bahia

## **REFERENCE**

Prance, G.T. 1972. Chrysobalanaceae. Flora Neotropica 9: 1-409.

# *Hirtella racemosa* var. *hispida* Prance

## Has as synonym

heterotypic *Hirtella strigulosa* Steud.

## **Life Form**

Shrub, Tree

## **Substrate**

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## **Phytogeographic Domains**

Amazon Rainforest

## **Vegetation Types**

Terra Firme Forest

## **Geographic Distribution**

### Confirmed occurrences

North (Amazonas, Amapá)

## HERBARIUM MATERIAL

B.V. Rabelo, 2381, NY,  (NY00468703), Amapá, **Typus**

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. Flora Neotropica 9: 1-409.

# *Hirtella radamii* Prance

## DESCRIPTION

**Stem: indumentum shoot when young** sparsely hirsute. **Leaf: cavity myrmecophyllous** absent; **form blade** lanceolate/oblong. **Inflorescence: type** racemose; **gland(s) on the bract(s)** sessile; **gland(s) on the bracteole(s)** sessile/stipitate. **Flower: number of the stamen** 6.

### Life Form

Shrub

### Substrate

Terrestrial

## DISTRIBUTION

Native, Is endemic from Brazil

### Phytogeographic Domains

Amazon Rainforest

### Vegetation Types

Ombrophyllous Forest (Tropical Rain Forest)

### Geographic Distribution

Confirmed occurrences

North (Rondônia)

## HERBARIUM MATERIAL

J.C. Silva, 100, MG (MG057792), Rondônia, **Typus**

## REFERENCE

Prance, G.T. 1989. Chrysobalanaceae (Supplement). *Flora Neotropica* 9: 1-267

# *Hirtella rasa* Standl.

## DESCRIPTION

**Stem:** indumentum shoot when young sparsely pubescent/glabrescent. **Leaf:** cavity myrmecophyllous absent; form blade oblong/elliptic. **Inflorescence:** type paniculate; gland(s) on the bract(s) absent; gland(s) on the bracteole(s) absent. **Flower:** number of the stamen 6.

## ADDITIONAL DESCRIPTION

Diferencia-se de espécies morfológicamente próximas por apresentar inflorescência paniculada muito ramificada, com um eixo central curto.

### Life Form

Tree

### Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

### Phytogeographic Domains

Amazon Rainforest

### Vegetation Types


Terra Firme Forest, Ombrophyllous Forest (Tropical Rain Forest)

### Geographic Distribution

#### Confirmed occurrences

North (Acre)

## HERBARIUM MATERIAL

B.A. Krukoff, 5525, NY,  (NY00867065), MO (MO255286), Acre, **Typus**

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. Flora Neotropica 9: 1-409.

# *Hirtella rodriguesii* Prance

## DESCRIPTION

**Stem: indumentum shoot when young** sparsely hirsute/hirsute. **Leaf: cavity myrmecophyllous** absent; **form blade** obovate/elliptic. **Inflorescence: type** paniculate; **gland(s) on the bract(s)** absent; **gland(s) on the bracteole(s)** absent. **Flower: number of the stamen** 4/5.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types

Terra Firme Forest

## Geographic Distribution

### Confirmed occurrences

North (Acre, Amazonas)

## HERBARIUM MATERIAL

Rodrigues, W.A., 6735, NY, INPA

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. Flora Neotropica 9: 1-409.



# *Hirtella santosii* Prance

## DESCRIPTION

**Stem:** indumentum shoot when young hirsute. **Leaf:** cavity myrmecophyllous absent; form blade ovate/oblong/elliptic. **Inflorescence:** type racemose; gland(s) on the bract(s) sessile; gland(s) on the bracteole(s) sessile/stipitate. **Flower:** number of the stamen 5/6/7.

## ADDITIONAL DESCRIPTION

Diferencia-se de espécies morfológicamente próximas por apresentar flores com pedicelos 6-19 mm compr.; receptáculo campanulado; e brácteas com glândulas sésseis e bractéolas frequentemente com glândulas estipitadas na margem.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Is endemic from Brazil

## Phytogeographic Domains

Atlantic Rainforest

## Vegetation Types

Ombrophyllous Forest (Tropical Rain Forest)

## Geographic Distribution

### Confirmed occurrences

Northeast (Alagoas, Bahia)

## HERBARIUM MATERIAL

T.S. Santos, 300, CEPEC, 325665,  (CEPEC00005091), NY, ,  (NY00428279), RB, 325665,  (RB00537050), Bahia, **Typus**

## REFERENCE

Prance, G.T. 1989. Chrysobalanaceae. Flora Neotropica Monograph 9 (Supplement): 1-267.

# *Hirtella scaberula* Spruce ex Hook.f.

## DESCRIPTION

**Stem:** indumentum shoot when young pubescent. **Leaf:** cavity myrmecophyllous absent; form blade elliptic. **Inflorescence:** type racemose; gland(s) on the bract(s) absent; gland(s) on the bracteole(s) absent. **Flower:** number of the stamen 5/6/7.

### Life Form

Tree

### Substrate

Terrestrial

## DISTRIBUTION

Native, Is endemic from Brazil

### Phytogeographic Domains

Amazon Rainforest

### Vegetation Types


Ombrophyllous Forest (Tropical Rain Forest)

### Geographic Distribution

#### Confirmed occurrences

North (Amazonas)

## HERBARIUM MATERIAL

R. Spruce, 2418, K,  (K000220908), P (P00741057), Amazonas, **Typus**

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. Flora Neotropica 9: 1-409.

# *Hirtella scabra* Benth.

## DESCRIPTION

**Stem:** indumentum shoot when young sparsely pubescent. **Leaf:** cavity myrmecophyllous absent; form blade ovate. **Inflorescence:** type paniculate; gland(s) on the bract(s) absent; gland(s) on the bracteole(s) absent. **Flower:** number of the stamen 5/6/7.

### Life Form

Shrub

### Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

### Phytogeographic Domains

Amazon Rainforest

### Vegetation Types



Amazonian Campinarana, Rock outcrop vegetation

### Geographic Distribution

#### Confirmed occurrences

North (Amazonas, Roraima)

## HERBARIUM MATERIAL

G.T. Prance, 29766, NY,  (NY01195451), K,  (K001241276), Amazonas

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. Flora Neotropica 9: 1-409.

# *Hirtella schultesii* Prance

## DESCRIPTION

**Stem:** indumentum shoot when young sparsely pubescent. **Leaf:** cavity myrmecophyllous absent; **form blade** narrowly oblong/oblong. **Inflorescence:** type racemose; **gland(s) on the bract(s)** absent; **gland(s) on the bracteole(s)** stipitate. **Flower:** number of the stamen 5.

## ADDITIONAL DESCRIPTION

Diferencia-se de espécies morfológicamente próximas por apresentar folhas com 9-16 cm compr., com a base subauriculada devido à leve constrição na lâmina pouco acima da junção com o pecíolo, e 11-13 pares de nervuras principais.

### Life Form

Shrub

### Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

### Phytogeographic Domains

Amazon Rainforest

### Vegetation Types



Terra Firme Forest, Ombrophyllous Forest (Tropical Rain Forest)



### Geographic Distribution

#### Confirmed occurrences

North (Amazonas)

## HERBARIUM MATERIAL

C.A.C. Ferreira, 3427, RB, 271697,  (RB00069204), US, 271697,  (US01855793), Amazonas

B.A. Krukoff, 8727, NY, 271697,  (NY01195485), K, 271697,  (K001172926), Amazonas

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. Flora Neotropica 9: 1-409.

# *Hirtella sprucei* Benth. ex Hook.f.

This treatment is composed of the following taxa: *Hirtella sprucei*, .

## DESCRIPTION

**Stem:** indumentum shoot when young sparsely hirsute/glabrescent. **Leaf:** cavity myrmecophyllous absent; **form blade** narrowly oblong/oblong. **Inflorescence:** type racemose; **gland(s) on the bract(s)** absent; **gland(s) on the bracteole(s)** stipitate. **Flower:** number of the stamen 5/6.

## Life Form

Shrub, Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Is endemic from Brazil

## Phytogeographic Domains

Amazon Rainforest, Central Brazilian Savanna, Atlantic Rainforest

## Vegetation Types

Riverine Forest and/or Gallery Forest, Seasonally Semideciduous Forest, Ombrophyllous Forest (Tropical Rain Forest)

## Geographic Distribution

### Confirmed occurrences


Northeast (Bahia)

Central-west (Mato Grosso)

Southeast (Espírito Santo, Minas Gerais, Rio de Janeiro)

## HERBARIUM MATERIAL

T.S. Santos, 570, CEPEC,  (CEPEC00005491), NY, Bahia

Blanchet, 3568, GH (GH00046228), S (S-R-8155), K,  (K000220890), P (P00741064), MO (MO1612455), Bahia, **Typus**

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. Flora Neotropica Monograph 9: 1- 409.

# *Hirtella subscandens* Spruce ex Hook.f.

## DESCRIPTION

**Stem:** indumentum shoot when young hispid. **Leaf:** cavity myrmecophyllous absent; form blade lanceolate/oblong. **Inflorescence:** type racemose; gland(s) on the bract(s) stipitate; gland(s) on the bracteole(s) stipitate. **Flower:** number of the stamen 6/7.

### Life Form

Shrub

### Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

### Phytogeographic Domains

Amazon Rainforest

### Vegetation Types

Ombrophyllous Forest (Tropical Rain Forest)

### Geographic Distribution

#### Confirmed occurrences

North (Amazonas)

## HERBARIUM MATERIAL

G.T. Prance, 15604, P, NY, INPA

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. Flora Neotropica 9: 1-409.

# *Hirtella suffulta* Prance

## DESCRIPTION

**Stem:** indumentum shoot when young sparsely pubescent/glabrescent. **Leaf:** cavity myrmecophyllous absent; **form blade** oblong. **Inflorescence:** type paniculate; **gland(s) on the bract(s)** absent; **gland(s) on the bracteole(s)** stipitate/absent. **Flower:** number of the stamen 5/6.

## ADDITIONAL DESCRIPTION

Diferencia-se de espécies morfológicamente próximas por apresentar lâminas foliares com base cuneada e face abaxial hirsuta quando maduras, ao menos nas nervuras principais; e bractéolas eglandulares ou com apenas uma glândula estipitada no ápice, mais longas do que o receptáculo, e que subtendem grupos de botões florais.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types

Terra Firme Forest

## Geographic Distribution

Confirmed occurrences

North (Amazonas, Pará)

## HERBARIUM MATERIAL

J.M. Pires, 6943, IAN, NY, UB

# *Hirtella tentaculata* Poepp.

## DESCRIPTION

**Stem:** indumentum shoot when young pubescent. **Leaf:** cavity myrmecophyllous absent; form blade oblong/elliptic. **Inflorescence:** type paniculate; gland(s) on the bract(s) sessile; gland(s) on the bracteole(s) stipitate. **Flower:** number of the stamen 3/4/5.

### Life Form

Tree

### Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

### Phytogeographic Domains

Amazon Rainforest

### Vegetation Types

Inundated Forest (Igapó), Terra Firme Forest


### Geographic Distribution

#### Confirmed occurrences

North (Pará, Roraima)

Northeast (Maranhão)

## HERBARIUM MATERIAL

N.T. Silva, 2170, IAN (IAN134025), NY,  (NY01195496), Pará

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. Flora Neotropica 9: 1-409.



# *Hirtella tenuifolia* Prance

## DESCRIPTION

**Stem:** indumentum shoot when young sparsely hirsute. **Leaf:** cavity myrmecophyllous absent; **form blade** lanceolate. **Inflorescence:** type racemose; **gland(s) on the bract(s)** sessile; **gland(s) on the bracteole(s)** sessile. **Flower:** number of the stamen 5.

### Life Form

Shrub, Tree

### Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

### Phytogeographic Domains

Amazon Rainforest

### Vegetation Types

Ombrophyllous Forest (Tropical Rain Forest)


### Geographic Distribution

#### Confirmed occurrences

North (Amazonas, Amapá, Pará)

Northeast (Maranhão)

## HERBARIUM MATERIAL

B. Maguire, 47110, MG (MG026478), NY,  (NY00468701), Amapá, **Typus**

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. Flora Neotropica 9: 1-409.

# *Hirtella tocantina* Ducke

## DESCRIPTION

**Stem: indumentum shoot when young** glabrescent. **Leaf: cavity myrmecophyllous** absent; **form blade** oblong. **Inflorescence: type** paniculate; **gland(s) on the bract(s)** sessile/shallowly stipitate; **gland(s) on the bracteole(s)** sessile/shallowly stipitate. **Flower: number of the stamen** 3.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types

Riverine Forest and/or Gallery Forest, Terra Firme Forest

## Geographic Distribution

### Confirmed occurrences

North (Acre, Amazonas, Pará)

## HERBARIUM MATERIAL

A. Ducke, s.n., MG, 16274, P, RB, US

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. Flora Neotropica 9: 1-409.

# *Hirtella triandra* Sw.

This treatment is composed of the following taxa: *Hirtella triandra*, *Hirtella triandra* subsp. *punctulata*, *Hirtella triandra* subsp. *triandra*.

## Has as synonym

heterotypic *Chrysobalanus triandrus* (Sw.) Morales

## DESCRIPTION

**Stem:** indumentum shoot when young sparsely pubescent. **Leaf:** cavity myrmecophyllous absent; **form blade** narrowly elliptic/elliptic. **Inflorescence:** type paniculate; **gland(s) on the bract(s)** absent; **gland(s) on the bracteole(s)** absent. **Flower:** number of the stamen 3.

## Life Form

Shrub, Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest, Atlantic Rainforest

## Vegetation Types

Riverine Forest and/or Gallery Forest, Terra Firme Forest, Seasonally Semideciduous Forest, Ombrophyllous Forest (Tropical Rain Forest)

## Geographic Distribution

### Confirmed occurrences

North (Acre, Amazonas, Pará, Rondônia, Roraima)

Northeast (Bahia)

Central-west (Mato Grosso)

Southeast (Espírito Santo, Minas Gerais, Rio de Janeiro)

### Possible occurrences

Central-west (Distrito Federal, Goiás)

## IDENTIFICATION KEY

1. Lâmina foliar 4-15 cm compr.; ápice acuminado, com acúmen 5-20 mm compr.; 9-13 pares de nervuras secundárias.....*Hirtella triandra* subsp. *triandra*

1'. Lâmina foliar 3,5-8 cm compr.; ápice abruptamente acuminado, com acúmen até 5 mm compr.; 7-9 pares de nervuras secundárias.....*Hirtella triandra* subsp. *punctulata*

## HERBARIUM MATERIAL

V. Demuner, 1328, MBML (MBML013211), Espírito Santo

## REFERENCE

Prance, G.T. & Sothers, C.A. 2003. Chrysobalanaceae 2, Acioa to Magnistipula. In: A.E. Orchard & A.J.G. Wilson (eds), Species Plantarum: Flora of the World 10. Australian Biological Resources Study, Canberra.

# *Hirtella triandra* subsp. *punctulata* (Miq.) Prance

## Has as synonym

heterotypic *Hirtella elliptica* C.Presl

heterotypic *Hirtella hevanda* Mart. ex Colla

heterotypic *Hirtella punctulata* Miq.

## **Life Form**

Shrub, Tree

## **Substrate**

Terrestrial

## **DISTRIBUTION**

Native, Is endemic from Brazil

## **Phytogeographic Domains**

Atlantic Rainforest

## **Vegetation Types**

Ombrophyllous Forest (Tropical Rain Forest)

## **Geographic Distribution**

### Confirmed occurrences

Northeast (Bahia)

Southeast (Espírito Santo, Minas Gerais, Rio de Janeiro)

## **REFERENCE**

Prance, G.T. 1972. Chrysobalanaceae. Flora Neotropica 9: 1-409.

# *Hirtella triandra* Sw. subsp. *triandra*

## Has as synonym

heterotypic *Hirtella americana* Jacq.  
heterotypic *Hirtella bracteata* Mart. & Zucc.  
heterotypic *Hirtella castanea* Sessé & Moc. ex DC.  
heterotypic *Hirtella cosmibuena* Lam.  
heterotypic *Hirtella jamaicensis* Urb.  
heterotypic *Hirtella multiflora* Urb.  
heterotypic *Hirtella peruviana* Pers.  
heterotypic *Sphenista peruviana* (Pers.) Raf.  
heterotypic *Zamzela racemosa* Raf.

## **Life Form**

Shrub, Tree

## **Substrate**

Terrestrial

## **DISTRIBUTION**

Native, Not endemic to Brazil

## **Phytogeographic Domains**

Amazon Rainforest, Atlantic Rainforest

## **Vegetation Types**


Riverine Forest and/or Gallery Forest, Terra Firme Forest, Seasonally Semideciduous Forest, Ombrophyllous Forest (Tropical Rain Forest)

## **Geographic Distribution**

### Confirmed occurrences

North (Acre, Amazonas, Pará, Rondônia, Roraima)  
Northeast (Bahia)  
Southeast (Espírito Santo, Minas Gerais, Rio de Janeiro)

## **HERBARIUM MATERIAL**

T.S. Santos, 3828, CEPEC,  (CEPEC00030689), HUEFS (HUEFS0002089), Bahia

## **REFERENCE**

Prance, G.T. 1972. Chrysobalanaceae. Flora Neotropica 9: 1-409.

# *Hirtella ulei* Pilg.

## DESCRIPTION

**Stem: indumentum shoot when young** glabrescent. **Leaf: cavity myrmecophyllous** absent; **form blade** oblong/elliptic. **Inflorescence: type** paniculate; **gland(s) on the bract(s)** sessile/absent; **gland(s) on the bracteole(s)** stipitate. **Flower: number of the stamen** 6/7.

## ADDITIONAL DESCRIPTION

Diferencia-se de espécies morfológicamente próximas por apresentar lâminas foliares com face abaxial hirsuta quando maduras, ao menos nas nervuras principais, bractéolas com numerosas glândulas estipitadas, e que não subtendem grupos de botões florais.

### Life Form

Shrub

### Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

### Phytogeographic Domains

Amazon Rainforest

### Vegetation Types

Riverine Forest and/or Gallery Forest, Terra Firme Forest

### Geographic Distribution

Confirmed occurrences

North (Amazonas, Roraima)

## HERBARIUM MATERIAL

E. Ule, 8853, K,  (K000220843), MG (MG013875), Amazonas, **Typus**

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. Flora Neotropica 9: 1-409.

# *Hymenopus* (Benth.) Sothers & Prance

This treatment is composed of the following taxa: *Hymenopus*, *Hymenopus adolphoduckei*, *Hymenopus amapaensis*, *Hymenopus arachnoideus*, *Hymenopus caudatus*, *Hymenopus conferruminatus*, *Hymenopus divaricatus*, *Hymenopus glabriflorus*, *Hymenopus heteromorphus*, *Hymenopus hirsutus*, *Hymenopus intrapetiolaris*, *Hymenopus krukovii*, *Hymenopus laevigatus*, *Hymenopus latifolius*, *Hymenopus macrophyllus*, *Hymenopus miltonii*, *Hymenopus oblongifolius*, *Hymenopus occultans*, *Hymenopus prismatocarpus*, *Hymenopus reticulatus*, *Hymenopus sothersiae*.

## HOW TO CITE

Sothers, C.A., Prance, G.T. 2020. *Hymenopus* in **Flora do Brasil 2020**. Jardim Botânico do Rio de Janeiro. Available at: <http://floradobrasil.jbrj.gov.br/reflora/floradobrasil/FB604710>.

## DESCRIPTION

Trees or shrubs. Leaves: stipules caducous or persistent; petiole with pair of glands present or not; lower surface glabrous or hirsute. Inflorescences panicles or racemose panicles. Bracts and bracteoles small, persistent to subsistent, not enclosing flower-buds. Flowers bisexual, sub-actinomorphic. Receptacle-tube campanulate, turbinate or urceolate, hairy inside, but throat without long retrorse hairs. Sepals 5. Petals 4-5. Stamens 3–10, inserted unilaterally, in  $\frac{3}{4}$  of a circle or in a complete circle, equal or shorter than calyx, rarely exserted; filaments free, connate either at base only, to  $\frac{1}{2}$  length or fully connate. Ovary 1-carpellary, 1-locular, inserted at base of receptacle; style filiform, indistinctly 3-lobed at apex. Fruit a drupe to  $9 \times 8$  cm, epicarp costate, smooth, glabrous, lenticellate, or pilose; endocarp glabrous or sparsely puberulous within; endocarp thick, hard and woody, or thin and fibrous, without any special mechanisms for seedling escape.

## COMMENTS

A genus of 28 species, of which 20 occur in Brazil. Distributed from Central America, Trinidad and Tobago, to northern South America and Amazonia, with a few representatives in northeastern and southeastern Brazil. Absent from Mexico. *Hymenopus* is characterised by the glabrous or hirsute leaves, the presence of petals, mostly included stamens, basal and unilocular ovary. In phylogenetic analyses the genus is recovered in a clade with *Afrolicania*, *Cordillera* and *Parinariopsis*; this clade is sister to *Hirtella*.

### Life Form

Shrub, Tree

### Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

### Phytogeographic Domains

Amazon Rainforest

### Vegetation Types

Flooded Field (Várzea), Riverine Forest and/or Gallery Forest, Inundated Forest (Igapó), Terra Firme Forest, Inundated Forest (Várzea), Amazonian Savanna

### Geographic Distribution

#### Confirmed occurrences

North (Acre, Amazonas, Amapá, Pará, Rondônia, Roraima)

Northeast (Maranhão)

Central-west (Mato Grosso)

#### Possible occurrences

Northeast (Maranhão)

Southeast (Espírito Santo, Rio de Janeiro)

## IDENTIFICATION KEY

- 1 Leaf lower surface sparsely hirsute at least on venation or hispid on midrib.
- 2 Receptacle urceolate; leaf apex rounded to apiculate.....**H. latifolius**
- 2' Receptacle campanulate; leaf apex acuminate or rarely acute.
- 3 Midrib distinctly impressed on leaf upper surface; pedicels 0.5 mm long.....**H. amapaensis**
- 3' Midrib plane above; flowers sessile.
- 4 Stamens 5; petioles 10 mm long; leaves chartaceous.....**H. krukovii**
- 4' Stamens 6-9; petioles 1.5-5 mm long; leaves coriaceous or membranaceous.
- 5 Inflorescence branches hirsute; leaf apex acuminate; petioles eglandular.....**H. hirsutus**
- 5' Inflorescence branches puberulous; leaf apex retuse to acute; petioles 2-glandular.....**H. heteromorphus**
- 1' Leaf lower surface glabrous
- 6 Midrib distinctly impressed on leaf upper surface.
- 7 Leaves 21-31 x 8.5-11.5; petioles 10-13 mm long; stipules 10-13 mm long; inflorescence branches sparsely puberulous.....**H. conferruminatus**
- 7' Leaves 5-19 x 2.4-8.5; petioles 2-8 mm long; stipules 1-5 mm long. inflorescence branches hirsute or tomentellous.
- 8 Flower pedicels c. 2 mm long; leaves submembranaceous.....**H. glabriflorus**
- 8' Flowers sessile; leaves coriaceous.
- 9 Leaf apex rounded to apiculate; petioles 3-6 mm long.....**H. prismatocarpus**
- 9' Leaf apex acuminate; petioles 7-8mm long.....**H. hirsutus**
- 6' Midrib plane or prominulous on leaf upper surface.
- 10 Flowers pedicellate
- 11 Leaf base cordate, subcordate or rounded.
- 12 Stipules 6-15 mm long; flowers 2.5-3 mm long; leaves 13-40 cm long.....**H. macrophyllus**
- 12' Stipules 3-5 mm long; flowers 1.5-2 mm long; leaves 6-17 mm long.....**H. oblongifolius**
- 11' Leaf base cuneate or subcuneate.
- 13 Flowers borne in small pedunculate cymules.
- 14 Petioles with 2 glands; stamens 6-7; stipules caducous.....**H. reticulatus**
- 14' Petioles eglandular; stamens 5; stipules persistent.....**H. adolphoduckei**
- 13' Flowers not grouped into cymules; petioles eglandular.
- 15 Receptacle urceolate; leaves 9-18 cm long; leaf apex acuminate.....**H. laevigatus**
- 15' Receptacle campanulate; leaves 4-11 cm long; leaf apex caudate or cuspidate.
- 16 Stipules persistent; stamens 5.....**H. miltonii**
- 16' Stipules caducous; stamens 6-8.
- 17 Primary leaf veins 8-9 pairs; leaves 8-11 cm long, subcoriaceous...**H. caudatus**
- 17' Primary leaf veins 5-7 pairs; leaves 4.5-8 cm long chartaceous....**H. occultans**
- 10' Flowers sessile.
- 18 Receptacle urceolate; stipules 10-30 mm long.....**H. arachnoideus**
- 18' Receptacle campanulate; stipules 1.5-15 mm long
- 19 Stipules adnate to petiole base; leaf apex acuminate.....**H. divaricatus**
- 19' Stipules axillary; leaf apex retuse to acute.
- 20 Primary leaf veins plane on upper surface; stipules 1.5-3.5 mm long.  
.....**H. heteromorphus**
- 20' Primary leaf veins prominulous on leaf upper surface; stipules 5-15 mm long.
- 21 Primary leaf veins 8-12 pairs; leaf apex acute; stamens 5.....**H. intrapetiolaris**
- 21' Primary leaf veins 6-7 pairs; leaf apex retuse; stamens 6-7.....**H. sothersiae**



# *Hymenopus adolphoduckei* (Prance) Sothers & Prance

## Has as synonym

basionym *Licania adolphoduckei* Prance

## DESCRIPTION

**Leaf:** abaxial glabrous; **shape** oblong; **petiole gland(s)** absent. **Inflorescence:** type racemose/panicle. **Flower:** stamen included; **pedicel** pedicellate; **receptacle** campanulate. **Fruit:** exocarp glabrous/lenticellate; **shape** ovoid.

## ADDITIONAL DESCRIPTION

Trees to 15 m tall. Branches glabrous when young. Leaves: stipules axillary, c. 2 mm long, persistent; petioles 4-6 mm long, glabrous, rugose, eglandular, with lamina base slightly confluent; lamina oblong, coriaceous, 8-13.5 × 3.5-6.5 cm, cuneate at base, acuminate at apex with acumen 3-10 mm long, glabrous on both surfaces, with scattered glands beneath; midrib prominulous above, prominent and glabrous beneath; primary veins 12-16 pairs, prominulous on both surfaces, 7-11 mm between veins. Inflorescences of terminal and subterminal racemose panicles; rachis sparsely puberulous. Bracts and bracteoles c. 1 mm long, ovate, persistent, chartaceous, puberulous on exterior. Flowers c. 1.5 mm long, borne in few-flowered cymules attached to rachis and primary branches by short peduncles. Receptacle campanulate, sparsely grey puberulous on exterior, tomentose within; pedicels 0.5-1 mm long. Calyx lobes 5, triangular, puberulous on exterior. Petals 5, sparsely puberulous on exterior. Stamens 5, inserted around complete circle; filaments shorter than calyx lobes, glabrous, united at mid point; anthers deltoid. Ovary puberulous; style puberulous on lower portion. Fruit ovoid, 6-8 cm long, 4-5 cm broad, constricted near base; exocarp glabrous, lenticellate; mesocarp 1-2 mm thick; endocarp thin, 0.5 mm thick, bony, glabrous within.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Is endemic from Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types







Terra Firme Forest

## Geographic Distribution

### Confirmed occurrences

North (Amazonas)

## HERBARIUM MATERIAL

Assuncao, P.A.C.L., 502, K,   (K000220649), MG (MG158229), NY,  (NY01195547), RB, 339675,  (RB00069359), INPA, 189824,   (INPA0189824), Amazonas, **Typus**

## REFERENCE

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), Species Plantarum: Flora of the World 9. Australian Biological Resources Study, Canberra.

Sothers C.A., Prance G.T. & Chase, M.W. (2016). Towards a monophyletic *Licania*: a new generic classification of the polyphyletic Neotropical genus *Licania* (Chrysobalanaceae). *Kew Bull.* 71: 58.

# *Hymenopus amapaensis* (Prance) Sothers & Prance

## Has as synonym

basionym *Licania amapaensis* Prance

## DESCRIPTION

**Leaf:** abaxial hirsute; **shape** oblong; **petiole gland(s)** present. **Inflorescence:** type panicle. **Flower:** stamen unknown; **pedicel** pedicellate; **receptacle** campanulate. **Fruit:** exocarp unknown; **shape** unknown.

## ADDITIONAL DESCRIPTION

Trees to 10 m tall. Branches hispid tomentose when young. Leaves: stipules axillary, membranous, lanceolate, persistent, tomentellous; petioles 10-16 mm long, terete, hispid-tomentose, with 2 sessile glands; lamina chartaceous, oblong, 15-33 × 4.5-9.5 cm, acuminate at apex with acumen 3-15 mm long, cuneate at base, hirsute and glandular beneath; midrib plane above, prominent and sparsely hirsute beneath; primary veins 13-17 pairs, impressed above, prominent and sparsely hirsute beneath. Inflorescences terminal and subterminal panicles; rachis and branches ferrugineous-tomentose; bracts and bracteoles oblong to linear, persistent, tomentose; pedicels c. 0.5 mm long. Flowers 3-4 mm long. Receptacle campanulate, tomentose outside, tomentose within. Calyx lobes acute, tomentose outside. Petals 5, glabrous. Stamens 10, inserted around 3/4 of circle; filaments glabrous; anthers deltoid. Ovary pilose. Style puberulous. Fruit unknown.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types

Terra Firme Forest

## Geographic Distribution

### Confirmed occurrences

North (Amapá, Pará)

## HERBARIUM MATERIAL

Pires, J.M., 51198, K,  (K000220774), MG (MG028475), NY,  (NY00428326), US, 2701224,  (US00130708), Amapá, **Typus**

## REFERENCE

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), Species Plantarum: Flora of the World 9. Australian Biological Resources Study, Canberra.  
Sothers C.A., Prance G.T. & Chase, M.W. (2016). Towards a monophyletic *Licania*: a new generic classification of the polyphyletic Neotropical genus *Licania* (Chrysobalanaceae). *Kew Bull.* 71: 58.

# *Hymenopus arachnoideus* (Fanshawe & Maguire) Sothers & Prance

## Has as synonym

basionym *Licania arachnoidea* Fanshawe & Maguire

## DESCRIPTION

**Leaf:** abaxial glabrous; **shape** oblong/lanceate; **petiole gland(s)** present. **Inflorescence:** type racemose/panicle. **Flower:** stamen exerted; **pedicel** sessile; **receptacle** urceolate. **Fruit:** exocarp unknown; **shape** unknown.

## ADDITIONAL DESCRIPTION

Tree, medium-sized. Branches puberulous when young, soon becoming glabrous. Leaves with stipules linear, 10-30 mm long, submembranous, axillary, persistent; petioles 7-9 mm long, glabrous, canaliculate, rugose, with 2 disc-shaped, medial glands above; lamina narrowly oblong-lanceolate with parallel sides, coriaceous, 17-25 × 4.5-7 cm, acuminate to acute at apex with acumen to 11 mm long, rounded at base, glabrous on both surfaces; palisade glands absent; midrib prominent and glabrous above; primary veins 12-14 pairs, prominulous above, prominent beneath. Inflorescences axillary racemose panicles, ramiflorous; rachis and branches sparsely arachnoid. Flowers 3.5-4 mm long, in dense glomerules on primary branches of inflorescence. Primary bracts ovate, to 8 mm long; other bracts and bracteoles 1-3 mm long, persistent, pubescent on exterior, glabrous within, often slightly serrate. Receptacle narrowly urceolate, sessile, densely arachnoid on exterior, lanate within. Calyx lobes acute, pubescent on exterior, glabrous within. Petals 5, densely pubescent, some shortly unguiculate. Stamens 5 fertile, inserted in a complete circle, with c. 4 sterile staminodes; filaments slightly exceeding calyx lobes, connate for 1/2 of length, with a dense lanate mass surrounding them and filling the mouth of the receptacle. Ovary lanate-tomentose. Style pubescent throughout, equalling filaments. Fruit unknown.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types



Terra Firme Forest

## Geographic Distribution

### Confirmed occurrences

North (Amazonas)

## HERBARIUM MATERIAL

R. de Lemos Fróes, 20910, US,  (US01352117), NY,  (NY01253292), Amazonas

## REFERENCE

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), Species Plantarum: Flora of the World 9. Australian Biological Resources Study, Canberra.

Sothers C.A., Prance G.T. & Chase, M.W. (2016). Towards a monophyletic *Licania*: a new generic classification of the polyphyletic Neotropical genus *Licania* (Chrysobalanaceae). *Kew Bull.* 71: 58.

# *Hymenopus caudatus* (Prance) Sothers & Prance

## Has as synonym

basionym *Licania caudata* Prance

## DESCRIPTION

**Leaf:** abaxial glabrous; **shape** elliptic/ovate; **petiole gland(s)** absent. **Inflorescence:** type racemose/panicle. **Flower:** stamen equal; **pedicel** pedicellate; **receptacle** campanulate. **Fruit:** exocarp glabrous/smooth; **shape** oblong.

## ADDITIONAL DESCRIPTION

Trees. Branches glabrous, lenticellate when young. Leaves: stipules caducous (not seen); petioles 5-7 mm long, glabrous, eglandular, weakly canaliculate; lamina subcoriaceous, ovate-elliptic, 8-11 × 3.5-5.5 cm, acuminate at apex with acumen 7-9 mm long, cuneate at base, glabrous on both surfaces; midrib prominulous and glabrous above, primary veins 8-9 pairs, plane above, prominent beneath. Inflorescences terminal and axillary racemose panicles; rachis and branches glabrous or sparsely hirsutulous; bracts and bracteoles minute, lanceolate, caducous; pedicels c. 0.5 mm long. Flowers 2 mm long; receptacle campanulate, sparsely hirsute on exterior, tomentose within. Calyx lobes acute, sparsely hirsutulous on both surfaces. Petals 5, sparsely pubescent. Stamens 7 or 8, inserted in a complete circle; filaments glabrous, connate for 1/2 of length, equalling calyx lobes. Ovary tomentose. Style equalling calyx lobes, pubescent to apex. Fruit oblong, 25 × 8 mm; exocarp smooth and glabrous, often slightly rugulose, wrinkled when dry; mesocarp thin, 0.25 mm thick, fleshy; endocarp thin (0.5 mm), bony, slightly puberulous within.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types

Flooded Field (Várzea), Terra Firme Forest

## Geographic Distribution

### Confirmed occurrences

North (Acre, Amazonas, Amapá, Pará, Rondônia)

Central-west (Mato Grosso)

## HERBARIUM MATERIAL

D. Coêlho, 3946, NY,  (NY00428360), INPA, 3946,    (INPA0003946), Amazonas, **Typus**

## REFERENCE

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), Species Plantarum: Flora of the World 9. Australian Biological Resources Study, Canberra.

Sothers C.A., Prance G.T. & Chase, M.W. (2016). Towards a monophyletic *Licania*: a new generic classification of the polyphyletic Neotropical genus *Licania* (Chrysobalanaceae). *Kew Bull.* 71: 58.



# *Hymenopus conferruminatus* (Prance) Sothers & Prance

## Has as synonym

basionym *Licania conferruminata* Prance

## DESCRIPTION

**Leaf:** abaxial glabrous; **shape** oblong-elliptic; **petiole gland(s)** absent. **Inflorescence:** type racemose/panicle. **Flower:** stamen unknown; **pedicel** sessile; **receptacle** campanulate. **Fruit:** exocarp unknown; **shape** unknown.

## ADDITIONAL DESCRIPTION

Tree 12 m tall. Branches sparsely short-puberulous when young. Leaves with stipules lanceolate, 10-13 mm, early caducous; petioles 10-13 mm long, sparsely appressed puberulous, terete, eglandular; lamina oblong-elliptic, chartaceous, 21-31 × 8.5-11.5 cm, cuneate at base, acuminate at apex with acumen 4-8 mm long, glabrous on both surfaces except on midrib which is slightly impressed above, prominent, with short sparse puberulous pubescence beneath; primary veins 10-13 pairs, slightly impressed above, prominent beneath, widely spaced, 1.5-4.5 cm apart. Inflorescences of axillary racemose panicles; rachis and branches sparsely puberulous. Bracts and bracteoles minute, to 1-3 mm long, persistent, puberulous on exterior. Flowers c. 1.5 mm long, sessile, borne on primary and secondary branches of inflorescence. Receptacle campanulate, sparsely puberulous on exterior, tomentellous within. Calyx lobes 5, acute, puberulous on exterior. Petals 5, with ciliate margins. Stamens 5 fertile; filaments connate almost to apex forming a ring on which anthers are inserted. Ovary sparsely pilose. Style sparsely hirsute, included. Fruit not seen.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Is endemic from Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types




Terra Firme Forest

## Geographic Distribution

### Confirmed occurrences

North (Rondônia)

## HERBARIUM MATERIAL

Ferreira, C.A.C., 9032, NY,  (NY00428367), K,   (K000220656), Rondônia, **Typus**

## REFERENCE

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), Species Plantarum: Flora of the World 9. Australian Biological Resources Study, Canberra.  
Sothers C.A., Prance G.T. & Chase, M.W. (2016). Towards a monophyletic *Licania*: a new generic classification of the polyphyletic Neotropical genus *Licania* (Chrysobalanaceae). *Kew Bull.* 71: 58.





# *Hymenopus divaricatus* (Benth.) Sothers & Prance

## Has as synonym

basionym *Licania divaricata* Benth.

homotype *Licania heteromorpha* var. *di* (Benth.) Fritsch

## DESCRIPTION

**Leaf:** abaxial glabrous; **shape** elliptic/oblong-elliptic; **petiole gland(s)** present. **Inflorescence:** type panicle. **Flower:** stamen included; **pedicel** subsessile; **receptacle** campanulate. **Fruit:** exocarp glabrous/smooth; **shape** ovoid.

## ADDITIONAL DESCRIPTION

Trees to 18 m tall; trunk often with stilt roots. Branches puberulous when young, soon becoming glabrous and lenticellate. Leaves: stipules lanceolate, coriaceous, to 4 mm long, adnate to petiole base, subpersistent; petioles 5-9 mm long, glabrous, terete, with 2 sessile glands near lamina base; lamina elliptic to oblong-elliptic, thick-coriaceous, 9-27 × 4.5-10 cm, abruptly short-acuminate at apex with acumen 2-10 mm long, subcuneate at base, glabrous on both surfaces; palisade glands present; midrib plane to slightly impressed above, glabrous; primary veins 6-7 pairs, extremely prominent beneath, inconspicuous above. Inflorescences predominantly axillary panicles; rachis and branches sparsely appressed-hirsutulous. Flowers c. 1.5 mm long, solitary but densely crowded on primary and secondary branches of inflorescence. Bracts and bracteoles 0.5-2 mm long, oblong to lanceolate, hirsutulous, persistent. Receptacle campanulate, almost sessile, sparsely hirsutulous on exterior, sparsely pubescent within. Petals 5, pubescent, not clawed. Stamens 7, inserted in a complete circle; filaments slightly shorter than calyx lobes, connate for 1/3 of length, glabrous. Ovary villous. Style equalling filaments, hirsute throughout. Fruit ovoid; epicarp smooth, glabrous, drying black; mesocarp thin, fleshy; endocarp thin, granular, fragile, glabrous within.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types

Terra Firme Forest, Amazonian Savanna

## Geographic Distribution

### Confirmed occurrences

North (Pará)

## HERBARIUM MATERIAL

Fróes, RL, 31898, IAN (IAN088481), Pará

Schomburgk, R., 463, K,  (K000220655), P (P00745949), **Typus**

## REFERENCE

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), Species Plantarum: Flora of the World 9. Australian Biological Resources Study, Canberra.

Sothers C.A., Prance G.T. & Chase, M.W. (2016). Towards a monophyletic *Licania*: a new generic classification of the polyphyletic Neotropical genus *Licania* (Chrysobalanaceae). *Kew Bull.* 71: 58.

# *Hymenopus glabriflorus* (Prance) Sothers & Prance

## Has as synonym

basionym *Licania glabriflora* Prance

## DESCRIPTION

**Leaf:** abaxial glabrous; **shape** oblong/oblong-elliptic; **petiole gland(s)** absent. **Inflorescence:** type panicle. **Flower:** stamen equal; **pedicel** pedicellate; **receptacle** campanulate. **Fruit:** exocarp lenticellate; **shape** ellipsoid.

## ADDITIONAL DESCRIPTION

Trees, small to medium sized. Branches hirsutulous when young, soon becoming glabrous and lenticellate. Leaves: stipules lanceolate, to 3.5 mm long, persistent, axillary, hirsutulous; petioles 2-5 mm long, terete, eglandular, hirsute to hirsutulous; lamina submembranous, oblong to oblong-elliptic, 7-11 × 2.5-4.2 cm, acuminate at apex with acumen 5-9 mm long, cuneate at base, glabrous on both surfaces, usually with paired glands on lower surface above insertion of petiole; midrib prominulous above, hirsutulous, soon becoming glabrous; primary veins 8-10 pairs, impressed above, prominent beneath. Inflorescences axillary (rarely terminal) panicles; rachis and branches sparsely hirsute; bracts and bracteoles minute, lanceolate, caducous. Flowers shortly pedicellate, c. 2 mm long. Receptacle campanulate, hirsutulous on exterior, tomentose within. Calyx lobes acute, sparsely hirsutulous. Petals 5, densely pubescent. Stamens 5, inserted around 3/4 of circle; filaments glabrous, connate halfway, as long as calyx lobes. Ovary pilose. Style equalling calyx lobes, hirsute. Fruit narrowly ellipsoid, 4.8 × 2 cm; exocarp abundantly lenticellate; endocarp hard, woody, c. 1.5 mm thick, glabrous within.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types

Terra Firme Forest

## Geographic Distribution

### Confirmed occurrences


North (Amapá, Pará)

### Possible occurrences

Northeast (Maranhão)

## HERBARIUM MATERIAL

Rosa, N.A., 1165, MG (MG052735), Amapá

J. A. Steyermark, 87907, NYBG, 428407,  (NY00428407), **Typus**

## REFERENCE

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), Species Plantarum: Flora of the World 9. Australian Biological Resources Study, Canberra.

Sothers C.A., Prance G.T. & Chase, M.W. (2016). Towards a monophyletic *Licania*: a new generic classification of the polyphyletic Neotropical genus *Licania* (Chrysobalanaceae). *Kew Bull.* 71: 58.

# *Hymenopus heteromorphus* (Benth.) Sothers & Prance

This treatment is composed of the following taxa: *Hymenopus heteromorphus*, *Hymenopus heteromorphus* var. *glabrus*, *Hymenopus heteromorphus* var. *heteromorphus*, *Hymenopus heteromorphus* var. *revolutus*, *Hymenopus heteromorphus* var. *subcordatus*.

## Has as synonym

basionym *Licania heteromorpha* Benth.

## DESCRIPTION

**Leaf:** abaxial glabrous; **shape** elliptic/oblong/lanceate/orbicular; **petiole gland(s)** present. **Inflorescence:** type racemose/panicle. **Flower:** stamen included; **pedicel** subsessile/sessile; **receptacle** campanulate. **Fruit:** exocarp glabrous/smooth/velutinous/verrucose/pubescent/costate; **shape** globose/oblong.

## ADDITIONAL DESCRIPTION

Trees to 30 m tall, occasionally slightly buttressed. Branches hispid or puberulous when young, soon becoming glabrous. Leaves: stipules 1.5-3.5 mm long, membranous, subsistent or caducous, linear; petioles 2-12 mm long, glabrous when mature, usually shallowly canaliculate, less often terete, most frequently bearing 2 protruding prominent medial glands, rarely eglandular; lamina elliptic-orbicular to oblong-lanceolate coriaceous, 4.5-22 × 2-10 cm, most frequently rounded at apex but varying from retuse to acute or bluntly acuminate, rounded to cuneate or rarely subcordate at base, glabrous on both surfaces; midrib prominulous above, glabrous; primary veins 6-12 pairs, plane or nearly so above, prominent beneath. Inflorescences terminal and subterminal racemose panicles; rachis and branches puberulous to tomentellous. Flowers 1.5-3 mm long, in small groups along primary and secondary branches of inflorescence, sessile or subsessile. Bracts and bracteoles 0.3-2 mm long, linear to ovate, persistent. Receptacle campanulate, tomentellous to tomentose on exterior, tomentose within. Calyx lobes acute, puberulous on both surfaces. Petals 5, pubescent. Stamens 5-7, inserted in a complete circle; filaments shorter than calyx lobes, free to base. Ovary lanate to short-pubescent. Style rising to base of anthers, pubescent. Fruit round to oblong; epicarp smooth or less frequently markedly costate, velutinous-pubescent or glabrous.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types

Flooded Field (Várzea), Riverine Forest and/or Gallery Forest, Inundated Forest (Igapó), Terra Firme Forest, Inundated Forest (Várzea)

## Geographic Distribution

### Confirmed occurrences

North (Acre, Amazonas, Amapá, Pará, Rondônia, Roraima)

Northeast (Maranhão)

Central-west (Mato Grosso)

### Possible occurrences

Southeast (Espírito Santo, Rio de Janeiro)

**IDENTIFICATION KEY**

1 Leaf base distinctly cordate..... var. subcordata

1: Leaf base rounded to cuneate

2 Fruit deeply costate, often oblong; leaves usually oblong-lanceolate, cuneate at base; young stem never hispid..... var. glabra

2: Fruit terete or very slightly costate; leaves broader, more oblong, usually subcuneate to rounded at base; young stem usually hispid

3 Leaf margins not revolute; leaf lamina 4.5-22 × 2-10 cm.....var. heteromorpha

3: Leaf margin revolute, leaf lamina 2-4.5 × 1.1-2.3 cm.....var. revoluta

**HERBARIUM MATERIAL**

Schomburgk, 873, K,  (K000220661), **Typus**

**REFERENCE**

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), Species Plantarum: Flora of the World 9. Australian Biological Resources Study, Canberra.

Sothers C.A., Prance G.T. & Chase, M.W. (2016). Towards a monophyletic *Licania*: a new generic classification of the polyphyletic Neotropical genus *Licania* (Chrysobalanaceae). *Kew Bull.* 71: 58.

# *Hymenopus heteromorphus* (Benth.) Sothers & Prance var. *heteromorphus*

## Has as synonym

basionym *Licania benthamii* Hook.f.

homotype *Licania heteromorpha* Benth. var. *heteromorpha*

heterotypic *Licania biglandulosa* Griseb. ex Urb.

## DESCRIPTION

Leaf lamina ovate to oblong, usually elliptic, rounded to subcuneate at base; reticulation intricate. Fruit smooth or rarely slightly costate, usually globose, less frequently ellipsoid.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types

Inundated Forest (Igapó), Terra Firme Forest, Inundated Forest (Várzea)

## Geographic Distribution

### Confirmed occurrences

North (Amazonas, Amapá, Pará, Rondônia, Roraima)

Northeast (Maranhão)

Central-west (Mato Grosso)

### Possible occurrences

Southeast (Espírito Santo, Rio de Janeiro)

## HERBARIUM MATERIAL

Spruce, 3278, RB, 18799,  (RB00537061), P (P00745997), **Typus**

## REFERENCE

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), Species Plantarum: Flora of the World 9. Australian Biological Resources Study, Canberra.

Sothers C.A., Prance G.T. & Chase, M.W. (2016). Towards a monophyletic *Licania*: a new generic classification of the polyphyletic Neotropical genus *Licania* (Chrysobalanaceae). *Kew Bull.* 71: 58.



# *Hymenopus heteromorphus* var. *glabrus* (Mart. ex Hook.) Sothers & Prance

## Has as synonym

basionym *Licania glabra* Mart. ex Hook.f.

homotype *Licania heteromorpha* var. *glabra* (Mart. ex Hook.f.) Prance

heterotypic *Licania costata* Spruce ex Hook.f.

## DESCRIPTION

Leaf lamina oblong to oblong-lanceolate, cuneate at base; reticulation lax. Fruit elongate, costate.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types


Riverine Forest and/or Gallery Forest, Terra Firme Forest

## Geographic Distribution

### Confirmed occurrences

North (Acre, Amazonas, Amapá, Rondônia)

## HERBARIUM MATERIAL

Spruce, R., 3503, K,  (K000220667), **Typus**

Spruce, 3503, P (P00745992), **Typus**

Spruce, Richard, 3503, E,  (E00326661), **Typus**

## REFERENCE

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), Species Plantarum: Flora of the World 9. Australian Biological Resources Study, Canberra.

Sothers C.A., Prance G.T. & Chase, M.W. (2016). Towards a monophyletic *Licania*: a new generic classification of the polyphyletic Neotropical genus *Licania* (Chrysobalanaceae). *Kew Bull.* 71: 58.

# *Hymenopus heteromorphus* var. *revolutus* (Prance) Sothers & Prance

## Has as synonym

basionym *Licania heteromorpha* var. *revoluta* Prance

## DESCRIPTION

Leaves 2-4.5 × 1.1-2.3 cm; margins revolute. Anthers deltoid.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Is endemic from Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types

Terra Firme Forest

## Geographic Distribution

### Confirmed occurrences

North (Amazonas)

## REFERENCE

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), Species Plantarum: Flora of the World 9. Australian Biological Resources Study, Canberra.

Sothers C.A., Prance G.T. & Chase, M.W. (2016). Towards a monophyletic *Licania*: a new generic classification of the polyphyletic Neotropical genus *Licania* (Chrysobalanaceae). *Kew Bull.* 71: 58.

# *Hymenopus heteromorphus* var. *subcordatus* (Fritsch) Sothers & Prance

## Has as synonym

basionym *Licania subcordata* (Fritsch) Fritsch

homotype *Licania heteromorpha* var. *subcordata* Fritsch

## DESCRIPTION

Leaves ovate, subcordate at base; reticulation intricate. Fruit globose, smooth.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types

Riverine Forest and/or Gallery Forest

## Geographic Distribution

### Confirmed occurrences

North (Amazonas)

## REFERENCE

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), Species Plantarum: Flora of the World 9. Australian Biological Resources Study, Canberra.

Sothers C.A., Prance G.T. & Chase, M.W. (2016). Towards a monophyletic *Licania*: a new generic classification of the polyphyletic Neotropical genus *Licania* (Chrysobalanaceae). *Kew Bull.* 71: 58.

# *Hymenopus hirsutus* (Prance) Sothers & Prance

## Has as synonym

basionym *Licania hirsuta* Prance

## DESCRIPTION

**Leaf:** abaxial hirsute; **shape** oblong-elliptic; **petiole gland(s)** absent. **Inflorescence:** type racemose/panicle. **Flower:** stamen included; **pedicel** sessile; **receptacle** campanulate. **Fruit:** exocarp unknown; **shape** unknown.

## ADDITIONAL DESCRIPTION

Shrub to 3 m tall. Branches hirsutulous, glabrescent when young, not lenticellate. Leaves with stipules linear, 4-5 mm long, coriaceous, extrapetiolar, persistent; petioles 7-8 mm long, hirsutulous, terete, eglandular; lamina oblong-elliptic, coriaceous, 12-19 × 5-8.5 cm, acuminate at apex with acumen 3-6 mm long, cuneate at base, glabrous above; venation hirsute beneath; midrib pubescent above, impressed on lower portion, plane or impressed towards apex; primary veins 9-10 pairs, impressed above, prominent beneath; secondary venation impressed above. Inflorescences of terminal and subterminal racemose panicles with rachis and branches sparsely hirsute. Bracts ovate, to 5 mm long, persistent, bracteoles minute, persistent, hirsute on exterior. Flowers c. 1.5 mm long, sessile. Receptacle campanulate, sessile, hirsute on exterior, tomentose within. Calyx lobes acute, puberulous on both surfaces. Petals 5, pubescent. Stamens 7-9, inserted around complete circle; filaments glabrous, shorter than calyx lobes, connate to mid point. Ovary villous. Fruit not seen.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains







Amazon Rainforest

## Geographic Distribution

### Confirmed occurrences

North (Amazonas, Amapá, Pará, Rondônia)

## HERBARIUM MATERIAL

R. de Lemos Fróes, 26137, NY,  (NY00428423), NY,  (NY00335282), Amazonas, **Typus** Sothers, C.A., 536, INPA, 183369,   (INPA0183369), RB, 339548,  (RB00069706), NY,  (NY01253419), MG (MG157879), Amazonas

## REFERENCE

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), Species Plantarum: Flora of the World 9. Australian Biological Resources Study, Canberra.  
Sothers C.A., Prance G.T. & Chase, M.W. (2016). Towards a monophyletic *Licania*: a new generic classification of the polyphyletic Neotropical genus *Licania* (Chrysobalanaceae). *Kew Bull.* 71: 58.

# *Hymenopus intrapetiolaris* (Spruce ex Hook.f.) Sothers & Prance

## Has as synonym

basionym *Licania intrapetiolaris* Spreng. ex Hook.f.

heterotypic *Licania heteromorpha* var. *grandifolia* Benoist

heterotypic *Licania intrapetiolaris* var. *brevis* J.F.Macbr.

## DESCRIPTION

**Leaf:** abaxial glabrous; **shape** elliptic/oblong-elliptic; **petiole gland(s)** present. **Inflorescence:** type racemose/panicle. **Flower:** stamen included; **pedicel** sessile; **receptacle** campanulate. **Fruit:** exocarp velutinous; **shape** globose.

## ADDITIONAL DESCRIPTION

Trees to 20 m tall. Branches puberulous or hispid when young, becoming glabrous with age. Leaves: stipules linear, to 15 mm long, persistent, axillary; petioles 4-7 mm long, terete, glabrous or sparsely puberulous, sometimes hispid when young, with 2 prominent protruding medial glands; lamina broadly elliptic to oblong-elliptic, 9-23 × 4.5-14 cm, rounded to acute at apex, rounded at base, glabrous on both surfaces; midrib plane or nearly so above, glabrous; primary veins 8-12 pairs, extremely prominent below, prominulous above. Inflorescences terminal and subterminal racemose panicles; rachis and branches tomentellous. Flowers 2-2.5 mm long, sessile along primary and secondary branches of inflorescence. Bracts and bracteoles 1-2 mm long, lanceolate, persistent, tomentellous on exterior, glabrous within. Receptacle campanulate, tomentellous on exterior, tomentose within, sessile. Calyx lobes acute, puberulous. Petals 5, pubescent. Stamens c. 5, inserted in a complete circle; filaments shorter than calyx lobes, glabrous, free to base; anthers deltoid. Ovary tomentose. Style rising to base of filaments, hirsute throughout. Fruit globose, c. 1.5 cm diameter; epicarp ferruginous-velutinous; mesocarp thin; endocarp thin, fibrous, glabrous within.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types

Terra Firme Forest

## Geographic Distribution

### Confirmed occurrences

North (Roraima)

## HERBARIUM MATERIAL

G. T. Prance, 20012, NY,  (NY01253506), Roraima

Spruce, R., 3539, P (P00746005), P (P00746004), K,  (K000220660), K,  (K000220659), K,  (K000220658), **Typus**

## REFERENCE

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), Species Plantarum: Flora of the World 9. Australian Biological Resources Study, Canberra.

Sothers C.A., Prance G.T. & Chase, M.W. (2016). Towards a monophyletic *Licania*: a new generic classification of the polyphyletic Neotropical genus *Licania* (Chrysobalanaceae). *Kew Bull.* 71: 58.

# *Hymenopus krukovii* (Standl.) Sothers & Prance

## Has as synonym

basionym *Licania krukovii* Standl.

## DESCRIPTION

**Leaf:** abaxial hirsute; **shape** oblong/lanceate; **petiole gland(s)** present. **Inflorescence:** type racemose/panicle. **Flower:** stamen included; **pedicel** sessile; **receptacle** campanulate. **Fruit:** exocarp pubescent; **shape** subglobose.

## ADDITIONAL DESCRIPTION

Tree to 25 m tall. Branches densely ferrugineous-tomentose when young, becoming lenticellate with age. Leaves with stipules axillary, to 1 cm long, broadly ovate, acute, persistent, tomentose on exterior; petioles 4-7 mm long, densely pilose-tomentose, terete, with 2 glands towards base; lamina oblong to oblong-lanceolate, chartaceous, 11-20 × 4-10 cm, acuminate at apex with acumen 3-10 mm long, rounded to subcuneate at base, glabrous or sparsely hirsute when young on upper surface, hirsute on veins and nerves beneath; palisade glands absent; midrib ferrugineous-tomentose above, plane; primary veins 13-15 pairs, plane and hirsute above, prominent beneath, arcuate towards lamina margins. Inflorescences spreading racemose panicles; rachis and branches ferrugineous-pilose-tomentose. Flowers 2-2.5 mm long, sessile and in small clusters on primary and secondary branches of inflorescence. Bracts and bracteoles oblong-lanceolate, 1.5 mm long, acute, persistent, ferrugineoustomentose on exterior. Receptacle campanulate, sessile, densely pilose-tomentose on exterior, pilose within. Calyx lobes acute, pubescent on both surfaces. Petals 5, pubescent. Stamens 5, inserted in a nearly complete circle; filaments shorter than calyx lobes, free to base, glabrous. Ovary tomentose. Style pubescent throughout. Fruit subglobose, 2.8 × 2.5 cm, exocarp brown-pubescent.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types






Terra Firme Forest

## Geographic Distribution

### Confirmed occurrences

North (Amazonas)

## HERBARIUM MATERIAL

B. A. Krukoff, 5070, A,  (A00046282), MO (MO255334), NY,  (NY00428443), NY,  (NY00428444), S (S-R-8100), G, G00177745,  (G00177745), US, 1662042,  (US00130817), Amazonas, **Typus**

## REFERENCE

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), Species Plantarum: Flora of the World 9. Australian Biological Resources Study, Canberra.

Sothers C.A., Prance G.T. & Chase, M.W. (2016). Towards a monophyletic *Licania*: a new generic classification of the polyphyletic Neotropical genus *Licania* (Chrysobalanaceae). *Kew Bull.* 71: 58.





# *Hymenopus laevigatus* (Prance) Sothers & Prance

## Has as synonym

basionym *Licania laevigata* Prance

## DESCRIPTION

**Leaf:** abaxial glabrous; **shape** oblong; **petiole gland(s)** absent. **Inflorescence:** type racemose/panicle. **Flower:** stamen included; **pedicel** pedicellate; **receptacle** urceolate. **Fruit:** exocarp tomentulose; **shape** globose.

## ADDITIONAL DESCRIPTION

Trees to 20 m tall. Branches glabrous when young. Leaves: stipules axillary, caducous; petioles 5-8 mm long, with confluent leaf base, glabrous, eglandular; lamina oblong, coriaceous, 9-18 × 4.2-7 cm, cuneate at base, acuminate at apex with acumen 4-10 mm long, glabrous on both surfaces, shiny above; midrib prominulous above, prominent beneath; primary veins 7-10 pairs, prominulous on both surfaces, widely spaced with 1.2-1.8 mm between veins. Inflorescences of terminal and subterminal racemose panicles; rachis puberulous. Bracts and bracteoles minute, triangular, tomentose, subsistent. Flowers c. 2 mm long, inserted on primary inflorescence branches. Receptacle urceolate, brown-tomentellous on exterior, tomentose within; pedicels 0.5-1 mm long. Calyx lobes 5, triangular, tomentellous on both surfaces. Petals 5, pubescent on exterior, with ciliate margins. Stamens 6 or 7, inserted around 3/4 of circle with tooth-like staminodes opposite; filaments shorter than calyx lobes, free, glabrous; anthers deltoid. Ovary tomentellous on exterior; style pubescent on lower portion. Fruit when young globose; exocarp densely short-ferruginous tomentellous.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types

Terra Firme Forest

## Geographic Distribution

### Confirmed occurrences

North (Amazonas, Pará)

Northeast (Maranhão)

## HERBARIUM MATERIAL

M. F. da Silva, 80, INPA, 35442,   (INPA0035442), NY,   (NY00428447), NY,  (NY00428446), Amazonas, **Typus**

## REFERENCE

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), Species Plantarum: Flora of the World 9. Australian Biological Resources Study, Canberra.

Sothers C.A., Prance G.T. & Chase, M.W. (2016). Towards a monophyletic *Licania*: a new generic classification of the polyphyletic Neotropical genus *Licania* (Chrysobalanaceae). *Kew Bull.* 71: 58.

# *Hymenopus latifolius* (Benth. ex Hook.f.) Sothers & Prance

## Has as synonym

basionym *Licania latifolia* Benth. ex Hook.f.

heterotypic *Licania obovata* Benth. ex Hook.f.

## DESCRIPTION

**Leaf:** abaxial hirsute; **shape** oblong-elliptic/obovate; **petiole gland(s)** present. **Inflorescence:** type racemose/panicle. **Flower:** stamen included; **pedicel** sessile; **receptacle** urceolate. **Fruit:** exocarp velutinous; **shape** globose.

## ADDITIONAL DESCRIPTION

Shrub or tree to 25 m tall. Branches pubescent when young, soon becoming glabrous and lenticellate. Leaves with stipules axillary, 3-8 cm long, triangular, acuminate, membranous, persistent; petioles 7-15 mm long, rufous-brown tomentose, terete, usually with 2 or more medial sessile glands; lamina obovate to oblong-elliptic, thick-coriaceous, 6-20 × 4.5-10.5 cm, rounded to bluntly apiculate at apex, rounded to subcuneate at base, glabrous on upper surface, prominently reticulate beneath, with sparse hirsute pubescence on venation; palisade glands absent; midrib plane above, tomentose when young; primary veins 12-20 pairs, slightly impressed above, prominent beneath, arcuate near lamina margins. Inflorescences spreading racemose panicles; rachis and branches ferruginous-tomentose. Flowers c. 2.5 mm long, sessile, in dense glomerules on branches of inflorescence. Bracts and bracteoles to 1.5 mm long, ovate, persistent, tomentose on exterior. Receptacle urceolate, sessile, ferruginoustomentose on exterior, tomentose within. Calyx lobes acute, tomentose on both surfaces. Petals 5, c. 1 mm long, pubescent. Stamens 6-10, inserted in a complete circle; filaments connate for 1/2 of length, shorter than calyx lobes. Ovary velutinous-tomentose. Style pilose throughout, equalling filaments. Fruit globose; epicarp rufous-velutinous; pericarp thin, hard, fibrous; sparsely pubescent within when young.

## Life Form

Shrub, Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest

## Geographic Distribution

### Confirmed occurrences

North (Amazonas, Pará, Rondônia, Roraima)

Northeast (Maranhão)

## HERBARIUM MATERIAL

Spruce, R., 457, K,  (K000220647), NY,  (NY00428454), P (P00746025), **Typus**

## REFERENCE

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), Species Plantarum: Flora of the World 9. Australian Biological Resources Study, Canberra.  
Sothers C.A., Prance G.T. & Chase, M.W. (2016). Towards a monophyletic *Licania*: a new generic classification of the polyphyletic Neotropical genus *Licania* (Chrysobalanaceae). *Kew Bull.* 71: 58.

# *Hymenopus macrophyllus* (Benth.) Sothers & Prance

## Has as synonym

basionym *Licania macrophylla* Benth.

## DESCRIPTION

**Leaf:** abaxial glabrous; **shape** oblong; **petiole gland(s)** present. **Inflorescence:** type racemose/panicle. **Flower:** stamen exerted; **pedicel** pedicellate; **receptacle** campanulate/urceolate. **Fruit:** exocarp glabrous/smooth/verrucose; **shape** ovoid/pyriform.

## ADDITIONAL DESCRIPTION

Trees to 30 m tall. Branches almost glabrous when young. Leaves: stipules linear, 6-15 mm long, submembranous, axillary, persistent; petioles 6-14 mm long, glabrous, usually shallowly canaliculate, with 2 sessile glands at base of lamina; lamina narrowly oblong with parallel margins, coriaceous, 13-40 × 4.5-10.5 cm, acuminate to obtuse at apex with acumen 6-11 mm long, rounded to cordate at base, glabrous on both surfaces; palisade glands absent; midrib prominulous above, glabrous; primary veins 12-16 pairs, prominent beneath, prominulous above. Inflorescences axillary racemose panicles on woody stems; rachis and branches sparsely puberulous. Flowers 2.5-3 mm long, solitary or in small groups on primary and secondary branches of inflorescence. Bracts and bracteoles ovate to lanceolate, 1-3 mm long, puberulous on both surfaces, persistent, entire. Receptacle campanulate to shortly urceolate, puberulous on exterior, arachnoid within; pedicels 0.25-0.5 mm long. Calyx lobes acute, puberulous on both surfaces. Petals 5, pubescent, shortly unguiculate. Stamens 5 fertile, with 5 or 6 staminodes, inserted in a complete circle; filaments slightly exceeding calyx lobes, connate at base to form a short tube, with a dense lanate mass surrounding filaments and filling mouth of receptacle. Ovary lanate-tomentose. Style pubescent throughout, equalling filaments. Fruit ovoid to pyriform, to 8 cm diameter; epicarp smooth, glabrous or crustaceous-verrucose, drying black; mesocarp c. 8 mm thick, hard when dry; endocarp thin, granular, glabrous within.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types





Flooded Field (Várzea), Inundated Forest (Igapó)

## Geographic Distribution

### Confirmed occurrences

North (Amazonas, Amapá, Pará)

## HERBARIUM MATERIAL

Spruce, R., 139, P (P00746047), NY,  (NY00428471), K,  (K001179281), K,  (K000220654), K,  (K000220653), Pará,

## Typus

## REFERENCE

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), Species Plantarum: Flora of the World 9. Australian Biological Resources Study, Canberra.

Sothers C.A., Prance G.T. & Chase, M.W. (2016). Towards a monophyletic *Licania*: a new generic classification of the polyphyletic Neotropical genus *Licania* (Chrysobalanaceae). *Kew Bull.* 71: 58.

# *Hymenopus miltonii* (Prance) Sothers & Prance

## Has as synonym

basionym *Licania miltonii* Prance

## DESCRIPTION

**Leaf:** abaxial glabrous; **shape** oblong; **petiole gland(s)** absent. **Inflorescence:** type panicle. **Flower:** stamen unknown; **pedicel** pedicellate; **receptacle** campanulate. **Fruit:** exocarp glabrous/smooth; **shape** ellipsoid.

## ADDITIONAL DESCRIPTION

Tree 5 m tall. Branches sparsely puberulous when young, soon becoming glabrous. Leaves with stipules axillary, linear, persistent, c. 2 mm long; petioles 1-3 mm long, terete, eglandular, with few sparse appressed hairs; lamina narrowly oblong, chartaceous, 4-10.2 × 1.3-3.8 cm, cuneate at base, cuspidate-acuminate at apex with acumen 6-12 mm long, glabrous on both surfaces; midrib slightly prominulous above, prominent beneath, with a few stiff appressed hairs on both surfaces; primary veins 6-8 pairs, plane above, slightly prominulous beneath. Inflorescences terminal and axillary little-branched panicles 1-3 cm long; rachis and branches very sparsely hirsutulous. Bracts and bracteoles minute, membranous, sparsely hirsutulous on exterior, persistent, entire. Flowers minute, 1-1.5 mm long, borne solitary on short primary branches of inflorescence. Receptacle campanulate, glabrous or sparsely hirsutulous on exterior, tomentose on exterior; pedicels 0.2 mm long. Calyx lobes 5, acute, glabrous, except for a few stiff appressed hairs on exterior; margins ciliate. Petals 5, tomentellous within towards apex, glabrous beneath, puberulous on outer surface. Stamens 5, fertile, inserted on short thick filaments, connate at base. Ovary sparsely hirsute. Fruit ellipsoid, c. 2 cm long, 1 cm broad; exocarp smooth, glabrous; mesocarp thin; endocarp 0.5 mm thick, glabrous within.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Is endemic from Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types

Terra Firme Forest





## Geographic Distribution

### Confirmed occurrences

North (Acre)

Central-west (Mato Grosso)

## HERBARIUM MATERIAL

Silva, M.G. da, 4296, MG (MG064627), NY,  (NY00428487), NY,  (NY00835986), INPA, 137141,  (INPA0137141), NYBG, 00583317,  (NY00583317), Mato Grosso, **Typus**

## REFERENCE

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), Species Plantarum: Flora of the World 9. Australian Biological Resources Study, Canberra.

Sothers C.A., Prance G.T. & Chase, M.W. (2016). Towards a monophyletic *Licania*: a new generic classification of the polyphyletic Neotropical genus *Licania* (Chrysobalanaceae). *Kew Bull.* 71: 58.

# *Hymenopus oblongifolius* (Standl.) Sothers & Prance

## Has as synonym

basionym *Licania oblongifolia* Standl.

## DESCRIPTION

**Leaf:** abaxial glabrous; **shape** oblong; **petiole gland(s)** present. **Inflorescence:** type panicle. **Flower:** stamen equal; **pedicel** pedicellate; **receptacle** campanulate. **Fruit:** exocarp glabrous/smooth/verrucose/pulverulent; **shape** globose/ovoid.

## ADDITIONAL DESCRIPTION

Tree to 30 m tall. Branches glabrous, not lenticellate when young. Leaves with stipules linear, 3-5 mm long, submembranous, axillary, persistent; petioles 5-11 mm long, glabrous, shallowly canaliculate, usually with 2 sessile glands at base of lamina; lamina oblong with parallel sides, coriaceous, 6-17 × 2.5-6 cm, rounded at apex, acute to short-acuminate, with acumen to 5 mm long, rounded to subcordate at base, glabrous on both surfaces; palisade glands occasional; midrib prominulous above, glabrous; primary veins 9-15 pairs, prominent beneath, prominulous above. Inflorescences axillary panicles; rachis and branches puberulous. Flowers 1.5-2 mm long, solitary on primary and secondary branches of inflorescence. Bracts and bracteoles 0.2-1 mm long, persistent, puberulous on exterior, entire. Receptacle campanulate, puberulous on exterior, puberulous within; pedicels 0.5-1 mm long. Calyx lobes acute, puberulous on both surfaces. Petals 5, densely lanate, usually short-unguiculate. Stamens 5 or 6 fertile, inserted in a complete circle; filaments equalling calyx lobes, slightly connate at base, with a dense lanate mass surrounding the filaments and filling the mouth of receptacle. Ovary lanate-tomentose. Style pubescent throughout, equalling filaments. Fruit globose to ovoid, to 6 cm wide, 9 cm long; epicarp glabrous, smooth, or crustaceouspulverulent; surface deeply and broadly rugose when mature; mesocarp 4-7 mm thick, fibrous, hard when dry; endocarp thin, granular, fragile, glabrous and shining within.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types

Terra Firme Forest

## Geographic Distribution

### Confirmed occurrences

North (Amazonas, Pará)

## HERBARIUM MATERIAL

Krukoff, B.A., 6812, K,  (K000220652), MO (MO255330), NY,  (NY00428498), NY,  (NY00428648), S (S-R-8105), US, 2608184,  (US00130838), US, 1660879,  (US00130839), Amazonas, **Typus**

## REFERENCE

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), Species Plantarum: Flora of the World 9. Australian Biological Resources Study, Canberra.

Sothers C.A., Prance G.T. & Chase, M.W. (2016). Towards a monophyletic *Licania*: a new generic classification of the polyphyletic Neotropical genus *Licania* (Chrysobalanaceae). *Kew Bull.* 71: 58.



# *Hymenopus occultans* (Prance) Sothers & Prance

## Has as synonym

basionym *Licania occultans* Prance

## DESCRIPTION

**Leaf:** abaxial glabrous; **shape** oblong-elliptic; **petiole gland(s)** absent. **Inflorescence:** type racemose/panicle. **Flower:** stamen included; **pedicel** pedicellate; **receptacle** campanulate. **Fruit:** exocarp unknown; **shape** unknown.

## ADDITIONAL DESCRIPTION

Tree to 30 m tall. Branches glabrous when young, with large conspicuous lenticels. Leaves with stipules axillary, small, caducous; petioles 2-5 mm long, with confluent leaf base, glabrous, eglandular; lamina oblong-elliptic, chartaceous, 4.5-8 × 2.5-4 cm, cuneate at base, acuminate at apex with acumen 4-9 mm long, cuspidate, glabrous on both surfaces; midrib prominulous above, prominent beneath; primary veins 5-7 pairs, prominulous on both surfaces, widely spaced. Inflorescences of terminal and subterminal racemose panicles; rachis sparsely grey-puberulous. Bracts and bracteoles triangular, minute, 0.5 mm long, persistent, puberulous. Flowers c. 1.5 mm long, inserted on primary inflorescence branches. Receptacle campanulate, sparsely puberulous on exterior, tomentellous within; pedicels c. 0.5 mm long. Calyx lobes 5, triangular, puberulous on both surfaces. Petals 5, sparsely pubescent on exterior; margins ciliate. Stamens 5 or 6, inserted around 3/4 of circle; filaments shorter than calyx lobes, free, glabrous. Ovary puberulous on exterior; style villous on lower 1/2. Fruit unknown.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types



Terra Firme Forest

## Geographic Distribution

### Confirmed occurrences

North (Amazonas, Amapá, Pará)

## HERBARIUM MATERIAL

W. C. Steward, P17669, NY,   (NY00428504), Amazonas, **Typus**

## REFERENCE

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), Species Plantarum: Flora of the World 9. Australian Biological Resources Study, Canberra.

Sothers C.A., Prance G.T. & Chase, M.W. (2016). Towards a monophyletic *Licania*: a new generic classification of the polyphyletic Neotropical genus *Licania* (Chrysobalanaceae). *Kew Bull.* 71: 58.

# *Hymenopus prismatocarpus* (Spruce ex Hook.f.) Sothers & Prance

## Has as synonym

basionym *Licania prismatocarpa* Spruce ex Hook.f.

## DESCRIPTION

**Leaf:** abaxial glabrous; **shape** oblong-elliptic; **petiole gland(s)** absent. **Inflorescence:** type panicle. **Flower:** stamen included; **pedicel** pedicellate; **receptacle** campanulate. **Fruit:** exocarp glabrous/smooth; **shape** oblong.

## ADDITIONAL DESCRIPTION

Tree to 25 m tall, often with stilt roots at the base. Branches hispid-tomentellous when young, glabrescent. Leaves with stipules axillary, eglandular, ovate, 1-2 mm long, persistent; petioles 3-6 mm long, terete, appressed tomentellous and hirsute, eglandular; lamina oblong-elliptic, 5-11 × 3-7 cm, retuse, rounded or shortly apiculate at apex, rounded to subcuneate at base, with few stiff appressed hairs on veins and margins, otherwise glabrous beneath, glabrous above; midrib prominulous above, with few sparse appressed hairs above, sparsely pubescent beneath; primary veins 6-9 pairs, slightly impressed above when dry, prominent beneath; secondary venation conspicuously reticulate. Inflorescences terminal and subterminal axillary panicles on short peduncles; rachis and branches shortly tomentellous. Bracts and bracteoles minute, 0.5 mm long, membranous, subsistent. Receptacle campanulate, puberulous on exterior, tomentose within. Calyx lobes acute, puberulous on both surfaces. Petals 5, pubescent on both surfaces. Stamens 5-7, inserted in a complete circle; filaments shorter than calyx-lobes, free to base. Ovary lanate-pubescent. Style arising to base of anthers, pubescent. Fruit oblong, c. 3 cm long, 2 cm broad; epicarp smooth, glabrous, markedly angled when young and slightly angled when mature and dry; mesocarp c. 1 mm thick; endocarp very thin, bony, glabrous within.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Vegetation Types

Terra Firme Forest

## Geographic Distribution

### Confirmed occurrences

North (Amazonas)

## HERBARIUM MATERIAL

Spruce, R., 3490, K,  (K000220662), K,  (K000220663), NY,  (NY00428546), P (P00746084), P (P00746085), **Typus** Sothers, CA, 925, IAN (IAN171368), K (K001251053), US,  (US01352923), INPA, 188277, ,  (INPA0188277), Amazonas

## REFERENCE

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), Species Plantarum: Flora of the World 9. Australian Biological Resources Study, Canberra.  
Sothers C.A., Prance G.T. & Chase, M.W. (2016). Towards a monophyletic *Licania*: a new generic classification of the polyphyletic Neotropical genus *Licania* (Chrysobalanaceae). *Kew Bull.* 71: 58.

# *Hymenopus reticulatus* (Prance) Sothers & Prance

## Has as synonym

basionym *Licania reticulata* Prance

## DESCRIPTION

**Leaf:** abaxial glabrous; **shape** oblong/oblong-elliptic; **petiole gland(s)** present. **Inflorescence:** type panicle. **Flower:** stamen equal; **pedicel** pedicellate; **receptacle** campanulate. **Fruit:** exocarp glabrous/smooth; **shape** oblong.

## ADDITIONAL DESCRIPTION

Trees. Branches glabrous, lenticellate when young. Leaves: stipules to 2 mm long, lanceolate, membranous, extra-petiolar, caducous; petioles 7-12 mm long, glabrous, terete, with 2 sessile glands near to lamina; lamina oblong-elliptic to oblong, coriaceous, 8-24 × 3.3-10 cm, glabrous and reticulate on both surfaces; apex acuminate with acumen 2-5 mm long; base rounded to subcuneate; midrib glabrous and plane above; primary veins 10-13 pairs, prominent on both surfaces. Flowers 2.5-3 mm long. Inflorescence of terminal panicles of cymes; rachis lenticellate; rachis and branches sparsely puberulous. Bracts and bracteoles c. 1 mm long, ovate, caducous. Receptacle campanulate, puberulous on exterior, tomentellous within; pedicels 0.25-1.5 mm long. Calyx lobes acute, puberulous on both surfaces. Petals 5, sparsely pubescent. Stamens 6 or 7, inserted around complete circle; filaments connate to mid point, pubescent, equalling calyx lobes. Ovary sparsely villous. Style lanate pubescent. Fruit oblong, to 7 cm long; exocarp smooth, glabrous, longitudinally striate; mesocarp thin, fleshy; endocarp thin, hard, glabrous within.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types

Flooded Field (Várzea), Terra Firme Forest

## Geographic Distribution

### Confirmed occurrences

North (Amazonas, Amapá, Pará, Rondônia)

## HERBARIUM MATERIAL

C.A. Sothers, 775, INPA, 183377,   (INPA0183377), US,  (US01352928), K,  (K001179233), Amazonas Collector unspecified, I.N.P.A.4141, INPA, 4141,  (INPA0004141), NY, 3472941,  (NY00428553), Amazonas, **Typus**

## REFERENCE

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), Species Plantarum: Flora of the World 9. Australian Biological Resources Study, Canberra.  
Sothers C.A., Prance G.T. & Chase, M.W. (2016). Towards a monophyletic *Licania*: a new generic classification of the polyphyletic Neotropical genus *Licania* (Chrysobalanaceae). *Kew Bull.* 71: 58.

# *Hymenopus sothersiae* (Prance) Sothers & Prance

## Has as synonym

basionym *Licania sothersiae* Prance

## DESCRIPTION

**Leaf:** abaxial glabrous; **shape** oblong-elliptic; **petiole gland(s)** present. **Inflorescence:** type racemose/panicle. **Flower:** stamen included; **pedicel** pedicellate; **receptacle** campanulate. **Fruit:** exocarp glabrous/lenticellate; **shape** globose.

## ADDITIONAL DESCRIPTION

Tree to 20 m tall. Branches puberulous when young, glabrescent, with narrowly-oblong lenticels. Leaves with stipules lanceolate, axillary, 5-6 mm long, membranous, caducous; petioles 8-13 mm long, terete, with 2 prominent subopposite glands on middle, sparsely hirsutulous; lamina oblong-elliptic, 5.5-11 × 3-6 cm, retuse at apex, cuneate at base, glabrous above, glabrous beneath except for very few stiff appressed hairs on midrib and primary veins; midrib prominulous above, with few sparse appressed hairs on both surfaces; primary veins 6 or 7 pairs, prominulous above, prominent beneath; secondary venation conspicuously reticulate beneath. Inflorescences of terminal and subterminal panicles of racemes; flowers sessile on primary branches and not grouped into cymules; rachis and branches shortly appressed tomentellous. Bracts and bracteoles minute, 0.5-1 mm long, lanceolate, membranous, persistent. Receptacle campanulate, puberulous on exterior, tomentose within. Calyx lobes acute, puberulous on both surfaces. Petals 5, puberulous on both surfaces. Stamens 6 or 7, inserted in a complete circle; filaments shorter than calyx lobes, free to base. Ovary lanate pubescent. Style arising to base of anthers, pubescent. Fruit globose, c. 2 × 2 cm; exocarp glabrous, lenticellate.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Is endemic from Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types



Terra Firme Forest

## Geographic Distribution

### Confirmed occurrences

North (Amazonas)

## HERBARIUM MATERIAL

Ribeiro, J.E.L.S., 1142, K,  (K000220776), NY,  (NY01254694), Amazonas, **Typus**  
C.A. Sothers, 959, K, 01254694 (K001251056), INPA, 188346,   (INPA0188346), Amazonas

## REFERENCE

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), Species Plantarum: Flora of the World 9. Australian Biological Resources Study, Canberra.  
Sothers C.A., Prance G.T. & Chase, M.W. (2016). Towards a monophyletic *Licania*: a new generic classification of the polyphyletic Neotropical genus *Licania* (Chrysobalanaceae). *Kew Bull.* 71: 58.



# *Leptobalanus* (Benth.) Sothers & Prance

This treatment is composed of the following taxa: *Leptobalanus*, *Leptobalanus apetalus*, *Leptobalanus emarginatus*, *Leptobalanus gardneri*, *Leptobalanus granvillei*, *Leptobalanus humilis*, *Leptobalanus joseramosii*, *Leptobalanus latus*, *Leptobalanus longistylus*, *Leptobalanus maguirei*, *Leptobalanus octandrus*, *Leptobalanus parvifolius*, *Leptobalanus sclerophyllus*, *Leptobalanus sprucei*, *Leptobalanus turbinatus*, *Leptobalanus wurdackii*.

## HOW TO CITE

Sothers, C.A., Prance, G.T. 2020. *Leptobalanus* in **Flora do Brasil 2020**. Jardim Botânico do Rio de Janeiro. Available at: <http://floradobrasil.jbrj.gov.br/reflora/floradobrasil/FB604711>.

## DESCRIPTION

Trees. Leaves: stipules persistent or caducous; lamina lower surface glabrous, tomentose or lanate, hair-filled stomatal cavities present or absent. Petiole with glands present or absent. Inflorescence a panicle, racemose panicle or panicle of cymes. Bracts and bracteoles small, eglandular or sometimes glandular (in *L. alba*, *L. longistyla*, *L. octandra* and *L. sprucei*). Flowers bisexual, sub-actinomorphic. Receptacle cupuliform to campanulate, hairy inside, but throat without long retrorse hairs. Petals absent. Stamens 7–22; filaments exserted to far-exserted, inserted in a complete circle, free or less often slightly connate at base; staminodes usually absent. Ovary 1-carpellary, 1-locular, inserted at base of receptacle tube; style filiform, indistinctly 3-lobed at apex. Fruit a drupe, 5.5 × 2–2.5 cm; epicarp smooth, lenticellate or pubescent; endocarp pubescent or rarely glabrous, without any special mechanisms for seedling escape.

## COMMENTS

A genus of 31 species distributed from Mexico, Central America and the Caribbean through to northern South America, the Guianas, Peru, Ecuador, Bolivia and SE Brazil.

### Life Form

Shrub, Tree

### Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

### Phytogeographic Domains

Amazon Rainforest, Central Brazilian Savanna, Atlantic Rainforest

### Vegetation Types

Anthropic area, Caatinga (stricto sensu), Amazonian Campinarana, Flooded Field (Várzea), Cerrado (lato sensu), Riverine Forest and/or Gallery Forest, Inundated Forest (Igapó), Terra Firme Forest, Ombrophylous Forest (Tropical Rain Forest), Coastal Forest (Restinga), Amazonian Savanna

### Geographic Distribution

#### Confirmed occurrences

North (Acre, Amazonas, Amapá, Pará, Rondônia, Roraima, Tocantins)  
Northeast (Bahia, Ceará, Maranhão, Paraíba, Pernambuco, Piauí, Sergipe)  
Central-west (Distrito Federal, Goiás, Mato Grosso do Sul, Mato Grosso)  
Southeast (Espírito Santo, Minas Gerais, Rio de Janeiro, São Paulo)

#### Possible occurrences

North (Acre, Rondônia)

Southeast (Rio de Janeiro)

## IDENTIFICATION KEY

- 1 Leaf lower surface glabrous or lanate, sometimes with prominent venation, stomatal cavities absent.
- 2 Stamens exerted well beyond calyx lobes.
- 3 Most flowers borne in small groups or cymules on secondary branches (peduncles) of inflorescence; peduncles over 2 mm long.
- 4 Rachis of inflorescence densely yellow-villous-pubescent.....**L. wurdackii**
- 4' Rachis of inflorescence grey puberulous or arachnoid pubescent when young.
- 5 Inflorescence short and compact 3-5 cm long; leaf lamina ovate, apex obtuse to acute.....**L. turbinatus**
- 5' Inflorescence longer and spreading, 6-20 cm long; leaf lamina oblong to elliptic, acuminate at apex.
- 6 Flowers 3.5-5 mm long; petioles deeply canaliculate; lamina base with 2 prominent glands; leaf undersurface with short pulverulent pubescence. **L. latus**
- 6' Flowers 2-3 mm long; leaf undersurface glabrous or lanate, eglandular.  
.....**L. apetalus**
- 3' Flowers borne on primary branches of inflorescence, sessile or short-pedunculate
- 7 Leaf apex predominantly obtuse to acute.
- 8 Rachis of inflorescence densely yellow-villous-pubescent.....**L. wurdackii**
- 8' Rachis of inflorescence grey-puberulous.....**L. parvifolius**
- 7' Leaf apex acuminate.
- 9 Receptacle cupuliform; petiole with 2 glands; stamens 14.....**L. maguirei**
- 9' Receptacle campanulate; petiole eglandular; stamens 9-12.
- 10 Flowers 3.5-5 mm long; leaves with short waxy lanate pubescence beneath.  
.....**L. latus**
- 10' Flowers 2-3.5 mm long; leaves glabrous or dense lanate beneath.
- 11 Stipules; persistent on young branches; leaf base rounded to subcordate; upper portion of ovary glabrous. ....**L. gardneri**
- 11' Stipules caducous; leaf base usually cuneate.
- 12 Inflorescence and flower exterior sparsely puberulous; leaves thickly coriaceous; the apex finely acuminate with acumen 10-15 mm long; petioles canaliculate.....**L. granvillei**
- 12' Inflorescence and flower exterior densely grey-puberulous; leaves chartaceous; the apex acuminate, with acumen 3-15 mm long; petioles terete..... **L. apetalus**
- 2' Stamens equalling or scarcely exceeding calyx lobes.
- 13 Stamens c. 19; leaves 15-20 cm long; flowers 5 mm long.....**L. joseramosii**
- 13' Stamens 10-11; leaves 3-8.5 mm long; flowers 2-3 mm long.....**L. emarginatus**
- 1' Leaf lower surface with stomatal cavities filled at the mouth with lanate pubescence.
- 14 Inflorescence with secondary branches, flowers borne on distinct secondary branches at least 2 mm long.
- 15 Flowers in distinct small, pedicellate groups (cymules); leaf upper surface smooth; the base rounded to cuneate.....**L. sprucei**
- 15' Flowers more or less clustered in small sessile groups on primary and secondary branches of inflorescence; leaf upper surface papillose; the base rounded to cordate.  
.....**L. sclerophyllus**
- 14' Inflorescence with primary branches only; flowers sessile or with short pedicels 0.5 mm
- 16 Flowers with pedicels 0.5-1.5 mm long; leaf reticulation extremely prominent on upper surface; fruit exterior appressed-yellow-velutinous.....**L. longistylus**
- 16' Flowers sessile; leaf reticulation prominulous on upper surface; fruit exterior glabrous or brown-tomentose.
- 17 Young branches densely tomentellous, trunk with a thick corky bark.....**L. humilis**
- 17' Young branches almost glabrous; trunk with thin bark.....**L. octandrus**

## REFERENCE

- Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), *Species Plantarum: Flora of the World 9*. Australian Biological Resources Study, Canberra.
- Sothers C.A., Prance G.T. & Chase, M.W. (2016). Towards a monophyletic *Licania*: a new generic classification of the polyphyletic Neotropical genus *Licania* (Chrysobalanaceae). *Kew Bull.* 71: 58.



# *Leptobalanus apetalus* (E.Mey.) Sothers & Prance

This treatment is composed of the following taxa: *Leptobalanus apetalus*, *Leptobalanus apetalus* var. *apertus*, *Leptobalanus apetalus* var. *apetalus*.

## Has as synonym

basionym *Hirtella apetalata* E.Mey.

homotype *Licania apetalata* (E.Mey.) Fritsch

## DESCRIPTION

**Leaf:** abaxial glabrous/lanate; **petiole gland(s)** absent. **Inflorescence:** type panicle/racemose. **Flower:** stamen number 10; **filament length** exserted; **pedicel** pedicellate/sessile; **receptacle** campanulate. **Fruit:** exocarp glabrous/smooth.

## ADDITIONAL DESCRIPTION

Tree to 40 m tall. Branches glabrous or sparsely puberulous when young, becoming glabrous, not lenticellate. Leaves with stipules linear to 4 mm long, membranous, rarely persistent; petioles 3-6 mm long, glabrous or sparsely pubescent when young, eglandular, terete; lamina oblong-ovate, elliptic, or oblong-lanceolate, coriaceous, 3.7-14 × 1.3-6 cm, usually with well developed apical acumen 3-18 mm long, rarely obtuse to rounded, rounded to subcuneate at base, glabrous on upper surface, glabrous or less often with persistent or caducous lanate pubescence on lower surface; midrib prominulous above, glabrous or sparsely pubescent when young; primary veins 7-12 pairs, prominent on lower surface, prominulous above. Inflorescences racemose panicles; rachis and branches grey-puberulous. Flowers 2-3 mm long, in small groups of cymules on short secondary branches (peduncles) of inflorescence or sessile on primary branches of inflorescence. Bracts and bracteoles 0.2-1 mm long, ovate to lanceolate, persistent. Receptacle campanulate, short-puberulous to tomentose on exterior, tomentose within, sessile or with short pedicels to 5 mm long. Calyx lobes acute, puberulous to tomentose on exterior, puberulous to glabrous within. Petals absent. Stamens c. 10, inserted in a complete circle; filaments far exceeding calyx lobes, free almost to base. Ovary villous. Style villous at base only, glabrous above, equalling filaments. Fruit globose to narrowly lanceolate-fusiform; epicarp smooth, glabrous; mesocarp very thin, fleshy; endocarp thin, fragile, fibrous, sparsely pubescent within.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest, Central Brazilian Savanna, Atlantic Rainforest

## Vegetation Types

Caatinga (stricto sensu), Flooded Field (Várzea), Cerrado (lato sensu), Riverine Forest and/or Gallery Forest, Inundated Forest (Igapó), Ombrophylous Forest (Tropical Rain Forest), Coastal Forest (Restinga), Amazonian Savanna

## Geographic Distribution

Confirmed occurrences

North (Acre, Amazonas, Amapá, Pará, Rondônia, Roraima, Tocantins)

Northeast (Bahia, Ceará, Maranhão, Piauí, Sergipe)

Central-west (Distrito Federal, Goiás, Mato Grosso)

Southeast (Rio de Janeiro)

Possible occurrences

Southeast (Rio de Janeiro)

### IDENTIFICATION KEY

Flowers borne in small groups of cymules on distinct secondary branches of

inflorescence, more than 2 mm long; fruit usually elongate-lanceolate.....var. *apetalus*

Flowers predominantly sessile on primary branches of inflorescence; fruit globose.....var. *apertus*

### REFERENCE

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), Species Plantarum: Flora of the World 9. Australian Biological Resources Study, Canberra.

Sothers C.A., Prance G.T. & Chase, M.W. (2016). Towards a monophyletic *Licania*: a new generic classification of the polyphyletic Neotropical genus *Licania* (Chrysobalanaceae). *Kew Bull.* 71: 58.

# *Leptobalanus apetalus* (E.Mey.) Sothers & Prance var. *apetalus*

## Has as synonym

homotype *Licania apetalus* (E.Mey.) Fritsch var. *apetalus*

homotype *Licania apetalus* var. *pendula* (Benth.) Fritsch

homotype *Licania pendula* Benth.

homotype *Moquilea pendula* (Benth.) Hook.f.

heterotypic *Licania dahlgrenii* Standl.

heterotypic *Licania floribunda* Benth.

heterotypic *Licania hylaea* Cuatrec.

heterotypic *Moquilea floribunda* (Benth.) Hook.f.

heterotypic *Moquilea orinocensis* Rusby

## DESCRIPTION

Flowers borne in small groups of cymules on distinct secondary branches of inflorescence, more than 2 mm long. Fruits usually elongate-lanceolate.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest, Central Brazilian Savanna, Atlantic Rainforest

## Vegetation Types

Flooded Field (Várzea), Cerrado (lato sensu), Riverine Forest and/or Gallery Forest, Inundated Forest (Igapó), Ombrophyllous Forest (Tropical Rain Forest), Coastal Forest (Restinga), Amazonian Savanna

## Geographic Distribution

### Confirmed occurrences

North (Acre, Amazonas, Amapá, Pará, Roraima, Tocantins)

Northeast (Bahia, Ceará, Maranhão, Piauí, Sergipe)

Central-west (Distrito Federal, Goiás, Mato Grosso)

Southeast (Rio de Janeiro)

## REFERENCE

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), Species Plantarum: Flora of the World 9. Australian Biological Resources Study, Canberra.

Sothers C.A., Prance G.T. & Chase, M.W. (2016). Towards a monophyletic *Licania*: a new generic classification of the polyphyletic Neotropical genus *Licania* (Chrysobalanaceae). *Kew Bull.* 71: 58.

# *Leptobalanus apetalus* var. *apertus* (Benth.) Sothers & Prance

## Has as synonym

basionym *Licania aperta* Benth.

homotype *Licania apetalus* var. *aperta* (Benth.) Prance

heterotypic *Licania caracasana* Klotzsch ex Hook.f.

heterotypic *Licania kuntzeana* Urb.

heterotypic *Licania pubiflora* Benth.

heterotypic *Moquilea kuntzeana* (Urb.) R.O.Williams

## DESCRIPTION

Flowers predominantly sessile on primary branches of inflorescence. Fruit globose.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest, Central Brazilian Savanna

## Vegetation Types

Caatinga (stricto sensu), Riverine Forest and/or Gallery Forest, Amazonian Savanna

## Geographic Distribution

### Confirmed occurrences

North (Acre, Amazonas, Pará, Rondônia, Roraima, Tocantins)

Central-west (Goiás, Mato Grosso)

## REFERENCE

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), Species Plantarum: Flora of the World 9. Australian Biological Resources Study, Canberra.

Sothers C.A., Prance G.T. & Chase, M.W. (2016). Towards a monophyletic *Licania*: a new generic classification of the polyphyletic Neotropical genus *Licania* (Chrysobalanaceae). *Kew Bull.* 71: 58.

# *Leptobalanus emarginatus* (Spruce ex Hook.) Sothers & Prance

## Has as synonym

basionym *Licania emarginata* Spruce ex Hook.f.

heterotypic *Licania petrensis* Prance

## DESCRIPTION

**Leaf:** abaxial glabrous; **petiole gland(s)** present. **Inflorescence:** type panicle. **Flower:** stamen number 10 - 11; filament length included; **pedicel** subsessile; **receptacle** campanulate. **Fruit:** exocarp glabrous/smooth.

## ADDITIONAL DESCRIPTION

Trees, medium to large-sized. Branches glabrous when young, not conspicuously lenticellate. Leaves: stipules minute, ovate, caducous, axillary; petioles 2-5 mm long, sparsely lanate when young, soon becoming glabrous, deeply canaliculate, with 2 sessile glands at junction with lower surface of lamina; lamina ovate-elliptic to elliptic, coriaceous, 3-8.5 × 1.5-5 cm, rounded or obtuse to bluntly acuminate at apex with acumen 0-6 mm long, rounded at base, glabrous and shiny on both surfaces; palisade glands absent; midrib glabrous and prominent above; primary veins 7-11 pairs, prominent beneath, prominulous above. Inflorescences panicles; rachis and branches puberulous. Flowers 2-3 mm long, in small cymules on distinct secondary branches of inflorescence which are 3-10 mm long. Bracts and bracteoles 0.5-1.5 mm long, ovate, caducous, entire. Receptacle campanulate, puberulous to grey-tomentose on exterior, rather sparsely tomentose within; pedicels c. 0.5 mm long. Calyx lobes acute, puberulous on both surfaces. Petals absent. Stamens 10 or 11, inserted in a complete circle; filaments shorter than calyx lobes, glabrous, free to base. Ovary pilose. Style pilose at base, glabrous above, equalling filaments. Fruit globose, c. 2 cm diam.; exocarp smooth, glabrous; mesocarp fleshy 0.5 mm thick when dry; endocarp hard, bony, c. 0.5 mm thick.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types








Ombrophyllous Forest (Tropical Rain Forest)

## Geographic Distribution

### Confirmed occurrences

North (Amazonas)

## HERBARIUM MATERIAL

R. Spruce, 2699, G, G00359655,  (G00359655), G, G00177657,  (G00177657), RB, 18801,  (RB00537069), P (P00745947), P (P00745946), NY,  (NY00428393), K,  (K000220619), K,  (K000220618), GH,  (GH00046259), Amazonas, **Typus**

## REFERENCE

- Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), Species Plantarum: Flora of the World 9. Australian Biological Resources Study, Canberra.
- Sothers C.A., Prance G.T. & Chase, M.W. (2016). Towards a monophyletic *Licania*: a new generic classification of the polyphyletic Neotropical genus *Licania* (Chrysobalanaceae). *Kew Bull.* 71: 58.

# *Leptobalanus gardneri* (Hook.f.) Sothers & Prance

## Has as synonym

basionym *Moquilea gardneri* Hook.f.

homotype *Licania gardneri* (Hook.f.) Fritsch

homotype *Licania mattogrossensis* Pilg.

heterotypic *Moquilea mattogrossensis* (Pilg.) Malme

## DESCRIPTION

**Leaf:** abaxial glabrous; **petiole gland(s)** absent. **Inflorescence:** type panicle/racemose. **Flower:** stamen number 12; **filament length** exerted; **pedicel** sessile; **receptacle** campanulate. **Fruit:** exocarp glabrous/smooth.

## ADDITIONAL DESCRIPTION

Shrubs or small trees. Branches puberulous when young, soon becoming glabrous, not lenticellate. Leaves: stipules linear, membranous, 4-5 mm long, subpersistent; petioles 4-7 mm long, densely tomentose when young, terete, eglandular; lamina elliptic to oblong, coriaceous, 9-16.5 × 5-8.5 cm, acuminate at apex with acumen 5-12 mm long, rounded to subcordate at base, glabrous on both surfaces; palisade glands occasional on lower surface; midrib prominulous above, glabrous when mature, sparsely pubescent towards base when young; primary veins 11-14 pairs, prominent on both surfaces. Inflorescences terminal and subterminal racemose panicles; rachis and branches sparsely grey-puberulous. Flowers 2.5-3.5 mm long, sessile or on short pedicels not exceeding 1.5 mm long. Bracts and bracteoles 1-2.5 mm long, ovate, puberulous on exterior, entire, eglandular. Receptacle campanulate, sessile, grey-puberulous on exterior, tomentose within. Calyx lobes acute, tomentose on both surfaces. Petals absent. Stamens c. 12, inserted in a complete circle; filaments far exceeding calyx lobes, slightly connate at base, glabrous. Ovary villous at base, glabrous above. Style sparsely hirsute on lower 1/2, equalling filaments. Fruits (immature) globose, exterior smooth, glabrous.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest, Central Brazilian Savanna, Atlantic Rainforest

## Vegetation Types

Cerrado (lato sensu), Riverine Forest and/or Gallery Forest

## Geographic Distribution

### Confirmed occurrences




North (Pará, Rondônia, Tocantins)

Northeast (Bahia, Maranhão, Piauí)

Central-west (Goiás, Mato Grosso do Sul, Mato Grosso)

Southeast (Minas Gerais, São Paulo)

## HERBARIUM MATERIAL

George Gardner, 4539, GH,  (GH00046269), K,  (K000220615), Minas Gerais, **Typus**  
Hatschbach, G, 33215, MBM (MBM033770), NY,  (NY00835743), Mato Grosso

## REFERENCE

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), Species Plantarum: Flora of the World 9. Australian Biological Resources Study, Canberra.  
Sothers C.A., Prance G.T. & Chase, M.W. (2016). Towards a monophyletic *Licania*: a new generic classification of the polyphyletic Neotropical genus *Licania* (Chrysobalanaceae). *Kew Bull.* 71: 58.



# *Leptobalanus granvillei* (Prance) Sothers & Prance

## Has as synonym

basionym *Licania granvillei* Prance

## DESCRIPTION

**Leaf:** abaxial glabrous; **petiole gland(s)** absent. **Inflorescence:** type panicle/racemose. **Flower:** stamen number 12; **filament length** exerted; **pedicel** sessile; **receptacle** campanulate. **Fruit:** exocarp glabrous/lenticellate.

## ADDITIONAL DESCRIPTION

Tree to 30 m tall. Branches sparsely puberulous when young, soon becoming glabrous. Leaves with stipules caducous (not seen); petioles 5-8 mm long, canaliculate above, glabrous, eglandular, rugulose; lamina oblong, thickly coriaceous, 6-13 × 2.3-6 cm, cuneate to subcuneate at base, finely acuminate at apex with acumen 10-25 mm long, glabrous on both surfaces, without stomatal cavities; midrib prominent on both surfaces, glabrous; primary veins 12-16 pairs, prominulous on both surfaces, glabrous. Inflorescences of racemose panicles 6-12 cm long; rachis and branches sparsely appressed pubescent, appearing dark because pubescence is incomplete. Bracts and bracteoles minute, 0.25 mm long, membranous. Flowers 2-3 mm long, sessile along primary branches of inflorescence. Receptacle campanulate, sparsely puberulous to glabrous on exterior, densely tomentose within, sessile. Calyx lobes 5, acute, puberulous on both surfaces, with tomentellous margins. Petals absent. Stamens 12, inserted around complete circle; filaments exerted beyond calyx lobes, glabrous, but densely tomentose around base, free to base. Ovary sparsely lanate. Style exerted, sparsely tomentose for 1/2 of length. Fruit globose to ellipsoid, 5.5 cm long × 2.5-4 cm broad, glabrous and lenticellate on exterior; mesocarp fleshy, 3-4 mm thick; endocarp hard, bony, 1 mm thick, glabrous within.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types






Riverine Forest and/or Gallery Forest, Terra Firme Forest

## Geographic Distribution

### Confirmed occurrences

North (Amazonas)

## HERBARIUM MATERIAL

N. T. da Silva, 60697, NY,  (NY01253169), NY,  (NY01253170), US,  (US01352296), Amazonas Mori, B. Boom, 14764, P (P00745988), NYBG, 345874,   (NY00345874), **Typus**

## REFERENCE

- Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), Species Plantarum: Flora of the World 9. Australian Biological Resources Study, Canberra.
- Sothers C.A., Prance G.T. & Chase, M.W. (2016). Towards a monophyletic *Licania*: a new generic classification of the polyphyletic Neotropical genus *Licania* (Chrysobalanaceae). *Kew Bull.* 71: 58.

# *Leptobalanus humilis* (Cham. & Schltdl.) Sothers & Prance

## Has as synonym

basionym *Licania humilis* Cham. & Schltdl.  
 homotype *Chrysobalanus humilis* (Cham. & Schltdl.) Kuntze  
 homotype *Moquilea humilis* (Cham. & Schltdl.) Hook.f.  
 heterotypic *Chrysobalanus sublanatus* Kuntze  
 heterotypic *Licania ulei* Taub.

## DESCRIPTION

**Leaf:** abaxial stomatal-cavity; **petiole gland(s)** absent. **Inflorescence:** type paniculate. **Flower:** stamen number 9 - 12; **filament length** exerted; **pedicel** sessile; **receptacle** campanulate. **Fruit:** exocarp glabrous/smooth.

## ADDITIONAL DESCRIPTION

Shrubs or low trees to 6 m tall. Stems densely tomentellous when young, with thick corky bark. Leaves: stipules linear, to 4 mm long, tomentose, caducous; petioles 2-6 mm long, densely tomentose, terete, eglandular; lamina ovate-elliptic to oblong, thick-coriaceous, 4-10.5 × 2.5-6.5 cm, rounded, obtuse, or bluntly acuminate at apex with acumen 0-8 mm long, rounded to subcuneate at base, glabrous and shining on upper surface; stomatal cavities on lower surface, with rounded veins describing open cavities filled with lanate pubescence; midrib prominent above, lanate when young; primary veins 7-10 pairs, prominent below. Inflorescences paniculate; rachis and branches brown-tomentose. Flowers c. 3 mm long, in sessile clusters on primary branches of inflorescence. Bracts and bracteoles ovate to lanceolate, 1-2 mm long, persistent, entire or with 1 or 2 small teeth on each side. Receptacle campanulate, sessile, tomentose on exterior, villous-tomentose within. Calyx lobes acute, tomentose on exterior, tomentose to puberulous within. Petals absent. Stamens 9-12, inserted in a complete circle; filaments far exceeding calyx lobes, free to base, glabrous. Ovary villous. Style pilose for most of length, equalling filaments. Fruit ovoid, 2-2.5 cm long, 1.3-2 cm broad; epicarp smooth, glabrous, drying black; mesocarp thick, fleshy; endocarp thin, fragile, sparsely hirsute within.

## Life Form

Shrub, Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Central Brazilian Savanna

## Vegetation Types

Cerrado (lato sensu)

## Geographic Distribution

### Confirmed occurrences



North (Rondônia)

Northeast (Bahia)

Central-west (Distrito Federal, Goiás, Mato Grosso do Sul, Mato Grosso)  
Southeast (Minas Gerais, Rio de Janeiro, São Paulo)

### HERBARIUM MATERIAL

Sellow, s.n., P (P00745999), Minas Gerais, **Typus**

J. A. Rizzo, 5235, NY,  (NY00818667), NY,  (NY00835791), Goiás

### REFERENCE

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), Species Plantarum: Flora of the World 9. Australian Biological Resources Study, Canberra.

Sothers C.A., Prance G.T. & Chase, M.W. (2016). Towards a monophyletic *Licania*: a new generic classification of the polyphyletic Neotropical genus *Licania* (Chrysobalanaceae). *Kew Bull.* 71: 58.

# *Leptobalanus joseramosii* (Prance) Sothers & Prance

## Has as synonym

basionym *Licania joseramosii* Prance

## DESCRIPTION

**Leaf:** abaxial glabrous; **petiole gland(s)** present. **Inflorescence:** type panicle. **Flower:** stamen number 19; filament length exerted; **pedicel** unknown; **receptacle** campanulate. **Fruit:** exocarp unknown.

## ADDITIONAL DESCRIPTION

Trees to 5 m tall. Branches glabrous when young. Leaves: stipules linear, c. 6 mm long, hispidulous, caducous; petioles 4-5 mm long, rugulose tomentellous when young, terete, with 2 glands near junction with lamina; lamina oblong to oblong-lanceolate, coriaceous, 13-20 × 4-6.5 cm, cuneate at base, finely acuminate at apex with acumen 15-20 mm long, glabrous on both surfaces, without stomatal cavities; primary veins 9-14 pairs, prominulous on both surfaces; midrib prominent on both surfaces. Inflorescences of panicles with long thick central rachis and short thin lateral branches bearing 1-3 flowers; rachis and branches tomentellous. Bracts and bracteoles lanceolate, subsistent, tomentellous on exterior, glabrous within, entire, with long thin acumen, eglandular. Flowers c. 5 mm long. Receptacle campanulate, grey-tomentose on exterior, tomentose within. Calyx lobes 5, acute, tomentose on exterior. Petals absent. Stamens c. 19, inserted around complete circle; filaments slightly exceeding calyx lobes, free almost to base, glabrous except for pilose annular ring. Ovary lanate. Style glabrous, equalling filaments in length. Fruit unknown.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Is endemic from Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types

Amazonian Campinarana

## Geographic Distribution

### Confirmed occurrences

North (Amazonas)

## HERBARIUM MATERIAL

O. P. Monteiro, 29, NY,   (NY00428440), INPA, 54340,   (INPA0054340), Amazonas, **Typus**

## REFERENCE

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), Species Plantarum: Flora of the World 9. Australian Biological Resources Study, Canberra.

Sothers C.A., Prance G.T. & Chase, M.W. (2016). Towards a monophyletic *Licania*: a new generic classification of the polyphyletic Neotropical genus *Licania* (Chrysobalanaceae). *Kew Bull.* 71: 58.

# *Leptobalanus latus* (J.F.Macbr.) Sothers & Prance

## Has as synonym

basionym *Licania lata* J.F.Macbr.

## DESCRIPTION

**Leaf:** abaxial lanate pulverulent; **petiole gland(s)** absent. **Inflorescence:** type panicle/racemose. **Flower:** stamen number 14; **filament length** exserted; **pedicel** sessile; **receptacle** campanulate/cupuliform. **Fruit:** exocarp glabrous/smooth.

## ADDITIONAL DESCRIPTION

Trees to 20 m tall. Branches villous when young, becoming glabrous with age, not lenticellate. Leaves: stipules caducous; petioles 6-10 mm long, puberulous, becoming glabrous, terete or shallowly canaliculate, eglandular; lamina oblong-elliptic, coriaceous, 9-21 × 3-8.5 cm, acuminate at apex with acumen 7-20 mm long, rounded to subcuneate at base, glabrous above, with persistent lanate-pulverulent pubescence beneath, becoming sparse with age; palisade glands rare; 2 large sessile glands at junction of lamina and petiole on lower surface; midrib prominent above, glabrous; primary veins 10-12 pairs, prominent on both surfaces. Inflorescences terminal and axillary racemose panicles; rachis and branches brownpuberulous, sometimes arachnoid when young. Flowers 4-5 mm long, sessile on primary branches of inflorescence or on short peduncles in small groups. Bracts and bracteoles 1-4 mm long, ovate, persistent, puberulous on exterior; margins entire or serrulate. Receptacle campanulate-cupuliform, sessile, tomentose on exterior, densely villous within. Calyx lobes acute, tomentellous on exterior, puberulous within. Petals absent. Stamens c. 14, inserted in a complete circle; filaments far exceeding calyx lobes, free to base, glabrous. Ovary densely pilose. Style villous almost to apex, equalling filaments. Fruit globose, 2-3 cm in diameter; epicarp smooth, glabrous, drying black; mesocarp very thin, fleshy; endocarp very thin, 0.5 mm thick, hard, sparsely hirsute within.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types

Ombrophyllous Forest (Tropical Rain Forest)

## Geographic Distribution







### Confirmed occurrences

North (Amazonas)

### Possible occurrences

North (Acre, Rondônia)

## HERBARIUM MATERIAL

Amaral, I.L. do, 466, MG (MG102126), NY,  (NY01253635), RB, 315839,  (RB00070105), US, 315839,  (US01352564), INPA, 106850,  (INPA0106850), Amazonas  
G. Klug, 560, NYBG, 428452,  (NY00428452), FMNH, V0042205F,  (V0042205F), Amazonas, **Typus**

## REFERENCE

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), Species Plantarum: Flora of the World 9. Australian Biological Resources Study, Canberra.  
Sothers C.A., Prance G.T. & Chase, M.W. (2016). Towards a monophyletic *Licania*: a new generic classification of the polyphyletic Neotropical genus *Licania* (Chrysobalanaceae). *Kew Bull.* 71: 58.



# *Leptobalanus longistylus* (Hook.f.) Sothers & Prance

## Has as synonym

basionym *Moquilea longistyla* Hook.f.

homotype *Licania longistyla* (Hook.f.) Fritsch

## DESCRIPTION

**Leaf:** abaxial stomatal-cavity; **petiole gland(s)** absent. **Inflorescence:** type panicle/racemose. **Flower:** stamen number 10; **filament length** exserted; **pedicel** pedicellate; **receptacle** campanulate. **Fruit:** exocarp pubescent.

## ADDITIONAL DESCRIPTION

Trees to 20 m tall. Branches puberulous when young, soon becoming glabrous. Leaves: stipules linear, 3-8 mm long, membranous, axillary, subpersistent; petioles 5-13 mm long, terete, eglandular, densely pubescent, becoming glabrescent with age; lamina elliptic, coriaceous, 6-23 × 3.5-10 cm, acuminate at apex with acumen 3-12 mm long, rounded to subcuneate at base, glabrous on upper surface, rarely papillose; lower surface bearing well developed stomatal cavities with flattened venation leaving small slit-like lanate-pubescent apertures; midrib prominent above, pubescent towards base, becoming glabrous with age; primary veins 9-12 pairs, prominent below. Inflorescences terminal and axillary racemose panicles; rachis and branches grey-tomentellous. Flowers c. 3 mm long, solitary on primary branches of inflorescence. Bracts and bracteoles 2-5 mm long, ovate to lanceolate, serrulate, usually with stipitate glands. Receptacle campanulate, grey-tomentose on exterior, densely villous-tomentose within; pedicels 0.5-1.5 mm long. Calyx lobes acute, tomentose on exterior, puberulous within. Petals absent. Stamens c. 10, inserted in a complete circle; filaments far exceeding calyx lobes, free to base, glabrous. Ovary villous. Style villous on lower portion, equalling or exceeding filaments. Fruit globose, 2.5-3.5 mm in diameter; epicarp with appressed sordid yellow-velutinous pubescence; pericarp undifferentiated, thin, fragile, fibrous, sparsely villous within.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types

Flooded Field (Várzea), Inundated Forest (Igapó)

## Geographic Distribution



### Confirmed occurrences



North (Acre, Amazonas, Amapá, Pará)

Northeast (Maranhão)

Central-west (Goiás, Mato Grosso)

## HERBARIUM MATERIAL

M. Silveira, 1620, K,  (K001181941), NY,  (NY00330756), Acre

B. W. P. de Albuquerque, 67-59, NY, 00330756,  (NY01254325), NY, 00330756,  (NY01254351), Amazonas

## REFERENCE

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), Species Plantarum: Flora of the World 9. Australian Biological Resources Study, Canberra.

Sothers C.A., Prance G.T. & Chase, M.W. (2016). Towards a monophyletic *Licania*: a new generic classification of the polyphyletic Neotropical genus *Licania* (Chrysobalanaceae). *Kew Bull.* 71: 58.

# *Leptobalanus maguirei* (Prance) Sothers & Prance

## Has as synonym

basionym *Licania maguirei* Prance

## DESCRIPTION

**Leaf:** abaxial glabrous; **petiole gland(s)** present. **Inflorescence:** type panicle. **Flower:** stamen number 14; **filament length** exerted; **pedicel** sessile; **receptacle** cupuliform. **Fruit:** exocarp unknown.

## ADDITIONAL DESCRIPTION

Shrubs. Branches puberulous when young, glabrescent, not lenticellate. Leaves: stipules linear, caducous; petioles 3-7 mm long, hirsutulous when young, terete, with 2 glands beneath at junction with lamina; lamina oblong-ovate, coriaceous, 6.5-17 × 2.4-6.5 cm, acuminate at apex with acumen 7-17 mm long, rounded to subcordate at base, glabrous on both surfaces; midrib prominent and glabrous above; primary veins 10-12 pairs, plane above, prominent beneath. Inflorescences of terminal and subterminal much-branched panicles; rachis and branches densely grey-tomentose. Primary bracts to 7 mm long, caducous. Secondary bracts and bracteoles 1.5-3 mm long, ovate, persistent, tomentose on exterior; margins serrate. Flowers c. 4 mm long. Receptacle cupuliform, sessile, tomentose on exterior, villous-tomentose within. Calyx lobes acute, tomentose on both surfaces. Petals absent. Stamens c. 14, inserted around complete circle; filaments glabrous, exerted, free to base. Ovary densely villous. Style villous on lower portion. Fruit unknown.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Is endemic from Brazil

## Phytogeographic Domains

Central Brazilian Savanna

## Vegetation Types

Riverine Forest and/or Gallery Forest

## Geographic Distribution

### Confirmed occurrences

Central-west (Mato Grosso do Sul, Mato Grosso)

## HERBARIUM MATERIAL

B. Maguire, 56470, NY,  (NY00428472), US, 2701237,  (US00130829), FMNH, V0054024F,  (V0054024F), Mato Grosso, **Typus**

## REFERENCE

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), Species Plantarum: Flora of the World 9. Australian Biological Resources Study, Canberra.

Sothers C.A., Prance G.T. & Chase, M.W. (2016). Towards a monophyletic *Licania*: a new generic classification of the polyphyletic Neotropical genus *Licania* (Chrysobalanaceae). *Kew Bull.* 71: 58.

# *Leptobalanus octandrus* (Hoffmanns. ex Roem. & Schult.) Sothers & Prance

This treatment is composed of the following taxa: *Leptobalanus octandrus*, *Leptobalanus octandrus* subsp. *grandifolius*, *Leptobalanus octandrus* subsp. *octandrus*, *Leptobalanus octandrus* subsp. *pallidus*.

## Has as synonym

basionym *Hirtella octandra* Hoffmanns. ex Schult.  
 homotype *Licania octandra* (Hoffmanns. ex Roem. & Schult.) Kuntze  
 homotype *Moquilea turiuva* (Cham. & Schltld.) Hook.f.  
*Licania turiuva* Cham. & Schltld.

## DESCRIPTION

**Leaf:** abaxial stomatal-cavity; **petiole gland(s)** absent. **Inflorescence:** type panicle/racemose. **Flower:** stamen number 8 - 12; **filament length** exserted; **pedicel** subsessile/sessile; **receptacle** campanulate. **Fruit:** exocarp glabrous/pubescent.

## ADDITIONAL DESCRIPTION

Trees, small to medium-sized. Branches glabrous when young. Leaves: stipules linear, to 5 mm long, membranous, hirsutulous, subpersistent, on young branches only; petioles tomentose, becoming less so with age, terete or rarely shallowly canaliculate; glands 2, sessile, at or near junction with lower surface of lamina, often obscured by pubescence; lamina broadly ovate to oblong-lanceolate, 3-12 × 2-4 cm, obtuse to acuminate at apex with acumen 1-13 mm long, rounded to subcuneate at base, glabrous and shining above, with well developed stomatal cavities beneath; venation flattened around small slit-like apertures to the cavities, with mouth of the cavities glabrous to lanate; midrib prominulous above, glabrous; primary veins 8-13 pairs, prominent on lower surface, plane or nearly so above. Inflorescence racemose panicles; rachis and branches sparsely grey-brown-tomentose or arachnoid-pubescent. Flowers 2-3 mm long, sessile or nearly so on primary branches of inflorescence, solitary or in small groups. Bracts and bracteoles 1-4 mm long, persistent, tomentose on exterior, often serrate, with stipitate glands. Calyx lobes acute, tomentose on both surfaces. Receptacle campanulate, sessile or with short pedicels to 0.2 mm long, tomentose on exterior, densely villous within. Petals absent. Stamens 8-12, inserted in a complete circle; filaments far exceeding calyx lobes, free to base, glabrous. Ovary inserted at base of receptacle, villous. Style villous at base only with upper portion glabrous, equalling filaments. Fruit globose to elongate-lanceolate, to 2.5 cm long; epicarp glabrous or with light brown appressed pubescence; mesocarp thin and fleshy; endocarp hard, thin, fibrous, glabrous or sparsely hirsute within when young.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest, Central Brazilian Savanna, Atlantic Rainforest

## Vegetation Types

Flooded Field (Várzea), Cerrado (lato sensu), Riverine Forest and/or Gallery Forest, Inundated Forest (Igapó), Terra Firme Forest, Amazonian Savanna

### Geographic Distribution

#### Confirmed occurrences

North (Acre, Amazonas, Amapá, Pará, Rondônia, Roraima, Tocantins)

Northeast (Bahia, Ceará, Maranhão, Paraíba, Pernambuco, Sergipe)

Central-west (Distrito Federal, Goiás, Mato Grosso do Sul, Mato Grosso)

Southeast (Espírito Santo, Minas Gerais, Rio de Janeiro, São Paulo)

### IDENTIFICATION KEY

1 Leaves 14-29 × 4.5-7 cm; apex long-acuminate with acumen 12-28 mm long.....subsp. *grandifolius*

1: Leaves 3-12 × 2-4 cm; apex obtuse to acuminate with acumen 1-13 mm long

2 Leaves broadly ovate to oblong, obtuse to bluntly acuminate with acumen 1-5 mm long; upper surface of leaf drying brown; young

inflorescence with sparse grey-brown tomentum.....subsp. *octandrus*

2: Leaves oblong-lanceolate with a well-developed finely pointed acumen 5-13 mm long; upper surface of leaf drying grey or green; young

inflorescence usually with a rufous-brown arachnoid indumentum.....subsp. *pallidus*

### REFERENCE

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), Species Plantarum: Flora of the World 9. Australian Biological Resources Study, Canberra.

Sothers C.A., Prance G.T. & Chase, M.W. (2016). Towards a monophyletic *Licania*: a new generic classification of the polyphyletic Neotropical genus *Licania* (Chrysobalanaceae). *Kew Bull.* 71: 58.

# *Leptobalanus octandrus* (Hoffmanns. ex Roem. & Schult.) Sothers & Prance subsp. *octandrus*

## Has as synonym

homotype *Licania bothynophylla* Mart.

homotype *Licania octandra* (Hoffmanns. ex Roem. & Schult.) Kuntze subsp. *octandra*

homotype *Moquilea bothynophylla* (Mart.) Hook.f.

heterotypic *Licania hookeri* var. *obtusata* Huber

heterotypic *Licania takutuensis* Standl.

heterotypic *Licania utilis* (Hook.f.) Fritsch

heterotypic *Moquilea utilis* Hook.f.

*Licania sellowiana* Klotzsch ex Hook.f.

## DESCRIPTION

Leaf lamina broadly ovate to oblong, obtuse to bluntly acuminate at apex, acumen 1-5 mm long; upper surface of leaf drying brown. Inflorescence when young with sparse grey brown tomentum.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest, Central Brazilian Savanna, Atlantic Rainforest

## Vegetation Types

Flooded Field (Várzea), Cerrado (lato sensu), Riverine Forest and/or Gallery Forest, Inundated Forest (Igapó), Terra Firme Forest

## Geographic Distribution

### Confirmed occurrences

North (Amazonas, Amapá, Pará, Roraima, Tocantins)

Northeast (Bahia, Ceará, Maranhão, Paraíba, Pernambuco, Sergipe)

Central-west (Distrito Federal, Goiás, Mato Grosso do Sul, Mato Grosso)

Southeast (Espírito Santo, Minas Gerais, Rio de Janeiro, São Paulo)

## HERBARIUM MATERIAL

Martius, 449, K,  (K000220633), **Typus**

C. F. P. Martius, 449, GH,  (GH00046251), Rio de Janeiro, **Typus**

## REFERENCE

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), Species Plantarum: Flora of the World 9. Australian Biological Resources Study, Canberra.

Sothers C.A., Prance G.T. & Chase, M.W. (2016). Towards a monophyletic *Licania*: a new generic classification of the polyphyletic Neotropical genus *Licania* (Chrysobalanaceae). *Kew Bull.* 71: 58.



# *Leptobalanus octandrus* subsp. *grandifolius* (Prance) Sothers & Prance

## Has as synonym

homotype *Licania octandra* subsp. *grandifolia* Prance

## DESCRIPTION

Leaf lamina oblong, 16-29 × 4.5-7 cm, with a well developed finely pointed acumen, 12-28 mm long.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types

Terra Firme Forest

## Geographic Distribution

### Confirmed occurrences

North (Amazonas)

## HERBARIUM MATERIAL

E. Lleras, P17270, NY,  (NY00428506), Amazonas

Lleras, E., P17270, K,  (K000220637)

Eduardo Lleras, William C. Steward, J.C. Ongley, Dionizio F. Coêlho, José F. Ramos, P17270, MO (MO255328), Amazonas

E. Lleras et al., P17270, GH,  (GH00046295), Amazonas

## REFERENCE

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), Species Plantarum: Flora of the World 9. Australian Biological Resources Study, Canberra.

Sothers C.A., Prance G.T. & Chase, M.W. (2016). Towards a monophyletic *Licania*: a new generic classification of the polyphyletic Neotropical genus *Licania* (Chrysobalanaceae). *Kew Bull.* 71: 58.

# *Leptobalanus octandrus* subsp. *pallidus* (Hook.f.) Sothers & Prance

## Has as synonym

basionym *Moquilea pallida* Hook.f.

homotype *Licania hookeri* Fritsch

homotype *Licania octandra* subsp. *pallida* (Hook.f.) Prance

heterotypic *Licania egensis* Fritsch

heterotypic *Licania stenocarpa* Standl.

## DESCRIPTION

Leaf lamina oblong-lanceolate, with a well developed finely pointed acumen 5-13 mm long; upper surface of leaf drying grey. Inflorescence when young usually with rufous-brown arachnoid pubescence.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types

Terra Firme Forest

## Geographic Distribution

### Confirmed occurrences

North (Acre, Amazonas, Pará, Rondônia, Roraima)

Central-west (Mato Grosso)

## REFERENCE

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), Species Plantarum: Flora of the World 9. Australian Biological Resources Study, Canberra.

Sothers C.A., Prance G.T. & Chase, M.W. (2016). Towards a monophyletic *Licania*: a new generic classification of the polyphyletic Neotropical genus *Licania* (Chrysobalanaceae). *Kew Bull.* 71: 58.

# *Leptobalanus parvifolius* (Huber) Sothers & Prance

## Has as synonym

basionym *Licania parvifolia* Huber  
heterotypic *Licania arachnites* Standl.

## DESCRIPTION

**Leaf:** abaxial glabrous/lanate pulverulent; **petiole gland(s)** absent. **Inflorescence:** type panicle/racemose. **Flower:** stamen number 9 - 10; **filament length** exerted; **pedicel** sessile; **receptacle** campanulate. **Fruit:** exocarp glabrous/smooth.

## ADDITIONAL DESCRIPTION

Trees, small to medium-sized. Branches puberulous when young, soon becoming glabrous, not lenticellate. Leaves: stipules linear, to 4 mm long, membranous, persistent; petioles 3-4 mm long, hirsute when young, becoming glabrous, shallowly canaliculate to terete, eglandular; lamina ovate-elliptic to oblong, coriaceous, 3.3-8.5 × 1.3-3.5 cm, obtuse to acute at apex, cuneate to cordate at base, glabrous above, caducous-lanate beneath; midrib prominulous above, glabrous; primary veins 8-11 pairs, prominulous on both surfaces. Inflorescences spreading racemose panicles; rachis and branches grey-puberulous. Flowers 3 mm long, in small cymules on short secondary branches of inflorescence or sessile on primary branches. Bracts and bracteoles 0.5-1 mm long, ovate, pubescent on exterior, entire, persistent, eglandular. Receptacle campanulate, sessile, tomentose to villous-tomentose on exterior, tomentose within. Calyx lobes acute, tomentose on both surfaces. Petals absent. Stamens 9 or 10, inserted in a complete circle; filaments far exceeding calyx lobes, glabrous, free almost to base. Ovary inserted at base of receptacle, pilose. Style pilose on lower portion only, equalling or exceeding filaments. Fruit (immature) ovoid to ellipsoid, c. 1-1.5 × 0.4-0.5 cm; exocarp smooth, glabrescent.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types

Riverine Forest and/or Gallery Forest

## Geographic Distribution

### Confirmed occurrences



North (Amazonas, Pará)

Northeast (Maranhão, Piauí)

Central-west (Mato Grosso do Sul, Mato Grosso)

## HERBARIUM MATERIAL

Ducke, A., s.n., MG (MG008979), G, G00177724,  (G00177724), Pará, **Typus**

N.A.Rosa, 1988, RB, 194751,  (RB00070326), NY, 194751,  (NY00836024), MG, 194751 (MG054258), Mato Grosso

## REFERENCE

- Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), Species Plantarum: Flora of the World 9. Australian Biological Resources Study, Canberra.
- Sothers C.A., Prance G.T. & Chase, M.W. (2016). Towards a monophyletic *Licania*: a new generic classification of the polyphyletic Neotropical genus *Licania* (Chrysobalanaceae). *Kew Bull.* 71: 58.

# *Leptobalanus sclerophyllus* (Hook.f.) Sothers & Prance

## Has as synonym

basionym *Moquilea sclerophylla* Mart. ex Hook.f.  
 homotype *Licania sclerophylla* (Hook.f.) Fritsch  
 heterotypic *Licania aspera* Standl.  
 heterotypic *Licania myristicoides* Benth. ex Hook.f.  
 heterotypic *Licania scabra* Benth. ex Hook.f.  
 heterotypic *Licania sclerophylla* var. *myristicoides* (Hook.f.) Fritsch  
 heterotypic *Licania sclerophylla* var. *scabra* (Hook.f.) Fritsch  
 heterotypic *Moquilea sclerophylla* var. *myristicoides* Hook.f.  
 heterotypic *Moquilea sclerophylla* var. *pohliana* Hook.f.  
 heterotypic *Moquilea sclerophylla* var. *scabra* Hook.f.

## DESCRIPTION

**Leaf:** abaxial stomatal-cavity; **petiole gland(s)** absent. **Inflorescence:** type paniculate. **Flower:** stamen number 10; **filament length** exserted; **pedicel** pedicellate; **receptacle** campanulate. **Fruit:** exocarp pubescent.

## ADDITIONAL DESCRIPTION

Trees to 15 m tall. Branches pubescent when young, becoming glabrous with age. Leaves: stipules linear 3-7 mm long, membranous, axillary, subpersistent; petioles 6-10 mm long, terete, eglandular, densely tomentose; lamina elliptic to ovate-elliptic, coriaceous, 9-23 × 4-10.5 cm, acute to acuminate at apex with acumen 0-8 mm long, rounded to cordate at base; upper surface glabrous and papillose; lower surface bearing well developed stomatal cavities with flattened venation leaving small slit-like lanate-pubescent apertures; midrib prominent above, lower portion densely tomentose; primary veins 8-10 pairs, prominent beneath. Inflorescences paniculate; rachis and branches densely brown tomentose. Flowers 2-3 mm long, borne in clusters on short secondary branches of inflorescence, and on primary branches. Bracts and bracteoles 1-3 mm long, lanceolate to ovate, usually entire, rarely slightly serrate. Receptacle campanulate, tomentose on exterior, villous-tomentose within; pedicels 0.5-1.5 mm long. Calyx lobes acute, tomentose on exterior, puberulous within. Petals absent. Stamens c. 10, inserted in a complete circle; filaments far exceeding calyx lobes, free to base, glabrous. Ovary densely villous. Style villous on lower portion, equalling or exceeding filaments. Fruit globose, to 3 cm diameter; epicarp densely appressedpubescent; pericarp undifferentiated, thin, fragile, sparsely villous-pubescent within.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types

Cerrado (lato sensu), Riverine Forest and/or Gallery Forest, Terra Firme Forest

**Geographic Distribution**Confirmed occurrences



North (Acre, Amazonas, Amapá, Pará, Rondônia, Tocantins)






Northeast (Maranhão, Piauí)

Central-west (Goiás, Mato Grosso)

Southeast (Minas Gerais)

**HERBARIUM MATERIAL**

Silva, MG da, 3230, IAN (IAN156159), IAN (IAN157104), MG (MG054880), NY,  (NY00836091), RB, 465320,  (RB00524948), Mato Grosso

E. Sette-Silva, 240, K, 465320,  (K001181934), NY, 465320,  (NY01292434), US, 465320,  (US01352972), INPA, 201172,   (INPA0201172), Amazonas

**REFERENCE**

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), Species Plantarum: Flora of the World 9. Australian Biological Resources Study, Canberra.

Sothers C.A., Prance G.T. & Chase, M.W. (2016). Towards a monophyletic *Licania*: a new generic classification of the polyphyletic Neotropical genus *Licania* (Chrysobalanaceae). *Kew Bull.* 71: 58.

# *Leptobalanus sprucei* (Hook.f.) Sothers & Prance

## Has as synonym

basionym *Moquilea sprucei* Hook.f.

homotype *Licania sprucei* (Hook.f.) Fritsch

## DESCRIPTION

**Leaf:** abaxial stomatal-cavity; **petiole gland(s)** present. **Inflorescence:** type panicle. **Flower:** stamen number 10; **filament length** exerted; **pedicel** subsessile; **receptacle** campanulate. **Fruit:** exocarp glabrous/smooth.

## ADDITIONAL DESCRIPTION

Trees to 20 m tall. Branches glabrous or puberulous when young. Leaves: stipules caducous (not seen); petioles 6-10 mm long, sparsely puberulous, becoming glabrous, terete to shallowly canaliculate, rugose, with 2 glands on upper surface at base of lamina; lamina oblong to oblong-elliptic, thick-coriaceous, 6-20 × 2.5-6.5 cm, acuminate at apex with acumen 4-15 mm long, rounded to subcuneate at base; upper surface glabrous; lower surface with well developed stomatal cavities; venation plane, with slit-like apertures to cavities filled with lanate pubescence; midrib prominent above, glabrous; primary veins 9-11 pairs, prominent below. Inflorescences terminal and axillary panicles; rachis and branches sparsely puberulous. Flowers c. 3 mm long, in small cymules on short secondary inflorescence branches 2-5 mm long. Bracts and bracteoles c. 1 mm long, ovate, persistent, serrate, often with stipitate glands. Receptacle campanulate, puberulous on exterior, villous-tomentose within; pedicels c. 0.5 mm long. Calyx lobes acute, puberulous on both surfaces. Petals absent. Stamens 10, inserted in a complete circle; filaments exceeding calyx lobes, free almost to base, glabrous. Ovary villous. Style villous for most of length, equalling filaments. Fruit globose; exterior smooth, glabrous, drying black; mesocarp thin, fleshy; endocarp thin, fibrous, puberulous within.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types





Anthropic area, Terra Firme Forest

## Geographic Distribution

### Confirmed occurrences

North (Amazonas, Amapá, Pará, Roraima)

## HERBARIUM MATERIAL

R. Spruce, 1801, RB, 18790,  (RB00537105), P (P00746064), P (P00746063), NY,  (NY00428578), K,  (K000220622), GH,  (GH00046332), Amazonas, **Typus**

## REFERENCE

- Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), Species Plantarum: Flora of the World 9. Australian Biological Resources Study, Canberra.
- Sothers C.A., Prance G.T. & Chase, M.W. (2016). Towards a monophyletic *Licania*: a new generic classification of the polyphyletic Neotropical genus *Licania* (Chrysobalanaceae). *Kew Bull.* 71: 58.



# *Leptobalanus turbinatus* (Benth.) Sothers & Prance

## Has as synonym

basionym *Moquilea turbinata* (Benth.) Hook.f.

homotype *Licania turbinata* Benth.

## DESCRIPTION

**Leaf:** abaxial glabrous; **petiole gland(s)** absent. **Inflorescence:** type panicle. **Flower:** stamen number 11 - 12; **filament length** exerted; **pedicel** pedicellate/subsessile; **receptacle** campanulate. **Fruit:** exocarp glabrous/smooth.

## ADDITIONAL DESCRIPTION

Trees to 15 m or shrub. Branches glabrous when young, not lenticellate. Leaves: stipules caducous; petioles 3-6 mm long, sparsely pubescent when young, soon glabrescent, eglandular, shallowly canaliculate; lamina ovate, 3-11 × 2-6 cm, coriaceous, obtuse to bluntly acuminate at apex with acumen 0-4 mm long, rounded at base, glabrous on both surfaces; palisade glands absent; midrib prominulous above, glabrous; primary veins 8-11 pairs, prominulous on both surfaces. Inflorescences short terminal panicles to 11 cm long; primary branches short, 0.5-1.8 cm long; rachis and branches sparsely grey-puberulous. Flowers 4 mm long, in small cymules on short secondary branches of inflorescence. Bracts and bracteoles 0.5-1 mm long, ovate, eglandular, subpersistent; margins entire or serrulate. Receptacle broadly campanulate, grey-puberulous on exterior, villous within; pedicels c. 0.5 mm long. Calyx lobes acute, puberulous on both surfaces. Petals absent. Stamens 11 or 12, inserted in a complete circle; filaments exceeding calyx lobes, free almost to base, glabrous. Ovary villous at base, glabrous above. Style hirsute on lower portion only, equalling filaments. Fruit when young globose; epicarp smooth, glabrous, drying black; mesocarp thin; endocarp hard, thin, with interior hirsute.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Is endemic from Brazil

## Phytogeographic Domains

Atlantic Rainforest

## Vegetation Types






Coastal Forest (Restinga)

## Geographic Distribution

### Confirmed occurrences

Northeast (Bahia, Pernambuco)

## HERBARIUM MATERIAL

George Gardner, 1149, GH,  (GH00046319), K,  (K000220607), K,  (K000220608), NY,  (NY00335274), NY,  (NY00428599), P (P00746056), P (P00746057), S (S-R-8120), Pernambuco, **Typus**

## REFERENCE

- Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), Species Plantarum: Flora of the World 9. Australian Biological Resources Study, Canberra.
- Sothers C.A., Prance G.T. & Chase, M.W. (2016). Towards a monophyletic *Licania*: a new generic classification of the polyphyletic Neotropical genus *Licania* (Chrysobalanaceae). *Kew Bull.* 71: 58.

# *Leptobalanus wurdackii* (Prance) Sothers & Prance

## Has as synonym

basionym *Licania wurdackii* Prance

## DESCRIPTION

**Leaf:** abaxial glabrous; **petiole gland(s)** present. **Inflorescence:** type panicle. **Flower:** stamen number 8 - 10; filament length exerted; **pedicel** sessile; **receptacle** campanulate. **Fruit:** exocarp glabrous/smooth/verrucose.

## ADDITIONAL DESCRIPTION

Trees, small. Branches lanate-arachnoid pubescent when young, soon becoming glabrous, not lenticellate. Leaves: stipules linear, membranous, 3-4 mm long, subpersistent; petioles 5-9 mm long, densely tomentose, glandular, lightly canaliculate or terete; lamina oblong to oblong-ovate, coriaceous, 5.5-10 × 2.2-5.3 cm, sparsely lanate-pubescent on both surfaces when young, soon becoming glabrous; apex obtuse; base rounded to subcuneate; midrib prominulous above; primary veins 7-10 pairs, prominent beneath, plane above. Flowers c. 4 mm long. Inflorescence terminal and subterminal panicles of cymes; rachis and branches densely yellow-brown pilose-tomentose. Primary bracts lanceolate to 12 mm long, caducous; other bracts and bracteoles lanceolate to ovate, eglandular, to 3 mm long, persistent, tomentose on exterior, glabrous within. Receptacle campanulate, sessile, tomentose on exterior, villous-tomentose within. Calyx lobes acute, pubescent on both surfaces. Petals absent. Stamens 8-10, inserted around complete circle; filaments far exerted, glabrous, free to base. Ovary densely villous-pubescent on basal portion. Style villous on basal part, glabrous above. Fruit lanceolate-fusiform; exocarp smooth, glabrous, sparsely verrucose; mesocarp thin; endocarp thin, fragile, sparsely hirsute within.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types








Riverine Forest and/or Gallery Forest

## Geographic Distribution

### Confirmed occurrences

North (Amazonas)

## HERBARIUM MATERIAL

Maguire, B., 36238, K,  (K000220604), NYBG, 428609,  (NY00428609), FMNH, V0054089F,  (V0054089F), **Typus** C. Farney, 1801, K, V0054089F (K001181697), MG, V0054089F (MG169725), NY, V0054089F,  (NY01254998), RB, 279747,  (RB00070418), US, 279747,  (US01353044), INPA, 170845,  (INPA0170845), Amazonas

## REFERENCE

- Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), Species Plantarum: Flora of the World 9. Australian Biological Resources Study, Canberra.
- Sothers C.A., Prance G.T. & Chase, M.W. (2016). Towards a monophyletic *Licania*: a new generic classification of the polyphyletic Neotropical genus *Licania* (Chrysobalanaceae). *Kew Bull.* 71: 58.

# Licania Aubl.

This treatment is composed of the following taxa: *Licania*, *Licania affinis*, *Licania alba*, *Licania apiculata*, *Licania aracaensis*, *Licania areolata*, *Licania arianaeae*, *Licania bahiensis*, *Licania belemii*, *Licania bellingtonii*, *Licania blackii*, *Licania bracteata*, *Licania canescens*, *Licania cidii*, *Licania cordata*, *Licania coriacea*, *Licania crassivenia*, *Licania cymosa*, *Licania davillifolia*, *Licania dealbata*, *Licania densiflora*, *Licania discolor*, *Licania elliptica*, *Licania farinacea*, *Licania ferreirae*, *Licania glazioviana*, *Licania gracilipes*, *Licania harlingii*, *Licania hebantha*, *Licania hoehnei*, *Licania hypoleuca*, *Licania impressa*, *Licania incana*, *Licania indurata*, *Licania irwinii*, *Licania kunthiana*, *Licania lamentanda*, *Licania lanceolata*, *Licania laxiflora*, *Licania leptostachya*, *Licania littoralis*, *Licania majuscula*, *Licania marleneae*, *Licania maxima*, *Licania membranacea*, *Licania micrantha*, *Licania mollis*, *Licania naviculistipula*, *Licania nelsonii*, *Licania niloi*, *Licania nitida*, *Licania orbicularis*, *Licania ovalifolia*, *Licania pallida*, *Licania paraensis*, *Licania parviflora*, *Licania parvifructa*, *Licania piresii*, *Licania polita*, *Licania pruinosa*, *Licania riedelii*, *Licania robusta*, *Licania rodriguesii*, *Licania rufescens*, *Licania sandwithii*, *Licania santosii*, *Licania savannarum*, *Licania silvae*, *Licania spicata*, *Licania stewardii*, *Licania teixeirae*, *Licania tocantina*, *Licania triandra*, *Licania urceolaris*, *Licania vaupesiana*.

## HOW TO CITE

Sothers, C.A., Prance, G.T. 2020. *Licania* in **Flora do Brasil 2020**. Jardim Botânico do Rio de Janeiro. Available at: <http://floradobrasil.jbrj.gov.br/reflora/floradobrasil/FB16815>.

## Has as synonym

heterotypic *Hedycrea* Schreb.

## DESCRIPTION

Trees to 35 m, shrubs, or rarely a rhizomatous geoxylic suffrutex. Leaves: stipules caducous or persistent, often adnate to petiole base; lamina often with an ill-defined glandular area on upper surface at junction of lamina and the eglandular petiole or with distinct petiolar glands; lower surface glabrous, lanate, tomentose, strigose, pulverulent-farinaceous, pulverulent-furfuraceous or with hair-filled stomatal cavities. Inflorescence a simple or branched raceme of sessile or subsessile cymose glomerules, more rarely a simple or branched raceme of shortly stalked cymose glomerules, rarely a raceme or spike, or a raceme of many-flowered lax cymes. Bracts and bracteoles usually eglandular and not enclosing the flower-buds (except in *L. densiflora*). Flowers bisexual, sub-actinomorphic. Receptacle cupuliform, conical, globose, campanulate or urceolate, hairy inside, but throat without long retrorse hairs. Sepals 5, subequal, acute. Petals absent. Stamens 2-11; filaments inserted in a complete circle,  $\frac{3}{4}$  of a circle or unilateral, included and usually shorter than or rarely equalling calyx, free or connate at base; staminodes usually absent. Ovary 1-carpellary, 1-locular, inserted at base of receptacle tube; style filiform, indistinctly 3-lobed at apex. Fruit a dry or fleshy drupe; epicarp tomentose, glabrous or verrucose, pubescent, pulverulent, or smooth; endocarp glabrous or variously pilose within; thick, hard and woody, or thin and fibrous, without any special mechanisms for seedling escape.

## COMMENTS

A genus of ca. 100 species, distributed from Mexico throughout Central and South America to southeastern Brazil, and in the Leeward Islands.

## Life Form

Shrub, Subshrub, Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest, Caatinga, Central Brazilian Savanna, Atlantic Rainforest

**Vegetation Types**

Amazonian Campinarana, Cerrado (lato sensu), Riverine Forest and/or Gallery Forest, Inundated Forest (Igapó), Terra Firme Forest, Inundated Forest (Várzea), Seasonally Semideciduous Forest, Ombrophylous Forest (Tropical Rain Forest), Mixed Ombrophylous Forest, Coastal Forest (Restinga), Amazonian Savanna

**Geographic Distribution**Confirmed occurrences

North (Acre, Amazonas, Amapá, Pará, Rondônia, Roraima, Tocantins)  
 Northeast (Alagoas, Bahia, Maranhão, Paraíba, Pernambuco, Piauí, Sergipe)  
 Central-west (Distrito Federal, Goiás, Mato Grosso do Sul, Mato Grosso)  
 Southeast (Espírito Santo, Minas Gerais, Rio de Janeiro, São Paulo)

Possible occurrences

North (Acre)

**IDENTIFICATION KEY**

1. Leaf undersurface entirely glabrous.
  2. Receptacle urceolate; leaves membranous, base cuneate.....**L. glazioviana**
  2. Receptacle campanulate; leaves coriaceous, base rounded to cordate (except *L. marleneae*)
    3. Leaf apex rounded to obtuse; stamens 4-5.
      4. Stipules axillary, caducous; leaf base rounded; petioles 3-5 mm.....**L. irwinii**
      4. Stipules adnate to petiole base; leaf base cordate or cuneate; petioles 2-3 mm.
        5. Leaf base cuneate..... **L. marleneae**
        5. Leaf base cordate to rounded.....**L. littoralis**
    3. Leaf apex distinctly acuminate; stamens 3 or 6-7.
      6. Stamens 3; stipules axillary, caducous; petioles 2-4 mm long; with 2 glands.**L. silvae**
      6. Stamens 6-7; stipules adnate to petiole base; petioles 6-14 mm long; without glands.
        - .....**L. polita**
  1. Leaf undersurface pubescent or with hair-filled stomatal cavities.
    7. Leaf undersurface with a pulverulent farinaceous pubescence.
      8. Flowers borne in cymules on long slender secondary branches attached to the primary inflorescence branches.
        9. Leaf apex rounded; receptacle urceolate; stamens 5-6.....**L. cymosa**
        9. Leaf apex acuminate; receptacle campanulate; stamens 3-5.
          10. Exterior of flowers and branches of inflorescence glabrous..... **L. parvifructa**
          10. Exterior of flowers and inflorescence branches puberulous
            11. Inflorescence branches sparse puberulous; midrib and veins plane or prominulous on upper surface; leaves 2.5-10 cm long..... **L. hypoleuca**
            11. Inflorescence branches glabrous; midrib and veins prominent on upper surface; leaves 6.5-16 cm long.....**L. piresii**
      8. Flowers sessile or subsessile on primary branches of inflorescence.
        12. Receptacle urceolate.
          13. Leaf apex rounded to retuse; laminas usually orbicular, rarely oblong-elliptic.
            - ..... **L. orbicularis**
          13. Leaf apex acute or acuminate, lamina elliptic or oblong.
            14. Leaf apex acute, margins often revolute.
              15. Receptacle narrowly urceolate; calyx lobes lanceolate; stamens 3.....**L. niloi**
              15. Receptacle broadly urceolate; calyx lobes deltoid; stamens 4-5.... **L. coriacea**
            14. Leaf apex distinctly acuminate, margins plane.
              16. Stamens 3.....**L. affinis**
              16. Stamens 5.
                17. Leaf apex caudate; lamina chartaceous.....**L. teixeirae**
                17. Leaf apex acuminate; lamina coriaceous.....**L. urceolaris**
      12. Receptacle campanulate.
        18. Primary veins and midrib slightly impressed on upper surface; lamina chartaceous; stamens 6-7..... **L. daviliifolia**
        18. Primary veins and midrib plane or prominent; lamina coriaceous; stamens 3-5.
          19. Primary veins prominulous on upper surface; leaves 12-19 cm long. **L. elliptica**
          19. Primary veins plane above; leaves 3.5-12 cm long

20. Stipules axillary; fruit epicarp rufous pubescent.....**L. farinacea**
20. Stipules adnate to base of petiole; fruit epicarp glabrous..... **L. canescens**
7. Leaf undersurface lanate-arachnoid pubescent or with hair-filled stomatal cavities.
21. Leaf undersurface with hair filled stomatal cavities.
22. Flowers borne in cymules on long slender secondary branches attached to the primary inflorescence branches.
23. Midrib impressed on upper surface of lamina.
24. Receptacle urceolate; leaves oblong to elliptic.....**L. arianae**
24. Receptacle campanulate; leaves oblong-lanceolate.....**L. impressa**
23. Midrib plane or prominent on upper surface of lamina.
25. Stamens 3-5; inflorescence puberulous; leaf apex with acumen 6-15 mm long.  
..... **L. pallida**
25. Stamens 7; inflorescence tomentellous; leaf apex rounded to acute... **L. santosii**
22. Flowers sessile or subsessile on primary branches of inflorescence.
26. Stamens 3.
27. Midrib impressed on upper leaf surface; stipules adnate to petiole base; lamina chartaceous.....**L. tocantina**
27. Midrib plane on upper leaf surface; stipules axillary; lamina coriaceous.  
.....**L. triandra**
26. Stamens 5-11.
28. Flowers 6-7.5 mm long; stipules triangular, navicular, to 13 mm long.  
.....**L. naviculistipula**
28. Flowers 1.4-3 mm long; stipules to 7 mm long.
29. Midrib impressed on leaf upper surface.
30. Stipules axillary, caducous
31. Leaves oblong-elliptic; inflorescence brown appressed tomentellous; stomatal cavities covered by lanate pubescence..... **L. areolata**
31. Leaves ovate-lanceolate; inflorescence grey tomentellous; stomatal cavities conspicuous because of glabrous nerves and veins. **L. crassivenia**
30. Stipules adnate to base of petioles, persistent.
32. Receptacle urceolate; exterior of flowers sparsely grey-puberulous not completely covering the surface.....**L. bellingtonii**
32. Receptacle campanulate or conical; exterior of flowers tomentellous or tomentose.
33. Lower leaf surface with extremely conspicuous stomatal cavities with pubescence confined to cavities and made obvious by almost glabrous venation; petioles without glands.
34. Inflorescence and flowers ferruginous pubescent; leaf apex acute or bluntly acuminate; petioles 3-5 mm. ....**L. riedelii**
34. Inflorescence and flower grey-puberulous; leaf apex acuminate; petioles 7-10 mm.....**L. bracteata**
33. Lower leaf surface with poorly developed stomatal cavities obscured by dense pubescence; petioles with 2 conspicuous glands.
35. Receptacle conical, 4-5mm long, fruit with stipe 2-6 mm long, epicarp tomentellous; stipules adnate to base of petiole..... **L. majuscula**
35. Receptacle campanulate, 2.5-3 mm long; fruit with stipe 8-15 mm long, epicarp pulverulent; stipules axillary..... **L. alba**
29. Midrib plane or prominulous on leaf upper surface.
36. Receptacle urceolate; exterior of flowers sparsely grey-puberulous not completely covering the surface; flowers c. 3 mm tall.....**L. bellingtonii**
36. Receptacle campanulate; exterior of flowers tomentellous or puberulous forming a complete covering; flowers c. 2 mm tall. ....**L. parviflora**
21. Leaf undersurface lanate or lanate arachnoid pubescent, without cavities.
37. Flowers borne in cymules on long slender secondary branches attached to the primary inflorescence branches.
38. Lower leaf surface deeply reticulate hidden by dense lanate-arachnoid pubescence
39. Bracteoles enclosing groups of flower buds, peduncles of cymules short and thick, 1-3 mm long; inflorescence branches brown tomentose.... **L. densiflora**
39. Bracteoles not enclosing groups of flower buds; peduncles of cymules long and

- slender; inflorescence branches grey puberulous.....**L. dealbata**
38. Leaf lower surface with a fine plane or prominulous venation, short appressed pubescence.
40. Exterior of flowers and inflorescence branches entirely glabrous; leaves oblong to oblong-lanceolate, 3.5-8 cm long.....**L. gracilipes**
40. Exterior of flowers and inflorescence branches grey-puberulous; leaves oblong, 8-19 cm long.....**L. membranacea**
37. Flowers sessile or subsessile on primary branches of inflorescence or on short thick peduncles less than 0.5 mm long.
41. Stamens 3.
42. Receptacle urceolate
43. Stipules axillary or caducous
44. Leaf apex rounded to acute; petioles 2-3mm long; lamina coriaceous.....**L. savannarum**
44. Leaf apex with a finely pointed acumen; petioles 5-6 mm long; lamina membranous..... **L. pruinosa**
43. Stipules adnate to petiole base, usually persistent.
45. Leaf apex rounded to bluntly acute, lamina oval to elliptic; midrib impressed above..... **L. ovalifolia**
45. Leaf apex acute to acuminate; midrib plane above; lamina oblong to oblong-elliptic.
46. Flowers 2 mm tall; interior of receptacle glabrous on upper portion; leaves 3-5.5 x 2-3 cm..... **L. aracaensis**
46. Flowers 4-5 mm tall; interior of receptacle pubescent on upper portion; leaves 4.5-10.5 x 2-5.5 cm.....**L. nitida**
42. Receptacle campanulate
47. Leaf apex acute, midrib plane on upper surface, primary veins 10-12 pairs. .... **L.micrantha**
47. Leaf apex acuminate, midrib usually slightly impressed above; primary veins 5-9.
48. Stipules adnate to petiole base.
49. Inflorescence branches grey puberulous; midrib slightly impressed above ..... **L. bahiensis**
49. Inflorescence branches tomentellous; midrib plane above... **L. apiculata**
48. Stipules axillary; inflorescence branches tomentose..... **L. discolor**
41. Stamens 5-11.
50. Stipules adnate to base of petiole.
51. Midrib impressed on leaf upper surface.
52. Leaf base distinctly cordate or subcordate; petioles 1.5-6 mm long.
53. Stamens 8-11; flowers 3-3.5 mm tall.
54. Petioles 1-2 mm; leaf apex retuse to acute; leaf undersurface smooth, waxy appressed lanate. ....**L. stewardii**
54. Petioles 3-6 mm; leaf apex acuminate; leaf undersurface reticulate, lanate..... **L. mollis**
53. Stamens 5-6; flowers c 2 mm tall.
55. Inflorescence a spike; leaf apex caudate; white lanate pubescent beneath.....**L. nelsonii**
55. Inflorescence a racemose panicle; leaf apex rounded to acute; deeply reticulate under lanate pubescence beneath..... **L. hebantha**
52. Leaf base rounded to cuneate; petioles 8-15 mm long.....**L. paraensis**
51. Midrib plane or prominulous on leaf upper surface.
56. Inflorescence a spike.....**L. incana**
56. Inflorescence a racemose panicle.
57. Petioles 12-20 mm long; leaves 9-22 x 5.5-10 cm.....**L.robusta**
57. Petioles 2.5 -12 mm long; leaves 3-16 x 1.3-7.5 cm
58. Primary leaf veins 8-10 pairs; leaves submembranaceous.....**L.maxima**
58. Primary leaf veins 5-9 pairs; leaves coriaceous.
59. Petioles 7-15 mm; lamina 7-16 x 3-8 cm, stipules subsistent; inflorescence tomentellous, glabrous or sparsely tomentellous



60. Petioles tomentose; leaf lower surface deeply reticulate....**L. blackii**  
 60. Petioles glabrous; leaf lower surface not deeply reticulate.... **L. cidii**  
 59. Petioles 2-5 mm; lamina 3-8.5 x 1.3-5 cm, stipules persistent;  
 inflorescence sparse grey puberulous.....**L. kunthiana**  
 50. Stipules axillary, intrapetiolar or caducous.  
 61. Inflorescence a spike or glomerule.  
 62. Flowers 2.5 mm long; receptacle broadly cupuliform; inflorescence  
 puberulous; venation of lower leaf surface conspicuous.....**L. spicata**  
 62. Flowers 1.5-2 mm long; receptacle campanulate; inflorescence tomentose;  
 venation of leaf lower surface inconspicuous.  
 63. Leaves thin and membranous, oblong to oblong-lanceolate, acumen finely  
 pointed; flowers in dense glomerules.....**L. leptostachya**  
 63. Leaves coriaceous, lanceolate, the apex acute; inflorescence a spike or  
 little-branched terminal panicle.....**L. lanceolata**  
 61. Inflorescence a racemose panicle.  
 64. Midrib and usually veins of leaf upper surface impressed.  
 65. Leaf base distinctly cordate; inflorescence branches hispid.....**L. cordata**  
 65. Leaf base rounded to cuneate; Inflorescence branches not hispid.  
 66. Flowers 3.5-5 mm long; receptacle broadly cupuliform.... **L. sandwichii**  
 66. Flowers 1.5-2.5 mm long; receptacle campanulate.  
 67. Leaf lower surface with parallel secondary veins, giving a  
 prominently reticulate appearance..... **L. laxiflora**  
 67. Leaf lower surface lanate, but not prominently reticulate.  
 68. Stipules linear, c. 5 mm long, persistent.....**L. vaupesiana**  
 68. Stipules not exceeding 2.5 mm long, often caducous.  
 69. Leaves oblong-lanceolate.....**L. indurata**  
 69. Leaves ovate-elliptic to oblong.  
 70. Inflorescence much branched, spreading, lax; lower leaf surface  
 rufous pubescent.....**L. rufescens**  
 70. Inflorescence densely crowded, compact, little-branched; lower  
 leaf surface grey-brown pubescent.  
 71. Leaves finely acuminate, the acumen 8-12 mm long; stipules  
 caducous.. .....**L. harlingii**  
 71. Leaf apex acute or bluntly acuminate; stipules persistent....  
 .....**L. hoehnei**  
 64. Midrib of upper leaf surface plane or prominulous.  
 72. Petioles 10-15 mm long; receptacle velutinous on exterior.  
 73. Leaves thickly coriaceous with recurved margins; apex apiculate;  
 flowers 4.5-5.5 mm long.....**L. lamentanda**  
 73. Leaves chartaceous, finely acuminate at apex; flowers 2-2.5 mm long..  
 .....**L. belemii**  
 72. Petioles 6-12 mm long; receptacle rarely velutinous, only *L. rodriguesii*  
 74. Inflorescence puberulous; young leaves without glands at junction with  
 petiole; receptacle velutinous pubescent; primary leaf veins 6-7  
 pairs.....**L. rodriguesii**  
 74. Inflorescence brown-tomentellous, young leaves with large glands at  
 junction with petiole; receptacle tomentellous; primary leaf veins  
 10-13 pairs..... **L. ferreirae**

## REFERENCE

- Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), Species Plantarum: Flora of the World 9. Australian Biological Resources Study, Canberra.  
 Sothers C.A., Prance G.T. & Chase, M.W. (2016). Towards a monophyletic *Licania*: a new generic classification of the polyphyletic Neotropical genus *Licania* (Chrysobalanaceae). *Kew Bull.* 71: 58.

# *Licania affinis* Fritsch

## Has as synonym

*Licania schomburgkiana* Klotzsch

## DESCRIPTION

**Leaf:** shape elliptic/oblong; **abaxial indumentum** waxy/pulverulent farinaceous; **petiole gland(s)** present. **Inflorescence:** type racemose panicle. **Flower:** **receptacle shape** urceolate; **pedicel** sessile; **stamen number** 3; **filament length** included; **filament fusion** free. **Fruit:** **epicarp** smooth/glabrous.

## ADDITIONAL DESCRIPTION

Trees. Branches glabrous when young, lenticellate. Leaves: stipules linear, 3-5 mm long, coriaceous, persistent, adnate to base of petiole; petioles 3-6 mm long, glabrous, rugose, shallowly canaliculate, with 2 obscure sessile glands near to lamina; lamina elliptic to oblong, thick-coriaceous, 5-15.5 × 2.5-6.7 cm, acuminate at apex with acumen 3-12 mm long, subcordate to subcuneate at base glabrous above, with waxy brown pulverulent-farinaceous pubescence beneath; margins plane; midrib glabrous above, prominulous; primary veins 4-7 pairs, arcuate, prominent beneath, prominulous above. Inflorescence of little-branched terminal and axillary racemose panicles; rachis and branches glabrous to glabrescent. Flowers c. 3 mm long, on primary branches of inflorescence. Bracts and bracteoles 0.3-1 mm long, deltoid, persistent, puberulous on exterior. Receptacle urceolate, sessile, tomentellous on exterior, sparsely puberulous within. Calyx lobes acute, tomentellous on both surfaces. Petals absent. Stamens 3, unilateral; filaments shorter than calyx lobes, glabrous, free to base. Ovary short-tomentose. Style equalling filaments, pubescent throughout. Fruit to 4 cm long with stipe c. 1 cm long, pyriform; epicarp glabrous, drying yellow and wrinkled; mesocarp thin; endocarp thick, hard, granular and fibrous, sparsely hirsutulous within.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types


Ombrophyllous Forest (Tropical Rain Forest)





## Geographic Distribution

### Confirmed occurrences

North (Pará)

## HERBARIUM MATERIAL

G.T. Prance, 4049, INPA, 19689,  (INPA0019689), Roraima

G.A. Black, 50-9808, NY,  (NY01292541), NY,  (NY01195552), NY,  (NY01195548), IAN (IAN054675), IAN, NY  
Schomburgk, 822, P (P00745945), P (P00745944), P (P00745943), K,  (K000220713), **Typus**

## REFERENCE

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), Species Plantarum: Flora of the World 9. Australian Biological Resources Study, Canberra.

Sothers C.A., Prance G.T. & Chase, M.W. (2016). Towards a monophyletic *Licania*: a new generic classification of the polyphyletic Neotropical genus *Licania* (Chrysobalanaceae). *Kew Bull.* 71: 58.

# *Licania alba* (Bernoulli) Cuatrec.

## Has as synonym

homotype *Theobroma alba* Bernoulli

heterotypic *Licania longifolia* Benoist

heterotypic *Licania venosa* Rusby

## DESCRIPTION

**Leaf:** shape elliptic/oblong-elliptic; **abaxial indumentum** stomatal-cavity/lanate-pubescent; **petiole gland(s)** absent/present. **Inflorescence:** type racemose panicle. **Flower:** receptacle shape campanulate; **pedicel** sessile; **stamen number** 6 - 8; **filament length** included; **filament fusion** free. **Fruit:** epicarp pulverulent.

## ADDITIONAL DESCRIPTION

Tree to 35 m tall. Branches pulverulent when young, becoming glabrous with age. Leaves with stipules elliptic, to 7 mm long, subsistent, axillary; petioles 9-17 mm long, short-tomentellous-pubescent, canaliculate, usually with medial glands; lamina oblong-elliptic to elliptic, coriaceous, 9-27 × 4-10 cm, acuminate at apex with acumen 3-10 mm long, rounded at base, glabrous above; lower surface with deep stomatal cavities rather obscured by dense lanate pubescence; midrib impressed above for entire length, pulverulent near base but becoming glabrous with age; primary veins 8-12 pairs, prominent beneath, impressed and glabrous above. Inflorescences terminal and axillary racemose panicles; rachis and branches tomentellous-pubescent. Flowers 2.5-3 mm long, sessile on primary and secondary branches of inflorescence. Bracts and bracteoles ovate, to 4 mm long, persistent, often with paired glands at base, tomentellous on exterior. Receptacle campanulate, sessile, tomentellous on exterior, tomentose within. Calyx lobes acute, tomentellous on both surfaces. Petals absent. Stamens 6-8, inserted in a complete circle; filaments shorter than calyx lobes, pubescent, free to base. Ovary villous. Style equalling filaments, lanate throughout. Fruit pyriform, to 9 cm long, including stipe to 15 mm long; epicarp sordid ferruginous-brown pulverulent; mesocarp thin, very hard, sparsely hirsutulous within.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types

Ombrophyllous Forest (Tropical Rain Forest)


## Geographic Distribution

### Confirmed occurrences

North (Amazonas, Amapá, Pará)

## HERBARIUM MATERIAL

S.A. Mori, 17547, MG, NY, SP

N. T. da Silva, 60705, NY, 1195560,  (NY01195560), Amazonas

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. *Flora Neotropica* 9: 1-409.

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), *Species Plantarum: Flora of the World* 9. Australian Biological Resources Study, Canberra.

Sothers C.A., Prance G.T. & Chase, M.W. (2016). Towards a monophyletic *Licania*: a new generic classification of the polyphyletic Neotropical genus *Licania* (Chrysobalanaceae). *Kew Bull.* 71: 58.

# *Licania apiculata* Prance

## DESCRIPTION

**Leaf:** shape oblong/oblong lanceolate; **abaxial indumentum** lanate-pubescent; **petiole gland(s)** absent. **Inflorescence:** type racemose panicle. **Flower:** **receptacle shape** campanulate; **pedicel** sessile; **stamen number** 3; **filament length** included; **filament fusion** free. **Fruit:** **epicarp** pubescent.

## ADDITIONAL DESCRIPTION

Shrubs. Branches glabrous not lenticellate when young. Leaves: stipules linear, to 2 mm long, glabrous, caducous, adnate to base of petiole; petioles 3-4 mm long, glabrescent, terete, eglandular; lamina oblong or oblong-lanceolate, coriaceous, 5-10 × 1.7-3.5 cm, apiculate at apex, cuneate at base, glabrous and shiny above, densely lanate-pubescent beneath; midrib glabrous and plane above; secondary veins 10-12 pairs, slightly prominent on both surfaces. Inflorescences of terminal racemose panicles; rachis and branches puberulous or tomentellous. Bracts and bracteoles 1-3 mm long, linear, small, persistent, puberulous on exterior. Flowers 2-3 mm long. Receptacle campanulate, sessile, tomentose on exterior, tomentellous within. Calyx lobes acute, tomentellous on both surfaces. Petals absent. Stamens 3, unilateral; filaments glabrous, free to base, shorter than calyx lobes. Ovary tomentellous. Style pubescent to apex. Fruit (immature) pyriform; exocarp sordid-pubescent.

## Life Form

Shrub

## Substrate

Terrestrial

## DISTRIBUTION

Native, Is endemic from Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types


Riverine Forest and/or Gallery Forest, Ombrophylous Forest (Tropical Rain Forest)

## Geographic Distribution

### Confirmed occurrences

North (Amazonas)

## HERBARIUM MATERIAL

Rodrigues, W.A., 3970, RB, 170757,  (RB00537180), INPA, Amazonas

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. *Flora Neotropica* 9: 1-409.

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), *Species Plantarum: Flora of the World* 9. Australian Biological Resources Study, Canberra.

Sothers C.A., Prance G.T. & Chase, M.W. (2016). Towards a monophyletic *Licania*: a new generic classification of the polyphyletic Neotropical genus *Licania* (Chrysobalanaceae). *Kew Bull.* 71: 58.

# *Licania aracaensis* Prance

## DESCRIPTION

**Leaf:** shape oblong; **abaxial indumentum** lanate tomentose; **petiole gland(s)** absent. **Inflorescence:** type racemose panicle. **Flower:** **receptacle shape** urceolate; **pedicel** sessile; **stamen number** 3; **filament length** included; **filament fusion** free. **Fruit:** **epicarp** glabrous.

## ADDITIONAL DESCRIPTION

Tree to 2 m tall. Branches puberulous when young, soon becoming glabrous and lenticellate. Leaves: stipules persistent, lanceolate, 1-1.5 mm long, adnate to base of petiole; petioles 3-4 mm long, terete, sparsely puberulous, eglandular; lamina oblong, conduplicate, coriaceous, 3-5.5 × 2-2.8 cm, subcuneate at base, acute to bluntly acuminate at apex with acumen 2-6 mm long, glabrous above, densely lanate-tomentose beneath; midrib plane above, prominulous beneath; primary veins 6-8 pairs, plane above, prominulous beneath. Inflorescences terminal and subterminal racemose panicles 4-7.5 cm long; rachis and branches puberulous. Bracts and bracteoles triangular, persistent, tomentose on exterior, c. 0.75 mm long. Flowers c. 2 mm long. Receptacle urceolate, sessile, yellow-tomentellous on exterior, tomentose towards base within. Petals absent. Stamens 3, unilateral, opposite 3 calyx lobes; filaments glabrous, shorter than calyx lobes. Ovary tomentose. Style puberulous, shorter than calyx lobes. Fruit pyriform; exocarp glabrous, wrinkled when dry; stipe 5-10 mm in dry fruit.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Is endemic from Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types


Ombrophyllous Forest (Tropical Rain Forest), Amazonian Savanna

## Geographic Distribution

### Confirmed occurrences

North (Amazonas)

## HERBARIUM MATERIAL

J.M. Pires, 15027, NY, 428336,  (NY00428336), RB, INPA, Amazonas, **Typus**

## REFERENCE

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), Species Plantarum: Flora of the World 9. Australian Biological Resources Study, Canberra.  
Sothers C.A., Prance G.T. & Chase, M.W. (2016). Towards a monophyletic *Licania*: a new generic classification of the polyphyletic Neotropical genus *Licania* (Chrysobalanaceae). *Kew Bull.* 71: 58.

# *Licania areolata* Prance

## DESCRIPTION

**Leaf:** shape oblong-elliptic; **abaxial indumentum** stomatal-cavity/lanate-pubescent; **petiole gland(s)** absent. **Inflorescence:** type racemose panicle. **Flower:** **receptacle shape** campanulate/globose; **pedicel** sessile; **stamen number** 5; **filament length** included; **filament fusion** free. **Fruit:** **epicarp** rufous velutinous.

## ADDITIONAL DESCRIPTION

Trees to 25 m tall, the young branches sparsely puberulous, soon glabrous. Leaves: stipules axillary, ovate, 1 mm long, caducous; petioles 6 – 12 mm long, slightly canaliculate, eglandular; lamina oblong-elliptic, thinly coriaceous, 5 – 8.5 × 1.5 – 3.5 cm; finely acuminate at apex, the acumen 5 – 15 mm long, cuneate at base; glabrous above, lanate pubescent and deeply reticulate with stomatal cavities beneath; midrib slightly impressed above, prominent and sparsely puberulous beneath; primary veins 7 – 8 plane or slightly impressed above, prominulous beneath. Inflorescence of terminal and subterminal racemose panicles, rachis and branches appressed tomentellous. Bracts and bracteoles minute, triangular c 1 mm long, tomentellous on exterior, almost glabrous within. Flowers c. 2 mm long, sessile. Receptacle campanulate-globular, grey tomentellous on exterior, tomentose within; calyx lobes triangular, acute, 0.4 mm long, tomentellous on both surfaces. Petals absent. Stamens 5, unilateral, filaments shorter than calyx lobes. Ovary inserted at base, of receptacle, tomentose; style inserted at base of ovary sparse puberulous. Fruit orbicular and slightly narrowed towards peduncle, 4.5 × 4.5 cm, exocarp velvety rufous-brown.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Is endemic from Brazil

## Phytogeographic Domains

Atlantic Rainforest

## Vegetation Types

Ombrophyllous Forest (Tropical Rain Forest)

## Geographic Distribution

### Confirmed occurrences

Southeast (Espírito Santo)

## HERBARIUM MATERIAL

G. Hatschbach, 61607, K (K001250466), Espírito Santo

G. Hatschbach, 61607, CEPEC,  (CEPEC00070101), Espírito Santo

Hatschbach, M, 61607, SPF,  (SPF00112478), Espírito Santo

G. Hatschbach, 61607, K, Espírito Santo, **Typus**

# *Licania arianae* Prance

## DESCRIPTION

**Leaf:** shape oblong-elliptic/oblong; **abaxial indumentum** stomatal-cavity; **petiole gland(s)** absent. **Inflorescence:** type panicle. **Flower:** **receptacle shape** urceolate; **pedicel** sessile; **stamen number** 6 - 7; **filament length** included; **filament fusion** free. **Fruit:** **epicarp** unknown.

## ADDITIONAL DESCRIPTION

Trees to 20 m tall. Branches densely ferrugineous-tomentose when young. Leaves: stipules 6-10 mm long, 1.5-2 mm broad at base, lanceolate, persistent, adnate to extreme base of petiole; petioles 6-8 mm long, densely ferrugineous-pubescent, canaliculate; lamina oblong to oblong-elliptic, coriaceous, 7-11 × 3.5-5 cm, rounded to subcuneate at base, bluntly acuminate or acute at apex with acumen 0-5 mm long, glabrous above, with conspicuous deep-set stomatal cavities beneath, filled with a lanate white pubescence; midrib impressed for entire length above, prominent and ferrugineous-tomentose beneath; primary veins 10-15 pairs, plane above, prominent and with a few sparse hairs beneath. Inflorescences of terminal and subterminal panicles; rachis and branches densely ferrugineous-tomentose. Bracts and bracteoles minute, c. 1 mm long, persistent. Flowers 5-6 mm long, inserted in small groups of cymules attached to primary branches by short thick peduncles; receptacle urceolate, slightly gibbous, tomentose on exterior, lanate within. Calyx lobes acute, tomentose on both surfaces. Petals absent. Stamens 6 or 7, unilateral with large lanate ridge opposite bearing short staminodes; filaments shorter than calyx lobes, unequal in length. Ovary inserted at base of receptacle, villous; style exceeding filaments in length, lanate for entire length. Fruit not seen.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Is endemic from Brazil

## Phytogeographic Domains

Atlantic Rainforest

## Vegetation Types


Ombrophyllous Forest (Tropical Rain Forest)

## Geographic Distribution

### Confirmed occurrences

Southeast (Espírito Santo)

## HERBARIUM MATERIAL

D.A. Folli, 228, RB, 230741,  (RB00537059), NY, Espírito Santo, **Typus**

## REFERENCE

- Prance, G.T. 1989. Chrysobalanaceae (Supplement). *Flora Neotropica* 9: 1-267.
- Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), *Species Plantarum: Flora of the World* 9. Australian Biological Resources Study, Canberra.
- Sothers C.A., Prance G.T. & Chase, M.W. (2016). Towards a monophyletic *Licania*: a new generic classification of the polyphyletic Neotropical genus *Licania* (Chrysobalanaceae). *Kew Bull.* 71: 58.



# *Licania bahiensis* Prance

## DESCRIPTION

**Leaf:** shape oblong-elliptic; **abaxial indumentum** lanate-pubescent; **petiole gland(s)** absent. **Inflorescence:** type racemose panicle. **Flower:** **receptacle shape** campanulate; **pedicel** sessile; **stamen number** 3; **filament length** included; **filament fusion** free. **Fruit:** **epicarp** unknown.

## ADDITIONAL DESCRIPTION

Trees. Branches glabrous when young, lenticellate. Leaves: stipules c. 3 mm long, persistent, lanceolate, puberulous, adnate to base of petiole; petioles 5-6 mm long, puberulous, terete, eglandular; lamina oblong-elliptic, coriaceous, 5.5-8 × 2.5-4.5 cm, apiculate to acuminate at apex with acumen 1-5 mm long, rounded to subcuneate at base, glabrous above, densely lanate-pubescent beneath; venation plane; midrib glabrous, slightly impressed above; primary veins 6-8 pairs, prominent beneath, plane above. Inflorescences in terminal and axillary racemose panicles; rachis and branches grey-puberulous. Bracts and bracteoles 0.5-1.5 mm long, ovate, persistent, puberulous on exterior. Flowers c. 2 mm long. Receptacle campanulate, sessile, grey-tomentellous on exterior, tomentose within. Calyx lobes acute, tomentellous on exterior, puberulous within. Petals absent. Stamens 3, unilateral; filaments glabrous, free to base, shorter than calyx lobes. Ovary villous. Style pubescent to apex. Fruit not seen.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Is endemic from Brazil

## Phytogeographic Domains

Atlantic Rainforest

## Vegetation Types

Ombrophyllous Forest (Tropical Rain Forest)

## Geographic Distribution

### Confirmed occurrences

Northeast (Bahia)

## HERBARIUM MATERIAL

H.P. Velloso, 736, NY, 428342,  (NY00428342), R, Bahia, **Typus**

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. *Flora Neotropica* 9: 1-409.

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), *Species Plantarum: Flora of the World* 9. Australian Biological Resources Study, Canberra.

Sothers C.A., Prance G.T. & Chase, M.W. (2016). Towards a monophyletic *Licania*: a new generic classification of the polyphyletic Neotropical genus *Licania* (Chrysobalanaceae). *Kew Bull.* 71: 58.

# *Licania belemii* Prance

## DESCRIPTION

**Leaf:** shape oblong ovate; **abaxial indumentum** lanate tomentose; **petiole gland(s)** absent. **Inflorescence:** type racemose panicle. **Flower:** **receptacle shape** campanulate; **pedicel** sessile; **stamen number** 5 - 6; **filament length** included; **filament fusion** free. **Fruit:** **epicarp** unknown.

## ADDITIONAL DESCRIPTION

Trees to 20 m tall. Branches glabrous when young. Leaves: stipules caducous (not seen); petioles 10-12 mm long, puberulous when young soon becoming glabrous; lamina oblong-ovate, coriaceous, 5-9.5 × 2.6-4.5 cm, with acumen 3-7 mm long, subcuneate at base, glabrous above, lanate-tomentose beneath; venation reticulate; midrib plane and glabrous above; primary veins 6-8 pairs, prominent beneath, plane above. Inflorescences of terminal and subterminal racemose panicles; rachis and branches sparsely tomentellous. Bracts and bracteoles 0.2-5 mm long, persistent, tomentellous. Flowers 2-2.5 mm long. Receptacle campanulate, sessile, velutinous-tomentellous on exterior, tomentose within. Calyx lobes acute, tomentellous on both surfaces. Petals absent. Stamens 5 or 6, unilateral; filaments glabrous, free to base, shorter than calyx lobes. Ovary tomentose. Style pubescent to apex. Fruit not seen.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Is endemic from Brazil

## Phytogeographic Domains

Atlantic Rainforest

## Vegetation Types

Ombrophyllous Forest (Tropical Rain Forest)




## Geographic Distribution

### Confirmed occurrences

Northeast (Bahia)

Southeast (Espírito Santo)

## HERBARIUM MATERIAL

Belém, R.P., 3211, NY,  (NY00428343), CEPEC,  (CEPEC00003766), UB, RB, Bahia, **Typus**  
S.A. Mori, s.n., RB, 285381,  (RB00069526), Bahia

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. *Flora Neotropica* 9: 1-409.

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), *Species Plantarum: Flora of the World* 9. Australian Biological Resources Study, Canberra.

Sothers C.A., Prance G.T. & Chase, M.W. (2016). Towards a monophyletic *Licania*: a new generic classification of the polyphyletic Neotropical genus *Licania* (Chrysobalanaceae). *Kew Bull.* 71: 58.

# *Licania bellingtonii* Prance

## DESCRIPTION

**Leaf:** shape oblong-elliptic; **abaxial indumentum** stomatal-cavity; **petiole gland(s)** absent. **Inflorescence:** type panicle. **Flower:** receptacle shape urceolate; **pedicel** sessile; **stamen number** 5; **filament length** included; **filament fusion** free. **Fruit:** epicarp unknown.

## ADDITIONAL DESCRIPTION

Trees. Branches sparsely puberulous when young, glabrescent, lenticellate. Leaves: stipules lanceolate, 3-5 mm long, persistent, sparsely puberulous, adnate to base of petiole; petioles 3-5 mm long, sparsely pubescent, terete, eglandular; lamina oblong-elliptic, coriaceous, 6-8.5 × 2-4 cm, acuminate at apex with acumen 6-10 mm long, cuneate at base, glabrous above, with shallow hair-filled stomatal cavities beneath; midrib plane or slightly impressed toward base above, tomentellous soon becoming glabrous; primary veins 8-10 pairs, plane above, prominent beneath. Inflorescences in terminal and subterminal panicles; rachis and branches sparsely puberulous. Bracts and bracteoles 0.2-1 mm long, ovate, persistent. Flowers c. 3 mm long. Receptacle urceolate, sessile, sparsely puberulous on exterior, tomentose within. Calyx lobes acute, sparsely tomentellous on both surfaces. Petals absent. Stamens 5, unilateral; filaments glabrous, free, shorter than calyx lobes. Ovary tomentose. Style lanate-pubescent to apex. Fruit not seen.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Is endemic from Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types

Terra Firme Forest, Ombrophyllous Forest (Tropical Rain Forest)

## Geographic Distribution

### Confirmed occurrences

North (Amazonas, Rondônia)

## HERBARIUM MATERIAL

G.T. Prance, 7000, S (S-R-8079), NY,  (NY00428344), GH,  (GH00046248), MG (MG038887), K,  (K000220733), INPA, NY, P, US, Rondônia, **Typus**

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. *Flora Neotropica* 9: 1-409.

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), *Species Plantarum: Flora of the World* 9. Australian Biological Resources Study, Canberra.

Sothers C.A., Prance G.T. & Chase, M.W. (2016). Towards a monophyletic *Licania*: a new generic classification of the polyphyletic Neotropical genus *Licania* (Chrysobalanaceae). *Kew Bull.* 71: 58.

# *Licania blackii* Prance

## DESCRIPTION

**Leaf:** shape oblong lanceolate/oblong ovate; **abaxial indumentum** lanate/arachnoid; **petiole gland(s)** absent. **Inflorescence:** type racemose panicle. **Flower:** **receptacle shape** campanulate; **pedicel** sessile; **stamen number** 6; **filament length** included; **filament fusion** free. **Fruit:** **epicarp** tomentose/velutinous.

## ADDITIONAL DESCRIPTION

Shrubs or trees. Branches tomentellous when young, glabrescent, lenticellate. Leaves: stipules linear, to 3 mm long, puberulous, subsistent, adnate to base of petiole; petioles 7-12 mm long, velutinous-tomentellous, terete, eglandular; lamina oblong-ovate to oblong-lanceolate, coriaceous, 7-16 × 3-7.5 cm, acute to acuminate at apex with acumen 1-20 mm long, rounded to subcuneate at base, glabrous, shiny above, deeply reticulate and lanate-arachnoid pubescent beneath; midrib plane or slightly impressed above, glabrous; primary veins 5-7 pairs, prominent beneath, plane above. Inflorescences of terminal and subterminal racemose panicles; rachis and branches tomentellous. Bracts and bracteoles 0.2-1.3 mm long, triangular, persistent, pubescent. Flowers c. 2 mm long. Receptacle campanulate, sessile, tomentose on exterior and within. Calyx lobes acute, tomentellous on both surfaces. Petals absent. Stamens c. 6, unilateral; filaments glabrous, free to base, shorter than calyx lobes. Ovary villous. Style pubescent to apex. Fruit pyriform; exocarp ferruginous-velutinoustomentose; pericarp hard, thin, fibrous, tomentose within.

## Life Form

Shrub, Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest, Central Brazilian Savanna

## Vegetation Types

Riverine Forest and/or Gallery Forest, Ombrophylous Forest (Tropical Rain Forest)

## Geographic Distribution

### Confirmed occurrences

North (Acre, Amazonas, Amapá, Pará, Rondônia, Roraima, Tocantins)

Northeast (Maranhão)

Central-west (Goiás, Mato Grosso)

## HERBARIUM MATERIAL

G.T. Prance, 58989, RB, 203707,  (RB00537062), NY,  (NY00428346), UB, K,  (K000220770), Tocantins, **Typus**

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. *Flora Neotropica* 9: 1-409.

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), *Species Plantarum: Flora of the World* 9. Australian Biological Resources Study, Canberra.

Sothers C.A., Prance G.T. & Chase, M.W. (2016). Towards a monophyletic *Licania*: a new generic classification of the polyphyletic Neotropical genus *Licania* (Chrysobalanaceae). *Kew Bull.* 71: 58.

# *Licania bracteata* Prance

## DESCRIPTION

**Leaf:** shape elliptic/oblong-elliptic; **abaxial indumentum** stomatal-cavity; **petiole gland(s)** absent. **Inflorescence:** type racemose panicle. **Flower:** **receptacle shape** campanulate; **pedicel** subsessile; **stamen number** 5; **filament length** included; **filament fusion** free. **Fruit:** **epicarp** velutinous pubescent.

## ADDITIONAL DESCRIPTION

Trees. Branches puberulous when young, soon becoming glabrous and lenticellate. Leaves: stipules lanceolate c. 4 mm long, puberulent, subpersistent, adnate to base of petiole; petioles 7-10 mm long, tomentellous when young, terete, eglandular; lamina elliptic to oblong-elliptic, coriaceous, 5.5-16.5 × 2.5-8 cm, glabrous above, with stomatal cavities with lanate-pubescent apertures beneath; venation between glabrous and conspicuous; apex acute or usually acuminate with acumen 3-15 mm long; base rounded to subcordate; midrib impressed above, glabrous; primary veins 8-10 pairs, prominent beneath, plane and conspicuous above. Inflorescences of terminal and axillary racemose panicles; rachis and branches puberulous. Flowers c. 2 mm long. Bracts and bracteoles lanceolate, to 2.5 mm long, persistent, puberulous on exterior. Receptacle campanulate, subsessile, grey-tomentellous on exterior, puberulous within. Calyx lobes acute, tomentellous on both surfaces. Petals absent. Stamens 5, unilateral; filaments shorter than calyx lobes, pubescent. Ovary villous; style lanate. Fruit oblong, to 7 × 4 cm; exocarp velutinous pubescent; mesocarp thin; endocarp c. 6 mm thick, woody and hard, glabrous within.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types





Terra Firme Forest, Ombrophyllous Forest (Tropical Rain Forest)

## Geographic Distribution

### Confirmed occurrences

North (Amazonas, Pará)

## HERBARIUM MATERIAL

A. Ducke, 293, US, 35567,  (US01352142), S, 35567 (S-R-8083), RB, 35567,  (RB00069609), NY,  (NY00428352), MG (MG017768), A, F, IAN, K,  (K000220749), Amazonas, **Typus**

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. *Flora Neotropica* 9: 1-409.

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), *Species Plantarum: Flora of the World* 9. Australian Biological Resources Study, Canberra.

Sothers C.A., Prance G.T. & Chase, M.W. (2016). Towards a monophyletic *Licania*: a new generic classification of the polyphyletic Neotropical genus *Licania* (Chrysobalanaceae). *Kew Bull.* 71: 58.

# *Licania canescens* Benoist

## DESCRIPTION

**Leaf:** shape elliptic/oblong-elliptic; **abaxial indumentum** waxy/pulverulent furfuraceous; **petiole gland(s)** absent. **Inflorescence:** type racemose panicle. **Flower:** receptacle shape campanulate; **pedicel** sessile; **stamen number** 5; **filament length** included; **filament fusion** free. **Fruit:** epicarp smooth/glabrous.

## ADDITIONAL DESCRIPTION

Trees to 20 m tall. Branches glabrous when young, lenticellate. Leaves: stipules 2-4 mm long, linear, persistent, adnate to base of petiole; petioles 3-5 mm long, glabrous, terete or shallowly canaliculate, eglandular, transversely rugose; lamina elliptic to oblong-elliptic, coriaceous, 4-12 × 2-5.5 cm, acuminate at apex with acumen 4-15 mm long, rounded to cuneate at base; margins plane; upper surface glabrous; lower surface with waxy grey pulverulent-furfuraceous pubescence; midrib glabrous above, plane; primary veins 6-9 pairs, prominent beneath, plane above. Inflorescences terminal and axillary racemose panicles; rachis and branches glabrous or sparsely puberulous. Flowers c. 2 mm long, in small groups on primary branches of inflorescence. Receptacle campanulate, sessile, tomentellous on exterior, tomentose within. Calyx lobes acute, tomentellous on both surfaces. Petals absent. Stamens 5, unilateral; filaments shorter than calyx lobes, glabrous, free to base. Ovary tomentose. Style equalling filaments, sparsely pubescent throughout. Fruit pyriform, c. 3 cm long; epicarp glabrous, drying yellow and wrinkled; mesocarp thin; endocarp hard, thick, fibrous, hirsutulous within.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest, Atlantic Rainforest

## Vegetation Types

Riverine Forest and/or Gallery Forest, Inundated Forest (Igapó), Inundated Forest (Várzea), Ombrophyllous Forest (Tropical Rain Forest)

## Geographic Distribution

### Confirmed occurrences

North (Acre, Amazonas, Amapá, Pará, Rondônia)

Northeast (Bahia, Maranhão)

Central-west (Mato Grosso)

## HERBARIUM MATERIAL

G.T. Prance, 12227, US,  (US01352184), NY,  (NY00867091), MG (MG042868), INPA, Acre

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. *Flora Neotropica* 9: 1-409.

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), *Species Plantarum: Flora of the World* 9. Australian Biological Resources Study, Canberra.

Sothers C.A., Prance G.T. & Chase, M.W. (2016). Towards a monophyletic *Licania*: a new generic classification of the polyphyletic Neotropical genus *Licania* (Chrysobalanaceae). *Kew Bull.* 71: 58.

# *Licania cidii* Prance

## DESCRIPTION

**Leaf:** shape elliptic; **abaxial indumentum** tomentose; **petiole gland(s)** absent. **Inflorescence:** type panicle. **Flower:** receptacle shape campanulate; **pedicel** sessile; **stamen number** 6 - 7; **filament length** included; **filament fusion** free. **Fruit:** epicarp unknown.

## ADDITIONAL DESCRIPTION

Trees to 30 m tall. Branches glabrous when young, conspicuously lenticellate. Leaves: stipules adnate to base of petiole, subsistent, lanceolate, 2-3 mm long, glabrous; petioles 8-15 mm long, terete, eglandular, glabrous; lamina elliptic, chartaceous, 7-14 × 3.5-8 cm, subcuneate at base, with pointed slightly curved acumen 9-20 mm long, glabrous on upper surface, densely tomentose beneath (pubescence between the reticulate venation, and hard to remove); midrib prominulous above, prominent and glabrous beneath; primary veins 5-7 pairs, plane above, prominent and glabrous beneath. Inflorescences of terminal and axillary panicles 7-17 cm long; rachis and primary branches glabrous or sparsely puberulous and secondary branches sparsely tomentellous. Bracts and bracteoles minute, caducous. Flowers 2.5-3 mm long, sessile on secondary branches of inflorescence. Receptacle campanulate, grey velutinous-tomentellous on exterior, pubescent within. Calyx lobes 5, acute, tomentellous on both surfaces. Petals absent. Stamens 6 or 7, inserted around 2/3 of circle; filaments shorter than calyx lobes, glabrous, free to base, with a pilose ring of hairs at their base. Ovary inserted at base of receptacle, tomentose. Style extending to level of anthers, tomentellous almost to apex. Fruit not seen.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types




Terra Firme Forest, Ombrophyllous Forest (Tropical Rain Forest)

## Geographic Distribution

### Confirmed occurrences

North (Amazonas)

## HERBARIUM MATERIAL

C. Ferreira, 8352, NY,  (NY00428365), MBM (MBM235949), GH,  (GH00061367), K,  (K000220773), INPA, Amazonas, **Typus**

## REFERENCE

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), Species Plantarum: Flora of the World 9. Australian Biological Resources Study, Canberra.  
Sothers C.A., Prance G.T. & Chase, M.W. (2016). Towards a monophyletic *Licania*: a new generic classification of the polyphyletic Neotropical genus *Licania* (Chrysobalanaceae). *Kew Bull.* 71: 58.

# *Licania cordata* Prance

## DESCRIPTION

**Leaf:** shape ovate; **abaxial indumentum** lanate-pubescent; **petiole gland(s)** absent. **Inflorescence:** type spike(s). **Flower:** **receptacle shape** campanulate; **pedicel** sessile; **stamen number** 5 - 6; **filament length** included; **filament fusion** free. **Fruit:** **epicarp** rufous tomentose.

## ADDITIONAL DESCRIPTION

Shrubs or trees. Branches hispid when young, soon becoming glabrous and lenticellate. Leaves: stipules axillary, lanceolate, 2 mm long, pilose, persistent; petioles 0.5-1.5 mm long, terete, pilose-tomentose, eglandular; lamina ovate, coriaceous, 2.8-6.5 × 1.4-4 cm, acuminate at apex with acumen 3-7 mm long, cordate at base, glabrous above, lanate pubescent with conspicuous reticulate venation beneath; midrib slightly impressed, villous above; primary veins 7-10 pairs, prominent beneath, pilose or hispid, plane above. Inflorescences in terminal and axillary spikes with rachis hispid. Bracts and bracteoles 1-2 mm long, ovate, persistent, tomentose on exterior. Flowers c. 1.5 mm long. Receptacle campanulate, sessile, tomentose on exterior. Calyx lobes acute, tomentellous on both surfaces. Petals absent. Stamens 5 or 6, inserted around complete or 3/4 circle; filaments glabrous, free, shorter than calyx lobes. Ovary villous. Style pubescent to apex. Fruit ovoid; exocarp rufous-tomentose.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types





Amazonian Savanna

## Geographic Distribution

### Confirmed occurrences

North (Amazonas)

## HERBARIUM MATERIAL

Pipoly, J.J., 6780, US,  (US01352161), NY,  (NY01253104), INPA, 134048,  (INPA0134048), INPA Maguire, B., 34505, P (P00745966), K,  (K000220798), **Typus**

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. *Flora Neotropica* 9: 1-409.

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), *Species Plantarum: Flora of the World* 9. Australian Biological Resources Study, Canberra.

Sothers C.A., Prance G.T. & Chase, M.W. (2016). Towards a monophyletic *Licania*: a new generic classification of the polyphyletic Neotropical genus *Licania* (Chrysobalanaceae). *Kew Bull.* 71: 58.



# *Licania coriacea* Benth.

This treatment is composed of the following taxa: *Licania coriacea*, .

## Has as synonym

heterotypic *Licania pallidula* Standl.

## DESCRIPTION

**Leaf: shape** elliptic/oblong ovate; **abaxial indumentum** waxy/pulverulent furfuraceous; **petiole gland(s)** absent. **Inflorescence: type** racemose panicle. **Flower: receptacle shape** urceolate; **pedicel** sessile; **stamen number** 4/5; **filament length** included; **filament fusion** free. **Fruit: epicarp** glabrous.

## ADDITIONAL DESCRIPTION

Trees to 25 m tall. Branches puberulous when young, soon becoming glabrous and lenticellate. Leaves: stipules 2-4 mm long, lanceolate, coriaceous, adnate to base of petiole, persistent; petioles 3-6 mm long, eglandular, terete, pulverulent, becoming glabrescent with age; lamina elliptic to oblong-ovate, thick-coriaceous, 3-12 × 1.5-5 cm, acute or acuminate at apex with acumen to 6 mm long, cuneate to subcuneate at base; margins revolute; upper surface glabrous; lower surface waxy grey pulverulent-furfuraceous pubescent; midrib glabrous above, plane or slightly impressed; primary veins 6-8 pairs, prominulous beneath, plane above. Inflorescences little branched terminal and axillary racemose panicles; rachis and branches tomentellous to puberulous. Flowers 3 mm long, solitary or in small groups along primary branches of inflorescence. Bracts and bracteoles 0.5-2.5 mm long, deltoid, persistent, tomentellous on exterior. Receptacle urceolate, sessile, tomentellous on exterior, and within. Calyx lobes acute, tomentellous on both surfaces. Petals absent. Stamens 4 or 5, unilateral; filaments shorter than calyx lobes, glabrous, free to base. Ovary tomentose. Style equalling filaments, tomentose. Fruit pyriform, 2.5-3 cm long; epicarp glabrous, drying yellow and wrinkled; mesocarp thin; endocarp c. 3 mm thick, hard, granular and fibrous, velutinous within.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types





Terra Firme Forest, Ombrophyllous Forest (Tropical Rain Forest)

## Geographic Distribution

### Confirmed occurrences

North (Amazonas, Pará, Roraima)

## HERBARIUM MATERIAL

C.A. Sothers, 1030, NY,  (NY01253112), MG (MG154224), RB, 339563,  (RB00069642), Amazonas Sothers, C.A., 1029, US, 339563,  (US01352190), SPF, 339563,  (SPF00141577), MG, 339563 (MG161623), MBM, 339563 (MBM229262), IAN, 339563 (IAN185543), INPA, K, Amazonas

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. Flora Neotropica 9: 1-409.

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), Species Plantarum: Flora of the World 9. Australian Biological Resources Study, Canberra.

Sothers C.A., Prance G.T. & Chase, M.W. (2016). Towards a monophyletic *Licania*: a new generic classification of the polyphyletic Neotropical genus *Licania* (Chrysobalanaceae). *Kew Bull.* 71: 58.

# *Licania crassivenia* Spruce ex Hook.f.

## DESCRIPTION

**Leaf:** shape ovate lanceolate; **abaxial indumentum** stomatal-cavity; **petiole gland(s)** absent. **Inflorescence:** type racemose panicle. **Flower:** **receptacle shape** campanulate; **pedicel** sessile; **stamen number** 5 - 7; **filament length** included; **filament fusion** free. **Fruit:** **epicarp** unknown.

## ADDITIONAL DESCRIPTION

Shrubs. Branches glabrous when young, obscurely lenticellate. Leaves: stipules to 2 mm long, lanceolate, puberulous, caducous; petioles 8-12 mm long, glabrous, shallowly canaliculate, eglandular; lamina ovate-lanceolate, coriaceous, 5-8 × 1.5-3.8 cm, tapering to a fine point at the apex with acumen 3-7 mm long, subcuneate at base, glabrous above; lower surface with well developed stomatal cavities which are filled by lanate pubescence; venation glabrous and hence the cavities conspicuous; midrib slightly impressed above, glabrous; primary veins 7-10 pairs, prominent beneath, impressed above. Inflorescences terminal racemose panicles; rachis and branches grey-puberulous. Flowers c. 3 mm long, sessile on primary branches of inflorescence. Bracts and bracteoles to 2 mm long, lanceolate, persistent, puberulous. Receptacle campanulate, sessile, grey-puberulous on exterior, lanate within. Calyx lobes acute, puberulous on both surfaces. Petals absent. Stamens 5-7, unilateral; filaments shorter than calyx lobes, glabrous, free to base. Ovary pilose. Style rising to base of filaments, lanate. Fruit unknown.

## Life Form

Shrub

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types


Amazonian Campinarana, Ombrophylous Forest (Tropical Rain Forest)

## Geographic Distribution

### Confirmed occurrences

North (Amazonas)

## HERBARIUM MATERIAL

R. Spruce, 2678, P (P00745962), K,  (K000220720), BM, BR, CGE, OXF, W, Amazonas, **Typus**

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. Flora Neotropica 9: 1-409.

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), Species Plantarum: Flora of the World 9. Australian Biological Resources Study, Canberra.

Sothers C.A., Prance G.T. & Chase, M.W. (2016). Towards a monophyletic *Licania*: a new generic classification of the polyphyletic Neotropical genus *Licania* (Chrysobalanaceae). *Kew Bull.* 71: 58.

# *Licania cymosa* Fritsch

## DESCRIPTION

**Leaf:** shape oblong-elliptic; **abaxial indumentum** farinaceous; **petiole gland(s)** absent. **Inflorescence:** type panicle. **Flower:** **receptacle shape** urceolate; **pedicel** sessile; **stamen number** 5 - 6; **filament length** included; **filament fusion** free. **Fruit:** **epicarp** waxy.

## ADDITIONAL DESCRIPTION

Trees. Branches glabrous when young, prominently lenticellate. Leaves: stipules linear, persistent, 1-2 mm long, adnate to extreme base of petiole; petioles 1.5-2 mm long, glabrous, eglandular, terete; lamina oblong-elliptic, thick-coriaceous, 2-5 × 1.3-3.2m, revolute at margins, rounded at apex, subcuneate at base; upper surface glabrous; lower surface persistently grey-farinaceous; midrib plane above, glabrous; primary veins 5-6 pairs, prominulous beneath, plane above. Inflorescences terminal and axillary cymose panicles; rachis and branches glabrous. Flowers c. 3 mm long, in small cymules on slender peduncles attached to rachis and primary branches of inflorescence. Bracts and bracteoles 0.5-1 mm long, lanceolate, puberulous, persistent. Receptacle urceolate, sessile, short-grey-tomentose on exterior, tomentose within. Calyx lobes acute, tomentellous on both surfaces. Petals absent. Stamens 5 or 6, unilateral; filaments shorter than calyx lobes, glabrous, free to base. Ovary villous. Style equalling filaments, pilose. Fruit globose, 2-2.5 cm diam.; epicarp waxy; pericarp thick, fibrous, sparsely hirsutulous within.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Is endemic from Brazil

## Phytogeographic Domains

Amazon Rainforest, Atlantic Rainforest

## Vegetation Types

Ombrophyllous Forest (Tropical Rain Forest)




## Geographic Distribution

### Confirmed occurrences

North (Pará)

Northeast (Bahia)

## HERBARIUM MATERIAL

Blanchet, J. S., 3200, P (P00745954), G, G00359651,  (G00359651), Bahia, **Typus**  
Mattos, L.A., 1136, NY,  (NY00378419), CEPEC,  (CEPEC00022136), CEPEC, Bahia

## REFERENCE

- Prance, G.T. 1972. Chrysobalanaceae. Flora Neotropica 9: 1-409.  
Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), Species Plantarum: Flora of the World 9. Australian Biological Resources Study, Canberra.  
Sothers C.A., Prance G.T. & Chase, M.W. (2016). Towards a monophyletic *Licania*: a new generic classification of the polyphyletic Neotropical genus *Licania* (Chrysobalanaceae). *Kew Bull.* 71: 58.

# *Licania davillifolia* Benoist

## DESCRIPTION

**Leaf:** shape oblong-elliptic; **abaxial indumentum** waxy/pulverulent farinaceous; **petiole gland(s)** absent/present. **Inflorescence:** type panicle. **Flower:** **receptacle shape** campanulate; **pedicel** sessile; **stamen number** 6 - 7; **filament length** included; **filament fusion** free. **Fruit:** **epicarp** rufous pubescent.

## ADDITIONAL DESCRIPTION

Trees. Branches glabrous when young, lenticellate. Leaves: stipules 1-3 mm long, linear, coriaceous, persistent, adnate to base of petiole; petioles 6-10 mm long, glabrescent to puberulous, shallowly canaliculate, eglandular or with inconspicuous glands, rugose; lamina oblong-elliptic, chartaceous, 6-21 × 3.5-8.5 cm, short-acuminate at apex with acumen 3-10 mm long, rounded at base, glabrous above, with waxy grey pulverulent-farinaceous pubescence beneath; margins plane; midrib glabrous above, impressed; primary veins 7-10 pairs, prominent beneath, impressed above; secondary nerves more or less parallel, prominent beneath; venation of upper surface usually papillose. Inflorescences terminal and axillary spreading branched panicles; rachis and branches tomentellous to puberulous. Flowers 1.5-2 mm long, solitary on primary and secondary branches of inflorescence. Bracts and bracteoles 0.3-1 mm long, deltoid to lanceolate, persistent, exterior tomentellous. Receptacle campanulate, sessile, tomentose on exterior, tomentose within. Calyx lobes acute, tomentose on both surfaces. Petals absent. Stamens 6 or 7, unilateral; filaments shorter than calyx lobes, glabrous, free to base. Ovary tomentose. Style equalling filaments, sparsely pubescent throughout. Fruit ovoid to pyriform, c. 3.2 cm long; epicarp densely and compactly rufous-pubescent; pericarp thick, granular, fibrous, densely hirsutulous within.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types




Riverine Forest and/or Gallery Forest, Terra Firme Forest, Ombrophyllous Forest (Tropical Rain Forest)

## Geographic Distribution

### Confirmed occurrences

North (Amazonas, Amapá, Pará)

## HERBARIUM MATERIAL

C. Ferreira, 6737, US,  (US01352198), K (K001250132), INPA, NY, Amazonas Pires, J.M., 4695, US,  (US01352202), INPA, 4940,  (INPA0004940), Pará

## REFERENCE

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), Species Plantarum: Flora of the World 9. Australian Biological Resources Study, Canberra.  
Sothers C.A., Prance G.T. & Chase, M.W. (2016). Towards a monophyletic *Licania*: a new generic classification of the polyphyletic Neotropical genus *Licania* (Chrysobalanaceae). *Kew Bull.* 71: 58.

# *Licania dealbata* Hook.f.

## DESCRIPTION

**Leaf:** shape oblong/oblong ovate; **abaxial indumentum** lanate-pubescent; **petiole gland(s)** absent. **Inflorescence:** type panicle. **Flower:** **receptacle shape** campanulate; **pedicel** pedicellate; **stamen number** 6 - 7; **filament length** included; **filament fusion** free. **Fruit:** **epicarp** short velutinous.

## ADDITIONAL DESCRIPTION

Shrubs or a low suffrutex. Branches puberulous when young, becoming glabrous with age, obscurely lenticellate. Leaves: stipules lanceolate, 3-5 mm long, coriaceous, persistent, adnate to extreme base of petiole; petioles 2-5 mm long, pubescent, eglandular, terete; lamina oblong to oblong-ovate, coriaceous, 4-7 × 2-3.5 cm, acuminate or acute at apex with acumen to 5 mm long; upper surface glabrous; lower surface with deep reticulation obscured by dense lanate white pubescence; midrib plane or slightly impressed above, sparsely pubescent towards base; primary veins 6-8 pairs, prominent beneath, more or less plane above. Inflorescences terminal and axillary panicles; rachis and branches grey-puberulous. Flowers c. 2.5 mm long, in few-flowered cymules attached to primary branches by long slender peduncles. Bracts and bracteoles 0.2-1 mm long, ovate, persistent, puberulous on exterior. Receptacle campanulate, grey-tomentellous on exterior, tomentellous within; pedicels c. 0.25 mm long. Calyx lobes acute, tomentellous-puberulous on both surfaces. Petals absent. Stamens 6 or 7, unilateral; filaments shorter than calyx lobes, glabrous, free to base. Ovary villous. Style equalling filaments, sparsely pubescent throughout. Fruit pyriform, c. 2 cm long; epicarp with short-appressed-velutinous pubescence; mesocarp thick, hard, fibrous; endocarp thin, hard, fibrous, hirsutulous within.

## Life Form

Shrub, Subshrub

## Substrate

Terrestrial

## DISTRIBUTION

Native, Is endemic from Brazil

## Phytogeographic Domains

Amazon Rainforest, Caatinga, Central Brazilian Savanna

## Vegetation Types

Cerrado (lato sensu)

## Geographic Distribution

### Confirmed occurrences



North (Tocantins)

Northeast (Bahia, Maranhão, Piauí)

Central-west (Distrito Federal, Goiás)

Southeast (Minas Gerais)

## HERBARIUM MATERIAL

G. Gardner, 2836, K,  (K001174891), K,  (K000220688), Bahia, **Typus**

G. Hatschbach, 64582, MBM (MBM193339), K, Minas Gerais

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. *Flora Neotropica* 9: 1-409.

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), *Species Plantarum: Flora of the World* 9. Australian Biological Resources Study, Canberra.

Sothers C.A., Prance G.T. & Chase, M.W. (2016). Towards a monophyletic *Licania*: a new generic classification of the polyphyletic Neotropical genus *Licania* (Chrysobalanaceae). *Kew Bull.* 71: 58.

# *Licania densiflora* Kleinhoonte

## Has as synonym

heterotypic *Licania kanukuensis* Standl.

## DESCRIPTION

**Leaf:** shape elliptic/oblong; **abaxial indumentum** glabrous; **petiole gland(s)** absent. **Inflorescence:** type panicle. **Flower:** **receptacle shape** campanulate; **pedicel** subsessile; **stamen number** 5 - 6/6 - 7; **filament length** included; **filament fusion** free. **Fruit:** **epicarp** tomentose/rufous pubescent.

## ADDITIONAL DESCRIPTION

Trees to 30 m tall. Branches tomentose when young, soon becoming glabrous and lenticellate. Leaves: stipules linear, 2-7 mm long, pubescent, subpersistent, adnate to extreme base of petiole; petioles 3-10 mm long, terete, lanate-tomentose, eglandular; lamina oblong to elliptic, coriaceous, 5-15 × 2-7.5 cm, acute to shortly acuminate at apex with acumen 3-7 mm long, rounded to subcuneate at base; midrib slightly impressed or plane above, glabrous; primary veins 9-11 pairs, prominent beneath, plane above. Inflorescences densely flowered terminal and subterminal panicles; rachis and branches densely tomentose. Flowers 4-5 mm long, in small groups of cymules attached to rachis and primary branches by short thick peduncles. Bracts and bracteoles c. 2 mm long, persistent, enclosing buds in small groups, tomentose on exterior. Receptacle campanulate, subsessile, tomentose on exterior, tomentose within. Calyx lobes acute, tomentellous on both surfaces. Petals absent. Stamens 5-7, unilateral; filaments shorter than calyx lobes, glabrous. Ovary villous. Style equalling filaments, lanate for most of length. Fruit pyriform, with short stipe c. 5 mm long; epicarp rufous-tomentose; pericarp thin, very hard, fibrous, densely hirsutulous within.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types


Ombrophylous Forest (Tropical Rain Forest)

## Geographic Distribution

### Confirmed occurrences

North (Amazonas, Amapá, Pará, Roraima)

## HERBARIUM MATERIAL

A. Ducke, s.n., RB, 19778,  (RB00069679), Pará

G.T. Prance, 10492, US,  (US01352220), P (P05562770), NY,  (NY01292551), NY,  (NY01253140), K,  (K001172277), MG (MG042024), INPA, NY, Roraima

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. *Flora Neotropica* 9: 1-409.

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), *Species Plantarum: Flora of the World* 9. Australian Biological Resources Study, Canberra.

Sothers C.A., Prance G.T. & Chase, M.W. (2016). Towards a monophyletic *Licania*: a new generic classification of the polyphyletic Neotropical genus *Licania* (Chrysobalanaceae). *Kew Bull.* 71: 58.



# *Licania discolor* Pilg.

## DESCRIPTION

**Leaf:** shape oblong/ovate; **abaxial indumentum** lanate; **petiole gland(s)** absent. **Inflorescence:** type racemose panicle. **Flower:** **receptacle shape** campanulate; **pedicel** pedicellate; **stamen number** 3; **filament length** included; **filament fusion** free. **Fruit:** **epicarp** rufous velutinous.

## ADDITIONAL DESCRIPTION

Trees to 35 m tall. Branches tomentellous when young, soon becoming glabrous and lenticellate. Leaves: stipules to 3 mm long, lanceolate, deciduous; petioles 3-7 mm long, tomentellous when young, terete, eglandular; lamina oval to oblong, thick-coriaceous, 3-9 × 1.5-4.5 cm, with finely pointed acumen 4-12 mm long at apex, subcuneate at base, glabrous above, densely lanate below; midrib slightly impressed above, glabrous; primary veins 7-9 pairs, prominent beneath, plane above. Inflorescences terminal racemose panicles; rachis and branches tomentose. Flowers 1.5-2 mm long; sessile on primary branches of inflorescence. Bracts and bracteoles to 1 mm long, ovate, subsistent, tomentellous on exterior. Receptacle campanulate, tomentose on exterior and within; pedicels 0-0.25 mm long. Calyx lobes acute, tomentose on exterior, puberulous within. Petals absent. Stamens 3, unilateral; filaments shorter than calyx lobes, glabrous. Ovary villous. Style rising to base of filaments, sparsely pubescent throughout. Fruit (immature) pyriform, with a short stipe; epicarp rufous-velutinous.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types

Ombrophyllous Forest (Tropical Rain Forest)

## Geographic Distribution

### Confirmed occurrences

North (Amazonas, Roraima)

## HERBARIUM MATERIAL

N.A. Rosa, 3120, FHO, MG, NY, Roraima

G.T. Prance, 4210, US,  (US01352229), NY,  (NY01253037), INPA, 19846,  (INPA0019846), Roraima

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. *Flora Neotropica* 9: 1-409.

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), *Species Plantarum: Flora of the World* 9. Australian Biological Resources Study, Canberra.

Sothers C.A., Prance G.T. & Chase, M.W. (2016). Towards a monophyletic *Licania*: a new generic classification of the polyphyletic Neotropical genus *Licania* (Chrysobalanaceae). *Kew Bull.* 71: 58.

# *Licania elliptica* Standl.

## Has as synonym

heterotypic *Licania paniculata* Fanshawe & Maguire

## DESCRIPTION

**Leaf:** shape elliptic; **abaxial indumentum** waxy/pulverulent farinaceous; **petiole gland(s)** present. **Inflorescence:** type panicle. **Flower:** **receptacle shape** campanulate; **pedicel** sessile; **stamen number** 3 - 5; **filament length** included; **filament fusion** free. **Fruit:** **epicarp** smooth/glabrous.

## ADDITIONAL DESCRIPTION

Trees. Branches glabrous when young, lenticellate. Leaves: stipules to 3 mm long, linear, coriaceous, persistent, adnate to extreme base of petiole; petioles 4-7 mm long, glabrous, shallowly canaliculate, often with 2 rather obscure medial sessile glands; lamina elliptic, coriaceous, (10.5-) 12-19 × 4-8 cm, with well developed acumen 5-15 mm long at apex, rounded to cuneate at base; margins plane; upper surface glabrous, with 2 glands at margin towards base; lower surface with waxy grey pulverulent-farinaceous pubescence; midrib glabrous above, prominulous; primary veins 8-9 pairs, prominent beneath, prominulous above. Inflorescences terminal and axillary spreading branched panicles; rachis and branches glabrous or sparsely puberulous. Flowers c. 1.5 mm long, in small groups on short thick peduncles attached to primary and secondary branches of inflorescence. Bracts and bracteoles 0.3-1 mm long, deltoid, persistent, puberulous on exterior. Receptacle campanulate, sessile, tomentellous on exterior, puberulous within. Calyx lobes acute, puberulous on both surfaces. Petals absent. Stamens 3-5, unilateral; filaments shorter than calyx lobes, glabrous, free to base. Ovary tomentose. Style equalling filaments, sparsely pubescent throughout. Fruit pyriform, c. 3.6 cm long; epicarp glabrous, drying wrinkled and yellow; mesocarp thin; endocarp thick, hard, fibrous, hirsutulous within.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types



Ombrophyllous Forest (Tropical Rain Forest)




## Geographic Distribution

### Confirmed occurrences

North (Amazonas, Pará, Rondônia)

## HERBARIUM MATERIAL

G.T. Prance, 15026, P (P05562867), NY,  (NY01253080), MG (MG044070), K (K001250141), INPA, 33242,  (INPA0033242), INPA, NY, Amazonas

Krukoff, B. A., 5014, A,  (A00046258), S (S-R-8089), NY,  (NY00428391), MO (MO255279), K,  (K000220716), G, G00177656,  (G00177656), Amazonas, **Typus**

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. *Flora Neotropica* 9: 1-409.

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), *Species Plantarum: Flora of the World* 9. Australian Biological Resources Study, Canberra.

Sothers C.A., Prance G.T. & Chase, M.W. (2016). Towards a monophyletic *Licania*: a new generic classification of the polyphyletic Neotropical genus *Licania* (Chrysobalanaceae). *Kew Bull.* 71: 58.

# *Licania farinacea* Prance

## DESCRIPTION

**Leaf:** shape elliptic/oblong; **abaxial indumentum** pulverulent farinaceous; **petiole gland(s)** absent. **Inflorescence:** type racemose panicle. **Flower:** **receptacle shape** campanulate; **pedicel** pedicellate; **stamen number** 5; **filament length** included; **filament fusion** free. **Fruit:** **epicarp** rufous velutinous.

## ADDITIONAL DESCRIPTION

Trees to 20 m tall. The young branches sparsely appressedpuberulous, glabrescent, lenticellate. Leaves: stipules linear, 2 mm long, axillary or inserted on extreme base of petiole at junction with stem, early caducous; petioles 3 – 5 mm long, puberulous, eglandular, shallowly canaliculate; lamina oblong to elliptic, coriaceous, 3.5 – 10 × 2 – 4.8 cm, acuminate or apiculate at apex, the acumen 2 – 8 mm long, subcuneate to rounded at base, glabrous and shiny above, densely pale-brown pulverulentfarinaceous pubescent beneath (noted as pallid beneath when fresh in field notes); midrib plane and glabrous above slightly prominent and sparsely puberulous beneath; primary veins 6 – 7 pairs, plane above, prominulous beneath; secondary venation smooth and inconspicuous. Inflorescence of terminal and subterminal racemose panicles, rachis and branches brown-puberulous. Bracts and bracteoles ovate-triangular. 0.5 – 1 mm long, tomentellous, persistent. Flowers 1.5 – 2 mm long, with short pedicels 0.2 – 0.4 mm long. Receptacle campanulate, grey tomentellous on exterior, tomentose within; calyx lobes triangular, acute, c. 0.4 mm long, tomentellous on exterior, sparsely tomentellous within. Petals absent. Stamens 5, unilateral, filaments glabrous, free to base, shorter than calyx lobes. Ovary inserted at base of receptacle, tomentose; style inserted at base of ovary pubescent almost to apex. Fruit pyriform, narrowed to a stipe 1 cm long and the swollen part to 4 cm long, 3.5 cm broad; exocarp with a dense rufous-velutinous pubescence; pericarp thin, hard, fibrous.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Is endemic from Brazil

## Phytogeographic Domains

Atlantic Rainforest

## Vegetation Types




Ombrophylous Forest (Tropical Rain Forest)

## Geographic Distribution

### Confirmed occurrences

Northeast (Bahia)

## HERBARIUM MATERIAL

Amorim, AM, 1281, MBM (MBM187194), Bahia  
Amorim, A. M. (Amorim, André M.), 1281, US,  (US01352449), Bahia  
A.M. Amorim, 1281, CEPEC, Bahia  
Amorim, A. M., 1281, CEPEC,  (CEPEC00058118), Bahia  
A.M. Amorim, 1281, K (K001251033), Bahia  
A. M. Amorim, 1281, NY,  (NY00378513), Bahia

## REFERENCE

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), Species Plantarum: Flora of the World 9. Australian Biological Resources Study, Canberra.

Sothers C.A., Prance G.T. & Chase, M.W. (2016). Towards a monophyletic *Licania*: a new generic classification of the polyphyletic Neotropical genus *Licania* (Chrysobalanaceae). *Kew Bull.* 71: 58.

# *Licania ferreirae* Prance

## DESCRIPTION

**Leaf:** shape elliptic; **abaxial indumentum** tomentulose; **petiole gland(s)** absent. **Inflorescence:** type racemose panicle. **Flower:** **receptacle shape** campanulate; **pedicel** sessile; **stamen number** 5; **filament length** included; **filament fusion** free. **Fruit:** **epicarp** unknown.

## ADDITIONAL DESCRIPTION

Trees to 30 m tall. Branches puberulous when young, glabrescent, conspicuously lenticellate. Leaves: stipules caducous (not seen); petioles 7-10 mm long, terete, puberulous when young, eglandular; lamina elliptic, coriaceous, 5-9 × 3-5 cm, abruptly acuminate at apex with acumen 4-6 mm long, rounded at base, glabrous above, with compact tomentellous pubescence beneath between venation; young leaves with 2 large and conspicuous saucerlike glands at junction between lamina and petiole, caducous and not visible in mature leaves and with 2 or 3 marginal glands towards apex which persist in some mature leaves only; midrib plane above, prominent beneath; primary veins 10-13 pairs, plane above, prominulous beneath. Inflorescences of terminal and subterminal little-branched racemose panicles, 5-7 cm long; rachis and branches brown-tomentellous. Bracts and bracteoles ovate to lanceolate, 0.5-0.75 mm, tomentellous on exterior, caducous. Flowers c. 2 mm long, borne singly on primary branches and rachis of inflorescence. Receptacle campanulate, tomentellous on exterior, tomentellous within. Calyx lobes acute, tomentellous on both surfaces. Petals absent. Stamens 5, unilateral; filaments free, glabrous, shorter than calyx lobes. Ovary inserted at base of receptacle, tomentose. Style equalling filaments in length, pubescent to apex. Fruit not seen.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Is endemic from Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types



Terra Firme Forest, Ombrophyllous Forest (Tropical Rain Forest)

## Geographic Distribution

### Confirmed occurrences

North (Amazonas)

## HERBARIUM MATERIAL

C. Ferreira, 8442, NY,  (NY00328808), MO (MO255274), INPA, 153039,  (INPA0153039), CAS, Amazonas, **Typus**

## REFERENCE

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), Species Plantarum: Flora of the World 9. Australian Biological Resources Study, Canberra.

Sothers C.A., Prance G.T. & Chase, M.W. (2016). Towards a monophyletic *Licania*: a new generic classification of the polyphyletic Neotropical genus *Licania* (Chrysobalanaceae). *Kew Bull.* 71: 58.

# *Licania glazioviana* Warm.

## DESCRIPTION

**Leaf:** shape elliptic; **abaxial indumentum** glabrous; **petiole gland(s)** absent. **Inflorescence:** type racemose panicle. **Flower:** **receptacle shape** urceolate; **pedicel** sessile; **stamen number** 5; **filament length** included; **filament fusion** fused basally. **Fruit:** **epicarp** waxy.

## ADDITIONAL DESCRIPTION

Trees. Branches glabrous and conspicuously lenticellate when young. Leaves: stipules lanceolate, 1.5-2.5 mm long, glabrous, adnate to petiole base, persistent; petioles 2-4 mm long, glabrous, canaliculate, eglandular; lamina oblong-lanceolate to narrowly elliptic, membranous, 3-6.5 × 1.4-2.5 cm, bluntly acuminate or obtuse at apex with acumen to 5 mm long, cuneate at base, glabrous on both surfaces; palisade glands present; midrib prominulous above, glabrous; primary veins 10-12 pairs, prominulous on both surfaces, but rather indistinct; venation papillose on lower surface. Inflorescences short axillary and terminal racemose panicles; rachis and branches almost glabrous. Flowers c. 3.5 mm long, solitary and sessile on primary branches of inflorescence. Bracts and bracteoles 0.5-1 mm long, ovate, persistent, almost glabrous. Receptacle urceolate, sessile, tomentellous on exterior, tomentose within. Calyx lobes acute, tomentellous on both surfaces. Petals absent. Stamens 5, unilateral, with fused sterile portion of ring opposite to them; filaments connate at base only, shorter than calyx lobes, pubescent. Ovary villous. Style pubescent throughout, equalling filaments. Fruit pyriform when young; epicarp with a waxy indumentum; pericarp thin, hard, tomentellous within.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Is endemic from Brazil

## Phytogeographic Domains

Atlantic Rainforest

## Vegetation Types

Ombrophyllous Forest (Tropical Rain Forest), Coastal Forest (Restinga)

## Geographic Distribution

### Confirmed occurrences

Southeast (Rio de Janeiro)

## HERBARIUM MATERIAL

A.P. Duarte, 4839, RB, 110052,    (RB00069644), NY,  (NY00378497), Rio de Janeiro

## REFERENCE

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), Species Plantarum: Flora of the World 9. Australian Biological Resources Study, Canberra.

Sothers C.A., Prance G.T. & Chase, M.W. (2016). Towards a monophyletic *Licania*: a new generic classification of the polyphyletic Neotropical genus *Licania* (Chrysobalanaceae). *Kew Bull.* 71: 58.

# *Licania gracilipes* Taub.

## Has as synonym

heterotypic *Licania duckei* Maguire

## DESCRIPTION

**Leaf: shape** lanceolate/oblong lanceolate; **abaxial indumentum** lanate-pubescent; **petiole gland(s)** absent. **Inflorescence: type** panicle. **Flower: receptacle shape** campanulate; **pedicel** pedicellate; **stamen number** 3; **filament length** included; **filament fusion** free. **Fruit: epicarp** pulverulent.

## ADDITIONAL DESCRIPTION

Trees to 20 m tall or shrubs. Branches glabrous when young, obscurely lenticellate. Leaves: stipules c. 1.5 mm long, linear, coriaceous, persistent, adnate to extreme base of petiole; petioles 3–6 mm long, glabrous, eglandular, shallowly canaliculate; lamina lanceolate to oblong-lanceolate, coriaceous, 3.5–8 × 1.3–3.5 cm, with a finely pointed acumen 10–15 mm long at apex, cuneate or subcuneate at base; upper surface glabrous; lower surface with short dense white persistent lanate pubescence; venation shallowly reticulate; midrib glabrous, more or less plane above; primary veins 8–15 pairs, prominulous beneath, plane above. Inflorescences terminal and axillary branched panicles; rachis and branches glabrous. Flowers c. 1.5 mm long, in cymules on long slender peduncles attached to primary inflorescence branches. Bracts and bracteoles minute, persistent, glabrous. Receptacle campanulate, glabrous on exterior, tomentellous within; pedicels 0.5–3 mm long. Calyx lobes acute, puberulous on both surfaces. Petals absent. Stamens 3, unilateral; filaments shorter than calyx lobes, glabrous, free to base. Ovary tomentose. Style rising to base of filaments, pubescent. Fruit to 1.8 mm long, pyriform; epicarp pulverulent, drying reddish; mesocarp thin; endocarp hard, thin, sparsely hirsutulous within.

## Life Form

Shrub, Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types

Terra Firme Forest, Ombrophyllous Forest (Tropical Rain Forest)

## Geographic Distribution

### Confirmed occurrences

North (Amazonas, Pará, Rondônia)

## HERBARIUM MATERIAL

G.T. Prance, 17948, INPA, NY, P

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. *Flora Neotropica* 9: 1–409.

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), *Species Plantarum: Flora of the World* 9. Australian Biological Resources Study, Canberra.

Sothers C.A., Prance G.T. & Chase, M.W. (2016). Towards a monophyletic *Licania*: a new generic classification of the polyphyletic Neotropical genus *Licania* (Chrysobalanaceae). *Kew Bull.* 71: 58.



# *Licania harlingii* Prance

## DESCRIPTION

**Leaf:** shape ovate elliptic; **abaxial indumentum** lanate-pubescent; **petiole gland(s)** absent. **Inflorescence:** type racemose panicle. **Flower:** **receptacle shape** globose; **pedicel** sessile; **stamen number** 5 - 6; **filament length** included; **filament fusion** free. **Fruit:** **epicarp** unknown.

## ADDITIONAL DESCRIPTION

Trees to 6 m tall. Branches puberulous when young, soon becoming glabrous and lenticellate with age. Leaves: stipules small, c. 1 mm long, axillary, caducous; petioles 5-6 mm long, tomentellous, terete; lamina ovate-elliptic, chartaceous, 7-10 × 3-5 cm, subcuneate at base, with acumen 8-12 mm long, glabrous above, densely lanate-pubescent below with puberulous conspicuous venation; midrib slightly impressed above, prominent beneath; primary veins 8-11 pairs, plane above, impressed beneath. Inflorescences of terminal racemose panicles; rachis and branches yellow-brown, puberulous. Bracts and bracteoles small, triangular-hastate, persistent, tomentellous on exterior. Flowers c. 1.5 mm long, borne singly along primary branches of inflorescence. Receptacle globose, sessile, brown-tomentellous on exterior, lanate within. Calyx lobes acute, tomentellous on both surfaces. Petals absent. Stamens 5 or 6, slightly unilateral; filaments free, shorter than calyx lobes, glabrous. Ovary tomentellous. Style equalling filaments, glabrous or with a few hairs only. Fruit not seen.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types

Terra Firme Forest, Ombrophyllous Forest (Tropical Rain Forest)

## Geographic Distribution

### Confirmed occurrences

North (Acre)

## HERBARIUM MATERIAL

M. Silveira, 935, K (K001251045), NY, 330674,  (NY00330674), Acre

## REFERENCE

- Prance, G.T. 1989. Chrysobalanaceae (Supplement). *Flora Neotropica* 9: 1-267.
- Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), *Species Plantarum: Flora of the World* 9. Australian Biological Resources Study, Canberra.
- Sothers C.A., Prance G.T. & Chase, M.W. (2016). Towards a monophyletic *Licania*: a new generic classification of the polyphyletic Neotropical genus *Licania* (Chrysobalanaceae). *Kew Bull.* 71: 58.

# *Licania hebantha* Mart. ex Hook.f.

## DESCRIPTION

**Leaf:** shape elliptic/ovate orbicular; **abaxial indumentum** lanate-pubescent; **petiole gland(s)** absent. **Inflorescence:** type racemose panicle. **Flower:** **receptacle shape** campanulate; **pedicel** sessile; **stamen number** 5 - 6; **filament length** included; **filament fusion** free. **Fruit:** **epicarp** unknown.

## ADDITIONAL DESCRIPTION

Shrubs or small trees. Branches puberulous when young, soon becoming glabrous and lenticellate. Leaves: stipules linear, 2-2.5 mm long, coriaceous, persistent, adnate to extreme base of petiole; petiole 1.5-3 mm long, terete, eglandular, tomentose; lamina ovate-orbicular or elliptic, submembranous, 2.5-9 × 2.2-5 cm, rounded to acute at apex, subcordate at base, glabrous above, with appressed lanate pubescence beneath obscuring the deeply reticulate venation; midrib slightly impressed above, hirsutulous towards base; primary veins 7-13 pairs, prominent beneath, plane or slightly impressed above. Inflorescences terminal and subterminal racemose panicles; rachis and branches tomentose. Flowers c. 3 mm long, sessile on primary branches of inflorescence. Bracts and bracteoles 0.5-1.5 mm long, elliptic, persistent, tomentose on exterior. Receptacle campanulate, sessile, tomentose on exterior, lanate-pilose within. Calyx lobes acute, tomentose on exterior, puberulous within. Petals absent. Stamens 5 or 6, unilateral; filaments shorter than calyx lobes, glabrous, free to base. Ovary pilose. Style equalling filaments, pubescent throughout. Fruit unknown.

## Life Form

Shrub, Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types



Amazonian Savanna

## Geographic Distribution

### Confirmed occurrences

North (Amazonas)

## HERBARIUM MATERIAL

Rodrigues, W.A., 10501, US,  (US01352303), INPA, NY, Amazonas [Martius], s.n., K,  (K000220719), **Typus**

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. Flora Neotropica 9: 1-409.

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), Species Plantarum: Flora of the World 9. Australian Biological Resources Study, Canberra.

Sothers C.A., Prance G.T. & Chase, M.W. (2016). Towards a monophyletic *Licania*: a new generic classification of the polyphyletic Neotropical genus *Licania* (Chrysobalanaceae). *Kew Bull.* 71: 58.

# *Licania hoehnei* Pilg.

## DESCRIPTION

**Leaf:** shape oblong; **abaxial indumentum** lanate; **petiole gland(s)** absent. **Inflorescence:** type racemose panicle. **Flower:** **receptacle shape** campanulate; **pedicel** sessile; **stamen number** 5 - 7; **filament length** included; **filament fusion** free. **Fruit:** **epicarp** rufous pubescent.

## ADDITIONAL DESCRIPTION

Tree or shrub. Branches puberulous when young, soon becoming glabrous and conspicuously lenticellate. Leaves with stipules 1-3 mm long, lanceolate, persistent, tomentellous; petioles 4-7 mm long, tomentose when young, soon becoming glabrous, terete, eglandular; lamina oblong, coriaceous, 3.7-8 × 1.5-3 cm, rounded to acuminate at apex but usually acute, subcuneate at base, glabrous above, persistently densely grey-lanate below; reticulations conspicuous but shallow; midrib plane or slightly impressed above, glabrous; primary veins 7-9 pairs, prominent beneath, conspicuous above. Inflorescences dense terminal and subterminal racemose panicles; rachis and branches tomentellous. Flowers c. 2 mm long, solitary or in small groups densely crowded on primary branches of inflorescence. Bracts and bracteoles 0.5-1 mm long, triangular, persistent, puberulous on exterior. Receptacle campanulate, sessile, tomentellous on exterior, tomentose within. Calyx lobes acute, puberulous on both surfaces. Petals absent. Stamens 5-7, unilateral; filaments shorter than calyx lobes, glabrous. Ovary tomentose. Style equalling filaments, pubescent throughout. Fruit globose to pyriform; epicarp densely rufous-pubescent; pericarp rather thick, hard, fibrous, lanate-hirsutulous within.

## Life Form

Shrub, Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Central Brazilian Savanna, Atlantic Rainforest

## Vegetation Types

Seasonally Semideciduous Forest, Ombrophyllous Forest (Tropical Rain Forest)

## Geographic Distribution

### Confirmed occurrences

Northeast (Bahia)

Central-west (Mato Grosso)

Southeast (Espírito Santo, Minas Gerais, Rio de Janeiro, São Paulo)

## HERBARIUM MATERIAL

G.T. Prance, 19161, INPA, 42652,  (INPA0042652), P, NY, Mato Grosso

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. *Flora Neotropica* 9: 1-409.

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), *Species Plantarum: Flora of the World* 9. Australian Biological Resources Study, Canberra.

Sothers C.A., Prance G.T. & Chase, M.W. (2016). Towards a monophyletic *Licania*: a new generic classification of the polyphyletic Neotropical genus *Licania* (Chrysobalanaceae). *Kew Bull.* 71: 58.

# *Licania hypoleuca* Benth.

This treatment is composed of the following taxa: *Licania hypoleuca*, *Licania hypoleuca* var. *foveolata*, *Licania hypoleuca* var. *hypoleuca*.

## DESCRIPTION

**Leaf:** shape oblong lanceolate/ovate; **abaxial indumentum** stomatal-cavity/lanate/pulverulent farinaceous; **petiole gland(s)** absent. **Inflorescence:** type panicle. **Flower:** **receptacle shape** campanulate; **pedicel** pedicellate; **stamen number** 3 - 5; **filament length** included; **filament fusion** free. **Fruit:** **epicarp** pulverulent.

## ADDITIONAL DESCRIPTION

Trees to 35 m tall. Branches glabrous when young, lenticellate. Leaves: stipules 1-2 mm long, linear, coriaceous, persistent, adnate to extreme base of petiole; petioles 2-6 mm long, glabrous or pubescent, becoming glabrous with age, transversely rugose, eglandular, terete or canaliculate; lamina ovate to oblong-lanceolate, membranous to coriaceous, 2.5-10 (-11.5) × 0.8-4.5 (ñ5.5) cm, with a fine acumen 5-16 mm long at apex, rounded to cuneate but usually subcuneate at base; upper surface glabrous; lower surface short grey-pulverulent-farinaceous or sordid-lanate; venation shallowly reticulate; midrib plane to prominulous above, glabrous; primary veins 5-9 pairs, prominulous beneath, plane above. Inflorescences terminal and axillary branched panicles; rachis and branches sparsely puberulous. Flowers 1.5 mm long, on long slender peduncles attached to primary inflorescence branches. Bracts and bracteoles 0.2-0.5 mm long, persistent. Receptacle campanulate, grey-puberulous to tomentellous on exterior, tomentellous within; pedicels 0.25-1 mm long. Calyx lobes acute, puberulous on both surfaces. Petals absent. Stamens 3-5, unilateral; filaments shorter than calyx lobes, glabrous, free to base. Ovary lanate. Style sparsely hirsute throughout. Fruit pyriform to ovoid, usually less than 1.5 cm long, rarely 2 cm long; epicarp with sordid pulverulent indumentum; mesocarp thin; endocarp thin, hard, fibrous, hirsutulous within.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest, Atlantic Rainforest

## Vegetation Types

Ombrophyllous Forest (Tropical Rain Forest), Amazonian Savanna

## Geographic Distribution

### Confirmed occurrences

North (Acre, Amazonas, Amapá, Pará, Rondônia, Roraima)

Northeast (Bahia)

Central-west (Mato Grosso)

Southeast (Rio de Janeiro)

## IDENTIFICATION KEY

Leaf lower surface lanate to pulverulent; stomatal cavities absent.....var. *hypoleuca*

Leaf lower surface with stomatal cavities which are filled by a lanate pubescence.....var. *foveolata*

## REFERENCE

- Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), Species Plantarum: Flora of the World 9. Australian Biological Resources Study, Canberra.
- Sothers C.A., Prance G.T. & Chase, M.W. (2016). Towards a monophyletic *Licania*: a new generic classification of the polyphyletic Neotropical genus *Licania* (Chrysobalanaceae). *Kew Bull.* 71: 58.

# *Licania hypoleuca* Benth. var. *hypoleuca*

## Has as synonym

heterotypic *Licania grisea* Kleinhoonte

heterotypic *Licania microcarpa* Hook.f.

heterotypic *Licania parviflora* var. *conduplicata* Maguire

## DESCRIPTION

Leaf lower surface lanate to pulverulent; stomatal cavities absent.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Is endemic from Brazil

## Phytogeographic Domains

Amazon Rainforest, Atlantic Rainforest

## Vegetation Types

Ombrophyllous Forest (Tropical Rain Forest), Amazonian Savanna

## Geographic Distribution

### Confirmed occurrences

North (Acre, Amazonas, Amapá, Pará, Rondônia, Roraima)

Northeast (Bahia)

Central-west (Mato Grosso)

Southeast (Rio de Janeiro)

## HERBARIUM MATERIAL

L. Kawasaki, 238, INPA, K, Amazonas

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. *Flora Neotropica* 9: 1-409.

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), *Species Plantarum: Flora of the World* 9. Australian Biological Resources Study, Canberra.

Sothers C.A., Prance G.T. & Chase, M.W. (2016). Towards a monophyletic *Licania*: a new generic classification of the polyphyletic Neotropical genus *Licania* (Chrysobalanaceae). *Kew Bull.* 71: 58.

# *Licania hypoleuca* var. *foveolata* Prance

## DESCRIPTION

Leaf lower surface with stomatal cavities.

### Life Form

Tree

### Substrate

Terrestrial

## DISTRIBUTION

Native, Is endemic from Brazil

### Phytogeographic Domains

Amazon Rainforest

### Vegetation Types

Ombrophyllous Forest (Tropical Rain Forest)

### Geographic Distribution

#### Confirmed occurrences

North (Amazonas)

## HERBARIUM MATERIAL

Rodrigues, W.A., 8319, INPA, NY, Amazonas

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. *Flora Neotropica* 9: 1-409.

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), *Species Plantarum: Flora of the World* 9. Australian Biological Resources Study, Canberra.

Sothers C.A., Prance G.T. & Chase, M.W. (2016). Towards a monophyletic *Licania*: a new generic classification of the polyphyletic Neotropical genus *Licania* (Chrysobalanaceae). *Kew Bull.* 71: 58.

# *Licania impressa* Prance

## DESCRIPTION

**Leaf:** shape oblong/oblong lanceolate; **abaxial indumentum** stomatal-cavity/lanate/arachnoid; **petiole gland(s)** present. **Inflorescence:** type panicle. **Flower:** receptacle shape campanulate; **pedicel** pedicellate; **stamen number** 6 - 7; **filament length** included; **filament fusion** free. **Fruit:** epicarp tomentose.

## ADDITIONAL DESCRIPTION

Trees, medium to large sized. Branches puberulous when young, glabrescent. Leaves: stipules lanceolate, coriaceous, subsistent, adnate to base of petiole; petioles 7-14 mm long, tomentose when young, canaliculate, usually with 2 glands; lamina oblong-lanceolate to oblong, coriaceous, 5.5-13 × 1.8-4 cm, acuminate at apex with acumen 3-7 mm long, rounded to subcuneate at base, glabrous above, lanate-arachnoid pubescent beneath, with deep reticulate venation or stomatal cavities beneath; midrib glabrous and impressed above; primary veins 9-12 pairs, plane and slightly impressed above, prominent beneath. Inflorescences of terminal and axillary panicles; rachis and branches grey-brown tomentose. Bracts and bracteoles small, ovate, persistent, tomentose on exterior. Flowers c. 1.5 cm long, borne in groups of 2-3 on short peduncles attached to primary branches of inflorescence. Receptacle campanulate, tomentose on exterior, tomentose within; pedicels c. 0.25 mm long. Calyx lobes acute, tomentose on both surfaces. Petals absent. Stamens 6 or 7, inserted around complete circle; filaments glabrous, free to base, shorter than calyx lobes. Ovary pilose. Style pubescent to apex, shorter than calyx lobes. Fruit pyriform; exocarp sordid-tomentose.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Is endemic from Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types

Terra Firme Forest, Ombrophyllous Forest (Tropical Rain Forest)

## Geographic Distribution

### Confirmed occurrences

North (Amazonas, Pará)

## HERBARIUM MATERIAL

A. Ducke, s.n., K, RB, 25032

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. *Flora Neotropica* 9: 1-409.

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), *Species Plantarum: Flora of the World* 9. Australian Biological Resources Study, Canberra.

Sothers C.A., Prance G.T. & Chase, M.W. (2016). Towards a monophyletic *Licania*: a new generic classification of the polyphyletic Neotropical genus *Licania* (Chrysobalanaceae). *Kew Bull.* 71: 58.



# *Licania incana* Aubl.

This treatment is composed of the following taxa: *Licania incana*, .

## Has as synonym

homotype *Chrysobalanus incanus* (Aubl.) M.Gómez

homotype *Hedycrea incana* (Aubl.) J.F.Gmel.

heterotypic *Licania crassifolia* Benth.

heterotypic *Licania leptostachya* var. *crassifolia* (Benth.) Benoist

## DESCRIPTION

**Leaf: shape** oblong/ovate; **abaxial indumentum** lanate; **petiole gland(s)** absent. **Inflorescence: type** spike(s). **Flower: receptacle shape** campanulate; **pedicel** sessile; **stamen number** 5 - 7; **filament length** included; **filament fusion** free. **Fruit: epicarp** tomentulose.

## ADDITIONAL DESCRIPTION

Shrub or rarely small tree. Branches tomentellous to puberulous when young, soon becoming glabrous and lenticellate. Leaves: stipules to 2 mm long, linear, persistent, pubescent, adnate to extreme base of petiole or axillary; petioles 2-5 mm long, terete, eglandular, tomentellous when young; lamina ovate to oblong, thick-coriaceous, 2.5-8.5 × 1.3-4 (-5.5) cm, acute to acuminate at apex with acumen to 10 mm long, usually rounded at base, rarely subcuneate, glabrous above, densely brown-lanate below (pubescence easily removed); midrib plane or slightly impressed above, glabrous; primary veins 7-9 pairs, prominulous beneath, plane above. Inflorescences terminal and axillary spikes, occasionally slightly branched; rachis tomentose when young. Flowers c. 2 mm long, in small glomerules along rachis. Bracts and bracteoles ovate to lanceolate, 1ñ3 mm long, persistent, tomentose on exterior. Receptacle campanulate, sessile, tomentose on exterior, tomentose within. Calyx lobes acute, tomentose on exterior, puberulous within. Petals absent. Stamens 5-7, slightly unilateral; filaments shorter than calyx lobes, glabrous. Ovary lanate. Style equalling filaments, tomentose throughout. Fruit globose, c. 1.6 cm diameter, including stipe c. 2 mm long; epicarp with short tomentellous pubescence; pericarp thin, hard, fibrous, tomentose-hirsute within.

## Life Form

Shrub, Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types





Ombrophyllous Forest (Tropical Rain Forest), Mixed Ombrophyllous Forest, Amazonian Savanna

## Geographic Distribution

### Confirmed occurrences

North (Amazonas, Pará, Roraima)

## HERBARIUM MATERIAL

G.T. Prance, 29037, US,  (US01352499), NY,  (NY01253493), NY,  (NY01253487), INPA, Amazonas  
Randy Evans, 1815, RB, 339644,  (RB00069813), Pará

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. Flora Neotropica 9: 1-409.

- Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), *Species Plantarum: Flora of the World 9*. Australian Biological Resources Study, Canberra.
- Sothers C.A., Prance G.T. & Chase, M.W. (2016). Towards a monophyletic *Licania*: a new generic classification of the polyphyletic Neotropical genus *Licania* (Chrysobalanaceae). *Kew Bull.* 71: 58.

# *Licania indurata* Pilg.

## DESCRIPTION

**Leaf:** shape oblong lanceolate/ovate lanceolate; **abaxial indumentum** lanate; **petiole gland(s)** absent. **Inflorescence:** type racemose panicle. **Flower:** **receptacle shape** campanulate/globose; **pedicel** sessile; **stamen number** 5; **filament length** included; **filament fusion** free. **Fruit:** **epicarp** unknown.

## ADDITIONAL DESCRIPTION

Trees. Branches sparsely puberulous when young, soon becoming glabrous and lenticellate. Leaves: stipules minute, caducous, axillary; petioles 5-8 mm long, pubescent, shallowly canaliculate, eglandular; lamina ovate-lanceolate to oblong-lanceolate, thick-coriaceous, 3-7 × 1-2.1 cm, bluntly acuminate at apex with acumen 11 mm long, cuneate at base, glabrous above, densely lanate beneath; midrib slightly impressed above, glabrous; primary veins 5-7 pairs, prominent beneath, plane above. Inflorescences terminal and subterminal racemose panicles; rachis and branches ferruginous-tomentellous. Flowers c. 2.5 mm long, solitary or in pairs on primary branches of inflorescence. Bracts and bracteoles to 1 mm long, triangular, persistent, puberulous on exterior. Receptacle campanulate-globose, sessile, tomentellous on exterior, tomentose within. Calyx lobes acute, tomentellous on both surfaces. Petals absent. Stamens 5, unilateral; filaments shorter than calyx lobes, glabrous. Ovary villous. Style equalling filaments, puberulous. Fruit unknown.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Is endemic from Brazil

## Phytogeographic Domains

Atlantic Rainforest

## Vegetation Types

Ombrophyllous Forest (Tropical Rain Forest)



## Geographic Distribution

### Confirmed occurrences

Southeast (Rio de Janeiro, São Paulo)

## HERBARIUM MATERIAL

Góes, O.C., 152, RB, Rio de Janeiro

E. Schwebel, II81, SPF,  (SPF00072196), NY,  (NY00428435), São Paulo, **Typus**

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. *Flora Neotropica* 9: 1-409.

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), *Species Plantarum: Flora of the World* 9. Australian Biological Resources Study, Canberra.

Sothers C.A., Prance G.T. & Chase, M.W. (2016). Towards a monophyletic *Licania*: a new generic classification of the polyphyletic Neotropical genus *Licania* (Chrysobalanaceae). *Kew Bull.* 71: 58.

# *Licania irwinii* Prance

## DESCRIPTION

**Leaf:** shape elliptic/ovate orbicular; **abaxial indumentum** glabrous; **petiole gland(s)** absent. **Inflorescence:** type panicle. **Flower:** **receptacle shape** campanulate; **pedicel** sessile; **stamen number** 5; **filament length** included; **filament fusion** free. **Fruit:** **epicarp** pulverulent/rugose.

## ADDITIONAL DESCRIPTION

Trees. Branches glabrous when young, lenticellate. Leaves: stipules small, thick, to 1.5 mm long, subpersistent, adnate to base of petiole; petioles 2-4 mm long, glabrous, eglandular, weakly canaliculate; lamina thickly coriaceous, ovate-orbicular to elliptic, 2-6.5 × 1.2-4 cm, rounded to obtusely-apiculate at apex, rounded at base with margins recurved, glabrous on both surfaces, glandular but not pustulate beneath; midrib glabrous and prominulous above; primary veins 6-12 pairs, plane above, prominulous beneath. Inflorescences terminal and subterminal panicles; rachis glabrescent with branches puberulous. Bracts and bracteoles triangular, to 1 mm long, persistent, puberulous outside. Flowers sessile, 2.5-3 mm long. Receptacle campanulate, sordid-tomentellous outside, tomentose within. Calyx lobes acute, tomentellous on both surfaces. Petals absent. Stamens 5, unilateral; filaments glabrous, free to base, shorter than calyx lobes. Ovary villous. Style pubescent to apex, shorter than calyx lobes. Fruit pyriform, 3.5 mm long; stipe 12 mm long; epicarp sordid-pulverulent, weakly rugose when dry; mesocarp thin, fleshy; endocarp hard, 2.5 mm thick, woody, sparsely pubescent within.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types




Ombrophyllous Forest (Tropical Rain Forest)

## Geographic Distribution

### Confirmed occurrences

North (Amazonas)

## HERBARIUM MATERIAL

Palheta, E., 2903.332912, US,  (US01352498), US,  (US01352497), K, NY, Amazonas  
Prance, G.T., 55002, P (P00746003), K,  (K000220676), **Typus**

## REFERENCE

- Prance, G.T. 1972. Chrysobalanaceae. *Flora Neotropica* 9: 1-409.  
Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), *Species Plantarum: Flora of the World* 9. Australian Biological Resources Study, Canberra.  
Sothers C.A., Prance G.T. & Chase, M.W. (2016). Towards a monophyletic *Licania*: a new generic classification of the polyphyletic Neotropical genus *Licania* (Chrysobalanaceae). *Kew Bull.* 71: 58.

# *Licania kunthiana* Hook.f.

## Has as synonym

heterotypic *Licania hypargyrea* Malme

heterotypic *Licania parviflora* var. *submembranacea* Maguire

## DESCRIPTION

**Leaf:** shape oblong lanceolate/oblong ovate; **abaxial indumentum** lanate farinaceous; **petiole gland(s)** absent. **Inflorescence:** type racemose panicle. **Flower:** **receptacle shape** campanulate; **pedicel** sessile; **stamen number** 5 - 6; **filament length** included; **filament fusion** free. **Fruit:** **epicarp** glabrous/pulverulent.

## ADDITIONAL DESCRIPTION

Trees to 25 m tall. Branches puberulous when young, soon becoming glabrous and lenticellate. Leaves: stipules lanceolate, 2-3 mm long, persistent, adnate to extreme base of petiole; petioles 2-5 mm long, tomentellous to puberulous, becoming glabrous with age, shallowly canaliculate to terete, eglandular; lamina oblong-ovate to oblong-lanceolate, membranous to subcoriaceous, 3-8.5 × 1.3-5 cm, acuminate at apex with acumen 2-13 mm long, rounded to cuneate at base, glabrous above, densely lanate-farinaceous beneath; upper surface of midrib plane or slightly impressed, glabrous except at extreme base; primary veins 7-9 pairs, prominent beneath, plane above; secondary veins reticulate. Inflorescences terminal and axillary racemose panicles; rachis and branches sparsely puberulous. Flowers 1.5-2 mm long, sessile and densely crowded on primary branches of inflorescence. Bracts and bracteoles 0.2-0.8 mm long, triangular. Receptacle campanulate, sessile, sparsely grey-puberulous or rarely tomentellous on exterior, tomentose within. Calyx lobes acute, puberulous on both surfaces. Petals absent. Stamens 5 or 6, unilateral; filaments shorter than calyx lobes, glabrous. Ovary lanate. Style lanate, equalling filaments. Fruit oblong-elliptical, up to 2 cm long, 1 cm broad, with a tapered base; epicarp yellow-brown-pulverulent, sometimes becoming glabrous with age; pericarp thin, hard, fibrous, hirsutulous within.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Is endemic from Brazil

## Phytogeographic Domains

Amazon Rainforest, Caatinga, Central Brazilian Savanna, Atlantic Rainforest

## Vegetation Types

Cerrado (lato sensu), Riverine Forest and/or Gallery Forest, Terra Firme Forest, Ombrophyllous Forest (Tropical Rain Forest)

## Geographic Distribution

### Confirmed occurrences



North (Acre, Amazonas, Amapá, Pará, Rondônia, Roraima, Tocantins)

Northeast (Bahia, Maranhão, Pernambuco, Sergipe)

Central-west (Distrito Federal, Goiás, Mato Grosso do Sul, Mato Grosso)

Southeast (Espírito Santo, Minas Gerais, Rio de Janeiro, São Paulo)

## HERBARIUM MATERIAL

A.M. Carvalho, 3792, CEPEC, HUEFS (HUEFS0022460), K (K001247848), MBM (MBM163195), MBML (MBML006716), NY,  (NY00378460), US,  (US01352519), Bahia

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. *Flora Neotropica* 9: 1-409.

- Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), *Species Plantarum: Flora of the World 9*. Australian Biological Resources Study, Canberra.
- Sothers C.A., Prance G.T. & Chase, M.W. (2016). Towards a monophyletic *Licania*: a new generic classification of the polyphyletic Neotropical genus *Licania* (Chrysobalanaceae). *Kew Bull.* 71: 58.

# *Licania lamentanda* Prance

## DESCRIPTION

**Leaf:** shape oblong-elliptic; **abaxial indumentum** lanate appressed; **petiole gland(s)** absent. **Inflorescence:** type racemose panicle. **Flower:** **receptacle shape** campanulate; **pedicel** subsessile; **stamen number** 6 - 7; **filament length** included; **filament fusion** free. **Fruit:** **epicarp** tomentulose/velutinous.

## ADDITIONAL DESCRIPTION

Trees. Branches shortly tomentellous when young, becoming glabrous with age. Leaves: stipules caducous (not seen); petioles 1.1-1.5 cm long, velutinous-tomentellous, terete or weakly canaliculate above, eglandular; lamina oblong-elliptic, coriaceous, 12-16.5 × 6-8.5 cm, subcuneate to rounded at base, rounded to apiculate at apex, glabrous above, with a short appressed-lanate brown pubescence beneath; midrib prominulous above, prominent beneath; primary veins 10-12 pairs, prominulous above, prominent beneath, secondary venation prominulous, c. more or less parallel at 90° to primary veins. Inflorescences of racemose panicles, 10-14 cm long; rachis and branches shortly tomentellous. Bracts and bracteoles membranous, persistent, ovate, 1.5-3 mm long, tomentellous on exterior, puberulous within. Flowers 4.5-5.5 mm long. Receptacle campanulate, 3.5 mm long, tomentellous on exterior, tomentose within, subsessile. Calyx lobes 5, acute, triangular, c. 1.5 mm long, tomentellous on both surfaces. Petals absent. Stamens 6 or 7, shorter than calyx lobes, inserted around 3/4 of a circle. Ovary extremely densely tomentose, thick-walled. Style pubescent on lower portion, glabrous above. Fruit ellipsoid, 5-6.5 cm long, 4-4.5 cm broad; exocarp densely velutinous tomentellous; pericarp hard, woody, c. 6 mm thick, lanate within.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Is endemic from Brazil

## Phytogeographic Domains

Atlantic Rainforest

## Vegetation Types

Ombrophyllous Forest (Tropical Rain Forest), Coastal Forest (Restinga)

## Geographic Distribution

### Confirmed occurrences

Northeast (Bahia)

## HERBARIUM MATERIAL

A.M. Amorim, 1129, US,  (US01352560), NY,  (NY00378563), CEPEC,  (CEPEC00057477), K, Bahia S.A. Mori, 13673, NY, 428448,  (NY00428448), Bahia, **Typus**

## REFERENCE

- Prance, G.T. 1989. Chrysobalanaceae (Supplement). *Flora Neotropica* 9: 1-267.  
 Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), *Species Plantarum: Flora of the World* 9. Australian Biological Resources Study, Canberra.  
 Sothers C.A., Prance G.T. & Chase, M.W. (2016). Towards a monophyletic *Licania*: a new generic classification of the polyphyletic Neotropical genus *Licania* (Chrysobalanaceae). *Kew Bull.* 71: 58.

# *Licania lanceolata* Prance

## DESCRIPTION

**Leaf:** shape lanceolate; **abaxial indumentum** stomatal-cavity/lanate-pubescent; **petiole gland(s)** absent. **Inflorescence:** type panicle/spike(s). **Flower:** **receptacle shape** campanulate; **pedicel** sessile; **stamen number** 6 - 8; **filament length** included; **filament fusion** free. **Fruit:** **epicarp** pubescent.

## ADDITIONAL DESCRIPTION

Shrub or suffrutex. Branches tomentellous when young, soon becoming glabrous. Leaves with stipules minute, to 1 mm long, linear, puberulous, subsistent, extrapetiolar; petioles 2-10 mm long, terete, eglandular, tomentose when young; lamina lanceolate, tapering to base, thickly coriaceous, 3.5-6 × 1-2.5 cm, glabrous above, densely lanate pubescent and deeply reticulate or with stomatal cavities beneath; apex acute; base rounded; primary veins 7-10 pairs, prominent beneath, plane above, arcuate and confluent before reaching margin. Flowers c. 2 mm long. Inflorescence of little-branched terminal and axillary panicles and axillary spikes; rachis and branches brown-tomentellous. Bracts and bracteoles 0.3-1 mm long, ovate, persistent, puberulous on exterior. Receptacle campanulate, sessile, tomentose on exterior, lanate within. Calyx lobes acute, tomentellous on both surfaces. Petals absent. Stamens 6-8, inserted around complete circle; filaments glabrous, free to base, shorter than calyx lobes. Ovary and style villous. Fruit oblong; exocarp sordid-pubescent; pericarp thin, fibrous, fragile, hirsutulous within.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types

Ombrophylous Forest (Tropical Rain Forest), Amazonian Savanna

## Geographic Distribution

### Confirmed occurrences

North (Acre, Amazonas, Roraima)

Northeast (Alagoas)

## HERBARIUM MATERIAL

G.T. Prance, 29834, INPA, 147561,  (INPA0147561), NY, Amazonas, **Typus**

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. *Flora Neotropica* 9: 1-409.

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), *Species Plantarum: Flora of the World* 9. Australian Biological Resources Study, Canberra.

Sothers C.A., Prance G.T. & Chase, M.W. (2016). Towards a monophyletic *Licania*: a new generic classification of the polyphyletic Neotropical genus *Licania* (Chrysobalanaceae). *Kew Bull.* 71: 58.



# *Licania laxiflora* Fritsch

## Has as synonym

heterotypic *Licania gracilis* Kleinhoonte

heterotypic *Licania macrophylla* Klotzsch

## DESCRIPTION

**Leaf:** shape elliptic/ovate; **abaxial indumentum** lanate; **petiole gland(s)** absent/present. **Inflorescence:** type racemose panicle. **Flower:** **receptacle shape** campanulate; **pedicel** sessile; **stamen number** 6 - 8; **filament length** included; **filament fusion** free. **Fruit:** **epicarp** rufous velutinous.

## ADDITIONAL DESCRIPTION

Tree to 30 m tall. Branches puberulous or rufous-hirsutulous when young, becoming glabrous with age. Leaves with stipules elliptic to lanceolate, 2-5 mm long, pubescent, intrapetiolar, subpersistent; petioles 4-8 mm long, densely rufous-tomentose, terete, eglandular or with medial glands; lamina ovate to elliptic, coriaceous, 5-22 × 2.5-9 cm, acuminate or rarely acute at apex with acumen 2-10 mm long, rounded at base, glabrous above; lower surface with deeply reticulate often hirsutulous venation with the area between veins lanate; midrib slightly impressed above, tomentellous towards base; primary veins 7-10 pairs, prominent beneath, impressed and glabrous; secondary veins ±parallel. Inflorescences terminal and subterminal racemose panicles; rachis and branches rufous-tomentose. Flowers 2.5-3 mm long, sessile on primary branches of inflorescence. Bracts and bracteoles ovate, to 3 mm long, persistent, tomentose on exterior. Receptacle campanulate, sessile, tomentose on exterior and within. Calyx lobes acute, tomentose on both surfaces. Petals absent. Stamens 6-8, inserted in a complete circle; filaments shorter than calyx lobes, glabrous, free to base. Ovary villous. Style equalling filaments, villous throughout. Fruit round to pyriform, to 10 cm long including the short stipe to 10 mm long; epicarp rufous-velutinous; mesocarp thin, fleshy; endocarp thick, hard, sparsely hirsutulous within.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types

Terra Firme Forest, Ombrophyllous Forest (Tropical Rain Forest)

## Geographic Distribution

### Confirmed occurrences

North (Amazonas, Amapá, Pará)

## HERBARIUM MATERIAL

N.A. Rosa, 1795, RB, 263218,  (RB00069978), NY,  (NY00836078), MG (MG054065), IAN, Amapá

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. *Flora Neotropica* 9: 1-409.

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), *Species Plantarum: Flora of the World* 9. Australian Biological Resources Study, Canberra.

Sothers C.A., Prance G.T. & Chase, M.W. (2016). Towards a monophyletic *Licania*: a new generic classification of the polyphyletic Neotropical genus *Licania* (Chrysobalanaceae). *Kew Bull.* 71: 58.



# *Licania leptostachya* Benth.

This treatment is composed of the following taxa: *Licania leptostachya*, .

## Has as synonym

heterotypic *Licania axilliflora* (Sagot) Hochr.

heterotypic *Licania incana* var. *axilliflora* Sagot

heterotypic *Licania leptostachya* var. *axilliflora* (Sagot) Fritsch

## DESCRIPTION

**Leaf: shape** oblong lanceolate/ovate/oblong ovate; **abaxial indumentum** lanate; **petiole gland(s)** absent. **Inflorescence: type** spike(s). **Flower: receptacle shape** campanulate/cupuliform; **pedicel** sessile; **stamen number** 6 - 7; **filament length** included; **filament fusion** free. **Fruit: epicarp** tomentose.

## ADDITIONAL DESCRIPTION

Shrub or small tree. Branches puberulous to glabrescent when young, soon becoming glabrous and conspicuously lenticellate. Leaves with stipules linear, to 3 mm long, pubescent, persistent, axillary; petioles 2-4 mm long, terete, eglandular, tomentose when young; lamina ovate, membranous, oblong-ovate to oblong-lanceolate, 3-7 × 1.5-3.5 cm, usually with a finely pointed acumen 2-15 mm long, cuneate to rounded at base, glabrous above, densely brown-lanate below (pubescence easily removed); midrib plane above, pubescent towards base; primary veins 7-10 pairs, prominent beneath, plane above. Inflorescences unbranched spikes or glomerules, predominantly axillary; rachis tomentose when young, becoming glabrescent in fruit. Flowers c. 2 mm long, in dense glomerules on rachis. Bracts and bracteoles 0.5-1.5 mm long, triangular, persistent, puberulous on exterior. Receptacle cupuliform-campanulate, sessile, tomentose on exterior and within. Calyx lobes acute, tomentose on exterior, puberulous within. Petals absent. Stamens 6 or 7, inserted in a complete circle; filaments shorter than calyx lobes, glabrous. Ovary tomentose. Style equalling filaments, tomentose at base, glabrous above. Fruit oblong, c. 2.5 cm long, including stipe c. 6 mm long; epicarp short-tomentose; pericarp thin, hard, fibrous, densely hirsutulous-tomentose within.

## Life Form

Shrub, Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest, Atlantic Rainforest

## Vegetation Types

Riverine Forest and/or Gallery Forest, Ombrophylous Forest (Tropical Rain Forest)



## Geographic Distribution

### Confirmed occurrences

North (Amapá, Pará, Rondônia, Roraima)

Northeast (Bahia, Maranhão)

## HERBARIUM MATERIAL

Steward, W.C., 130, US,  (US01352627), NY,  (NY01254287), INPA, Roraima

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. Flora Neotropica 9: 1-409.

- Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), *Species Plantarum: Flora of the World 9*. Australian Biological Resources Study, Canberra.
- Sothers C.A., Prance G.T. & Chase, M.W. (2016). Towards a monophyletic *Licania*: a new generic classification of the polyphyletic Neotropical genus *Licania* (Chrysobalanaceae). *Kew Bull.* 71: 58.

# *Licania littoralis* Warm.

This treatment is composed of the following taxa: *Licania littoralis*, *Licania littoralis* var. *cuneata*, *Licania littoralis* var. *littoralis*.

## DESCRIPTION

**Leaf: shape** obovate/ovate elliptic; **abaxial indumentum** glabrous; **petiole gland(s)** absent. **Inflorescence: type** racemose panicle. **Flower: receptacle shape** campanulate; **pedicel** sessile; **stamen number** 4; **filament length** included; **filament fusion** free. **Fruit: epicarp** smooth/waxy.

## ADDITIONAL DESCRIPTION

Trees or shrubs. Branches puberulous when young, becoming glabrous and lenticellate with age. Leaves: stipules lanceolate, 1 mm long, adnate to petiole base, subpersistent; petioles 2-3 mm long, glabrous, rugose, terete, eglandular; lamina obovate to ovate-elliptic, thick-coriaceous, 3-11 × 1.2-6.5 cm, retuse to obtuse at apex, rounded to cordate or rarely cuneate at base, glabrous on both surfaces; palisade glands occasional; midrib prominulous above, glabrous; primary veins 7-9 pairs, prominent beneath, almost plane above. Inflorescences terminal and subterminal racemose panicles; rachis and branches puberulous. Flowers c. 3 mm long, solitary or in small groups on primary branches of inflorescence. Bracts and bracteoles 0.5-1 mm long, persistent, ovate, entire, tomentellous on exterior. Receptacle campanulate, sessile, tomentellous on exterior, tomentose within. Calyx lobes acute, tomentellous on both surfaces. Petals absent. Stamens 4, unilateral; filaments shorter than calyx lobes, free to base, glabrous. Ovary short-tomentose. Style pubescent throughout, equalling filaments. Fruit pyriform, to 3 cm long; epicarp smooth with a waxy indumentum; pericarp thin, hard, fibrous, tomentose within.

## Life Form

Shrub, Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Is endemic from Brazil

## Phytogeographic Domains

Atlantic Rainforest

## Vegetation Types

Ombrophyllous Forest (Tropical Rain Forest), Coastal Forest (Restinga)

## Geographic Distribution

### Confirmed occurrences

Northeast (Bahia, Paraíba, Pernambuco, Sergipe)

Southeast (Espírito Santo, Rio de Janeiro)

## IDENTIFICATION KEY

Leaf bases rounded to cordate....var. *littoralis*

Leaf bases cuneate.....var. *cuneata*

## HERBARIUM MATERIAL

Glaziou, A.F.M., 6168, K,  (K000220675), P (P00746009), P (P00746010), Rio de Janeiro, **Typus**

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. *Flora Neotropica* 9: 1-409.

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), *Species Plantarum: Flora of the World* 9. Australian Biological Resources Study, Canberra.

Sothers C.A., Prance G.T. & Chase, M.W. (2016). Towards a monophyletic *Licania*: a new generic classification of the polyphyletic Neotropical genus *Licania* (Chrysobalanaceae). *Kew Bull.* 71: 58.

# *Licania littoralis* var. *cuneata* Kuhlman.

## DESCRIPTION

Leaf bases cuneate.

### Life Form

Shrub, Tree

### Substrate

Terrestrial

## DISTRIBUTION

Native, Is endemic from Brazil

### Phytogeographic Domains

Atlantic Rainforest

### Vegetation Types





Ombrophyllous Forest (Tropical Rain Forest), Coastal Forest (Restinga)

### Geographic Distribution

#### Confirmed occurrences

Southeast (Espírito Santo)

## HERBARIUM MATERIAL

J.G. Kuhlmann, 208, RB, 34158,  (RB00540095), RB, 34158,  (RB00540094), RB, 34158,  (RB00537076), NY,  (NY00428464), Espírito Santo

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. Flora Neotropica 9: 1-409.

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), Species Plantarum: Flora of the World 9. Australian Biological Resources Study, Canberra.

Sothers C.A., Prance G.T. & Chase, M.W. (2016). Towards a monophyletic *Licania*: a new generic classification of the polyphyletic Neotropical genus *Licania* (Chrysobalanaceae). *Kew Bull.* 71: 58.

# *Licania littoralis* Warm. var. *littoralis*

## DESCRIPTION

Leaf bases rounded to cordate.

### **Life Form**

Shrub, Tree

### **Substrate**

Terrestrial

## DISTRIBUTION

Native, Is endemic from Brazil

### **Phytogeographic Domains**

Atlantic Rainforest

### **Vegetation Types**

Ombrophyllous Forest (Tropical Rain Forest), Coastal Forest (Restinga)

### **Geographic Distribution**

#### Confirmed occurrences

Northeast (Bahia, Paraíba, Pernambuco, Sergipe)

## HERBARIUM MATERIAL

Lino, A.M., 71, RB

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. Flora Neotropica 9: 1-409.



# *Licania majuscula* Sagot

## Has as synonym

heterotypic *Licania hostmannii* Fritsch

## DESCRIPTION

**Leaf:** shape elliptic/oblong ovate; **abaxial indumentum** stomatal-cavity/lanate; **petiole gland(s)** present. **Inflorescence:** type racemose panicle. **Flower:** **receptacle shape** conical; **pedicel** sessile; **stamen number** 8 - 11; **filament length** equal; **filament fusion** fused basally. **Fruit:** **epicarp** velutinous pubescent.

## ADDITIONAL DESCRIPTION

Trees to 22 m tall. Branches tomentose when young, becoming glabrous with age. Leaves: stipules linear-lanceolate, 3-8 mm long, adnate to base of petioles, persistent; petioles 8-13 mm long, lanate, usually deeply canaliculate, with 2 or more pairs of sessile medial glands; lamina elliptic to oblong-ovate, coriaceous, 7.5-18 × 2.8-9 cm, cuspidate to acuminate at apex with acumen 2-12 mm long, rounded at base, glabrous above; venation deeply reticulate on lower surface, revealing open stomatal cavities or deep reticulations, lanate between the venation or in the mouth of the cavities; midrib slightly impressed above for entire length; primary veins 8-10 pairs, prominent beneath, slightly impressed above. Inflorescences terminal and axillary racemose panicles; rachis and branches tomentose. Flowers 4-5 mm long, solitary or in small groups, sessile on primary and secondary branches of inflorescence. Bracts and bracteoles 1-3.5 mm long, oblong to lanceolate, persistent, entire, eglandular, tomentose on exterior. Receptacle conical, sessile, tomentose on exterior, villous-tomentose within. Calyx lobes acute, tomentose on both surfaces. Petals absent. Stamens 8-11, inserted in a complete circle; filaments equalling calyx lobes, slightly connate at base, glabrous except for deflexed hairs at base. Ovary pilose. Style equalling filaments, lanate throughout. Fruit globose when mature, 5-6 cm diameter, with short stipe, pyriform when young; epicarp velutinous-pubescent; pericarp thick, undifferentiated, fibrous, densely pubescent within.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types

Riverine Forest and/or Gallery Forest, Terra Firme Forest, Ombrophyllous Forest (Tropical Rain Forest)



## Geographic Distribution

### Confirmed occurrences

North (Amazonas, Amapá, Pará)

## HERBARIUM MATERIAL

C. Ferreira, 814, NY, MG

D.C. Daly, 4037, NY,  (NY01300656), NY,  (NY01254417), MG (MG109062), K (K001250194), Amapá

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. *Flora Neotropica* 9: 1-409.

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), *Species Plantarum: Flora of the World* 9. Australian Biological Resources Study, Canberra.

Sothers C.A., Prance G.T. & Chase, M.W. (2016). Towards a monophyletic *Licania*: a new generic classification of the polyphyletic Neotropical genus *Licania* (Chrysobalanaceae). *Kew Bull.* 71: 58.

# *Licania marleneae* Prance

## DESCRIPTION

**Leaf:** shape oblong-elliptic; **abaxial indumentum** glabrous; **petiole gland(s)** absent. **Inflorescence:** type panicle. **Flower:** **receptacle shape** campanulate; **pedicel** sessile; **stamen number** 5; **filament length** included; **filament fusion** free. **Fruit:** **epicarp** unknown.

## ADDITIONAL DESCRIPTION

Tree to 15 m tall. Branches glabrous when young, lenticellate. Leaves with stipules acute, c. 0.75 mm long, persistent, sparsely puberulous, adnate to base of petiole; petioles 2-3 mm long, glabrous, rugulose, eglandular; lamina oblong-elliptic, coriaceous, 5.5-9.5 × 3-4.7 cm, cuneate at base, acute at apex, glabrous on both surfaces; midrib plane above, prominulous beneath; primary veins 7-11 pairs, plane or prominulous above, prominulous beneath. Inflorescences of terminal and subterminal branched panicles; rachis sparsely puberulous, becoming glabrous with age; branches puberulous. Bracts and bracteoles c. 0.5 mm long, persistent, triangular, puberulous on exterior. Flowers 2-2.5 mm long. Receptacle campanulate, sessile, sordid-tomentellous on exterior, tomentose within. Calyx lobes 5, acute, tomentellous on exterior, puberulous within. Petals absent. Stamens 5, unilateral, inserted opposite to 3 sepals; filaments glabrous, shorter than calyx lobes. Ovary pilose. Style glabrous. Fruit unknown.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Is endemic from Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types

Terra Firme Forest, Ombrophyllous Forest (Tropical Rain Forest)

## Geographic Distribution

Confirmed occurrences

North (Amazonas)

## HERBARIUM MATERIAL

Silva, M.F., 873, INPA, 36964,  (INPA0036964), Amazonas, **Typus**

## REFERENCE

- Prance, G.T. 1989. Chrysobalanaceae (Supplement). *Flora Neotropica* 9: 1-267.
- Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), *Species Plantarum: Flora of the World* 9. Australian Biological Resources Study, Canberra.
- Sothers C.A., Prance G.T. & Chase, M.W. (2016). Towards a monophyletic *Licania*: a new generic classification of the polyphyletic Neotropical genus *Licania* (Chrysobalanaceae). *Kew Bull.* 71: 58.

# *Licania maxima* Prance

## DESCRIPTION

**Leaf:** shape oblong; **abaxial indumentum** lanate/arachnoid; **petiole gland(s)** absent. **Inflorescence:** type racemose panicle. **Flower:** **receptacle shape** campanulate; **pedicel** sessile; **stamen number** 5; **filament length** included; **filament fusion** free. **Fruit:** **epicarp** unknown.

## ADDITIONAL DESCRIPTION

Tree to 32 m tall. Branches glabrescent when young, lenticellate. Leaves with stipules lanceolate, 4-5 mm long, persistent, adnate to base of petiole; petioles 6-7 mm long, terete to weakly canaliculate, pubescent when young, eglandular; lamina submembranous, oblong, 6.5-10.5 × 2.5-4.7 cm, with acumen 4-8 mm long, rounded to subcuneate at base, glabrous above, lanate-arachnoid pubescent beneath, deeply reticulate; midrib glabrous and plane above; primary veins 8-10 pairs, plane above, prominent beneath. Inflorescences terminal and subterminal racemose panicles; rachis and branches grey-puberulous; bracts and bracteoles ovate to lanceolate, to 2 mm long, equalling flowers in length, persistent, puberulous outside. Flowers sessile, 2 mm long. Receptacle campanulate, grey-tomentellous outside, tomentose within. Calyx lobes acute, tomentellous on both surfaces. Petals absent. Stamens 5, inserted around complete circle; filaments glabrous, free to base, shorter than calyx lobes. Ovary villous-tomentose. Style pubescent to apex, shorter than calyx lobes. Fruit not seen.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Is endemic from Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types

Riverine Forest and/or Gallery Forest, Ombrophylous Forest (Tropical Rain Forest)

## Geographic Distribution

Confirmed occurrences

North (Amapá)

## HERBARIUM MATERIAL

B. Maguire, 47081, IAN, MG, NY, P (P00746118), Amapá, **Typus**

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. *Flora Neotropica* 9: 1-409.

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), *Species Plantarum: Flora of the World* 9. Australian Biological Resources Study, Canberra.

Sothers C.A., Prance G.T. & Chase, M.W. (2016). Towards a monophyletic *Licania*: a new generic classification of the polyphyletic Neotropical genus *Licania* (Chrysobalanaceae). *Kew Bull.* 71: 58.

# *Licania membranacea* Sagot ex Laness.

## Has as synonym

homotype *Licania galibica* Benoist

## DESCRIPTION

**Leaf:** shape oblong; **abaxial indumentum** lanate/arachnoid; **petiole gland(s)** absent. **Inflorescence:** type panicle. **Flower:** **receptacle shape** campanulate; **pedicel** pedicellate; **stamen number** 3 - 5; **filament length** included; **filament fusion** free. **Fruit:** **epicarp** tomentose/rufous.

## ADDITIONAL DESCRIPTION

Trees to 32 m tall. Branches puberulous when young, becoming glabrous and lenticellate with age. Leaves: stipules 3-7 mm long, linear, coriaceous, persistent, adnate to extreme base of petiole; petioles 8-12 mm long, glabrous or glabrescent, eglandular, canaliculate, transversely rugose; lamina oblong, coriaceous, 8-19 × 3.7-7.8 cm, with fine acumen 10-25 mm long at apex, rounded to subcuneate at base; upper surface glabrous; lower surface with short appressed lanate-arachnoid pubescence; venation shallow; midrib plane or prominulous above, glabrous; primary veins 7-10 pairs, prominent beneath, plane above. Inflorescences terminal and axillary panicles; rachis and branches puberulous. Flowers c. 1.5 mm long, in cymules on long slender peduncles attached to primary branches of inflorescence. Bracts and bracteoles 0.5-1 mm long, persistent, puberulous. Receptacle campanulate, tomentellous on exterior, tomentellous within; pedicels 0.25-1 mm long. Calyx lobes acute, tomentellous on both surfaces. Petals absent. Stamens 3-5, unilateral; filaments shorter than calyx lobes, glabrous, free to base. Ovary tomentose. Style equalling filaments, lanate. Fruit pyriform, c. 2.5 cm long; epicarp brown rufous tomentose; mesocarp thin, fleshy; endocarp hard, thin, woody, hirsutulous within.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types

Terra Firme Forest, Ombrophyllous Forest (Tropical Rain Forest)


## Geographic Distribution

### Confirmed occurrences

North (Amazonas, Amapá, Pará)

Northeast (Maranhão)

## HERBARIUM MATERIAL

J.M. Pires, 10542, NY,  (NY01254413), IAN (IAN121254), Pará

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. *Flora Neotropica* 9: 1-409.

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), *Species Plantarum: Flora of the World* 9. Australian Biological Resources Study, Canberra.

Sothers C.A., Prance G.T. & Chase, M.W. (2016). Towards a monophyletic *Licania*: a new generic classification of the polyphyletic Neotropical genus *Licania* (Chrysobalanaceae). *Kew Bull.* 71: 58.

# *Licania micrantha* Miq.

This treatment is composed of the following taxa: *Licania micrantha*, *Licania micrantha* subsp. *micrantha*.

## DESCRIPTION

**Leaf: shape** oblong/ovate elliptic; **abaxial indumentum** lanate; **petiole gland(s)** absent. **Inflorescence: type** racemose panicle. **Flower: receptacle shape** campanulate; **pedicel** sessile; **stamen number** 3; **filament length** included; **filament fusion** free. **Fruit: epicarp** waxy/pulverulent.

## ADDITIONAL DESCRIPTION

Trees to 30 m tall. Branches puberulous when young, soon becoming glabrous and lenticellate. Leaves: stipules lanceolate to 7 mm long, glabrous, persistent, adnate to extreme base of petiole or axillary; petioles 4-12 mm long, puberulous when young, soon becoming glabrous, terete, eglandular; lamina ovate-elliptic to oblong, thick-coriaceous, 4.5-15 × 2.3-8 cm, usually acuminate or caudate at apex, rarely acute with acumen 2-14 mm long, rounded at base, glabrous above; margins plane; lower surface with dense brown lanate pubescence which is easily rubbed off; midrib more or less plane above, glabrous; primary veins 5-7 pairs, prominent beneath, plane above. Inflorescences terminal and axillary much-branched racemose panicles; rachis and branches tomentellous to puberulous. Flowers c. 2 mm long, sessile on primary branches of inflorescence. Bracts and bracteoles 0.5-1 mm long, ovate, persistent, exterior puberulous. Receptacle campanulate, sessile, tomentellous on exterior, tomentose within. Calyx lobes acute, puberulous on both surfaces. Petals absent. Stamens 3, unilateral; filaments shorter than calyx lobes, glabrous. Ovary pilose. Style equalling filaments, pubescent throughout. Fruit pyriform, to 5 cm long, including stipe 5-10 mm long; epicarp with waxy pulverulent indumentum, wrinkled when dry; pericarp thin, hard, fibrous, densely hirsutulous within.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest, Central Brazilian Savanna, Atlantic Rainforest

## Vegetation Types

Cerrado (lato sensu), Terra Firme Forest, Ombrophylous Forest (Tropical Rain Forest)

## Geographic Distribution

### Confirmed occurrences

North (Acre, Amazonas, Amapá, Pará, Rondônia, Roraima)

Northeast (Bahia)

Central-west (Mato Grosso)

Southeast (Espírito Santo, Rio de Janeiro)

### Possible occurrences

North (Acre)

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. *Flora Neotropica* 9: 1-409.

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), *Species Plantarum: Flora of the World* 9. Australian Biological Resources Study, Canberra.

Sothers C.A., Prance G.T. & Chase, M.W. (2016). Towards a monophyletic *Licania*: a new generic classification of the polyphyletic Neotropical genus *Licania* (Chrysobalanaceae). *Kew Bull.* 71: 58.



# *Licania micrantha* Miq. subsp. *micrantha*

## Has as synonym

heterotypic *Licania anisophylla* Standl.

*Licania helvola* Spruce ex Hook.f.

## DESCRIPTION

Leaves 5-15 × 2.8-7 cm; leaf apex acuminate. Inflorescence many-flowered.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest, Central Brazilian Savanna, Atlantic Rainforest

## Vegetation Types

Terra Firme Forest, Ombrophyllous Forest (Tropical Rain Forest)

## Geographic Distribution




### Confirmed occurrences

North (Acre, Amazonas, Amapá, Pará, Rondônia)

Northeast (Bahia)

Central-west (Mato Grosso)

## HERBARIUM MATERIAL

Sothers, C.A., 636, NY,  (NY00428328), K,  (K000220747), A,  (A00046245), INPA, Amazonas

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. *Flora Neotropica* 9: 1-409.

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), *Species Plantarum: Flora of the World* 9. Australian Biological Resources Study, Canberra.

Sothers C.A., Prance G.T. & Chase, M.W. (2016). Towards a monophyletic *Licania*: a new generic classification of the polyphyletic Neotropical genus *Licania* (Chrysobalanaceae). *Kew Bull.* 71: 58.



# *Licania mollis* Benth.

## Has as synonym

heterotypic *Licania lucida* J.F.Macbr.

## DESCRIPTION

**Leaf:** shape oblong/ovate elliptic; **abaxial indumentum** lanate; **petiole gland(s)** absent. **Inflorescence:** type racemose panicle. **Flower:** **receptacle shape** campanulate; **pedicel** sessile; **stamen number** 8 - 11; **filament length** included; **filament fusion** fused basally. **Fruit:** **epicarp** velutinous.

## ADDITIONAL DESCRIPTION

Tree to 15 m tall. Branches pubescent when young, becoming glabrous and lenticellate with age. Leaves with stipules linear-lanceolate, 3-6 mm long, erect, adnate to base of petiole, persistent; petioles 3-6 mm long, tomentose, terete, eglandular; lamina ovate-elliptic to oblong, coriaceous, 5-13 × 2.3-7 cm, cuspidate to acuminate at apex with acumen 3-18 mm long, rounded to subcordate at base, glabrous and shining above, with lower surface deeply reticulate-venose and densely lanate; midrib impressed for most of length above, becoming prominulous near base, tomentose; primary veins 9-12 pairs, prominent beneath, plane or nearly so above. Inflorescences terminal and axillary racemose panicles, densely brown-tomentose. Flowers 3-3.5 mm long, sessile and crowded on primary branches of inflorescence. Bracts and bracteoles 1-3.5 mm long, oblong-lanceolate, persistent entire, eglandular, tomentose on exterior. Receptacle broadly campanulate, sessile, tomentose on exterior, tomentellous within. Calyx lobes acute, tomentose on exterior, puberulous within. Petals absent. Stamens 8-11, inserted in an arc of c. 270°; filaments shorter than calyx lobes, connate at base. Ovary villous. Style equalling filaments, lanate throughout. Fruit globose but surface more or less longitudinally much-ridged, to 2.5 cm in diameter; epicarp ferruginous-velutinous; pericarp thick, hard, glabrous within.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types


Riverine Forest and/or Gallery Forest, Ombrophylous Forest (Tropical Rain Forest)

## Geographic Distribution

### Confirmed occurrences

North (Amazonas, Roraima)

## HERBARIUM MATERIAL

J.M. Pires, 13957, MO, INPA, IAN, Roraima  
Schomburgk, 910, K,  (K000220769), Amazonas, **Typus**

## REFERENCE

- Prance, G.T. 1972. Chrysobalanaceae. *Flora Neotropica* 9: 1-409.  
Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), *Species Plantarum: Flora of the World* 9. Australian Biological Resources Study, Canberra.  
Sothers C.A., Prance G.T. & Chase, M.W. (2016). Towards a monophyletic *Licania*: a new generic classification of the polyphyletic Neotropical genus *Licania* (Chrysobalanaceae). *Kew Bull.* 71: 58.



# *Licania naviculistipula* Prance

## DESCRIPTION

**Leaf:** shape oblong-elliptic; **abaxial indumentum** stomatal-cavity; **petiole gland(s)** present. **Inflorescence:** type racemose panicle. **Flower:** **receptacle shape** campanulate; **pedicel** sessile; **stamen number** 8; **filament length** included; **filament fusion** free. **Fruit:** **epicarp** unknown.

## ADDITIONAL DESCRIPTION

Tree c. 10 m tall. Branches tomentose when young, glabrescent. Leaves with stipules to 13 mm long, triangular, navicular, persistent, coriaceous, adnate to base of petiole; petioles 8-12 mm long, tomentose soon becoming glabrous, terete, with 2 sessile glands near to lamina base; lamina oblong-elliptic, coriaceous, 10-18 × 5.5-9 cm, acuminate at apex with acumen 2-10 mm long, glabrous above, with stomatal cavities filled with lanate pubescence beneath; midrib plane and glabrous above; primary veins 12-16 pairs, plane above, prominent and glabrescent beneath. Inflorescences of terminal and subterminal racemose panicles; rachis and branches ferruginous-tomentose. Bracts to 10 mm long, tomentose, persistent; bracteoles 1-3 mm long, oblong, tomentose, persistent. Flowers 6-7.5 mm long. Receptacle narrowly-campanulate, sessile, brown-tomentose on exterior, tomentose within. Calyx lobes acute, tomentose on both surfaces. Petals absent. Stamens 8, unilateral with toothed staminodes opposite; filaments free, glabrous, shorter than calyx lobes. Ovary pilose. Style lanate-pubescent, equalling calyx lobes. Fruit not seen.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Is endemic from Brazil

## Phytogeographic Domains

Atlantic Rainforest

## Vegetation Types

Ombrophyllous Forest (Tropical Rain Forest)


## Geographic Distribution

### Confirmed occurrences

Northeast (Bahia)

Southeast (Espírito Santo)

## HERBARIUM MATERIAL

Belém, R.P., 3814, NY, 335275,  (NY00335275), UB, SP, FHO, Espírito Santo, **Typus**

## REFERENCE

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), Species Plantarum: Flora of the World 9. Australian Biological Resources Study, Canberra.

Sothers C.A., Prance G.T. & Chase, M.W. (2016). Towards a monophyletic *Licania*: a new generic classification of the polyphyletic Neotropical genus *Licania* (Chrysobalanaceae). *Kew Bull.* 71: 58.

# *Licania nelsonii* Prance

## DESCRIPTION

**Leaf:** shape oblong-elliptic; **abaxial indumentum** lanate-pubescent; **petiole gland(s)** absent. **Inflorescence:** type spike(s). **Flower:** receptacle shape campanulate; **pedicel** sessile; **stamen number** 5; **filament length** included; **filament fusion** free. **Fruit:** epicarp unknown.

## ADDITIONAL DESCRIPTION

Tree to 30 m tall. Branches brown-tomentose when young. Leaves with stipules adnate to base of petioles, linear, persistent, to 3 mm long; petioles 1-2 mm long, terete, eglandular, tomentose when young; lamina oblong-elliptic, chartaceous to coriaceous, 3-6.5 × 1.8-3.2 cm, acuminate at apex with acumen 1-3 mm long, rounded to slightly subcordate at base, densely white-lanate pubescent beneath; midrib slightly impressed above, prominent beneath; primary veins 5-7 pairs, plane to lightly impressed above, prominent beneath; venation conspicuously reticulate beneath in mature leaves. Inflorescences of terminal and axillary densely crowded spikes, 1-4.5 cm long; rachis densely tomentose. Bracts and bracteoles ovate, persistent, rufous-pubescent, c. 1 mm long. Flowers c. 2 mm long, sessile and densely clustered along inflorescence rachis. Receptacle campanulate, sessile, rufous tomentose on exterior, tomentose within. Calyx lobes 5, acute, cream when fresh, rufous-tomentose on exterior when dry, pale brown-tomentose on interior. Petals absent. Stamens 5, inserted opposite 3 calyx lobes; filaments shorter than calyx lobes, free, glabrous. Ovary densely pilose. Fruit unknown.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Is endemic from Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types


Inundated Forest (Igapó), Ombrophyllous Forest (Tropical Rain Forest)

## Geographic Distribution

### Confirmed occurrences

North (Amazonas)

## HERBARIUM MATERIAL

Rodrigues, W.A., 10501, INPA, NY, RB, 402992,  (RB00070455), Amazonas, **Typus**

## REFERENCE

- Prance, G.T. 1989. Chrysobalanaceae (Supplement). *Flora Neotropica* 9: 1-267.
- Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), *Species Plantarum: Flora of the World* 9. Australian Biological Resources Study, Canberra.
- Sothers C.A., Prance G.T. & Chase, M.W. (2016). Towards a monophyletic *Licania*: a new generic classification of the polyphyletic Neotropical genus *Licania* (Chrysobalanaceae). *Kew Bull.* 71: 58.

# *Licania niloi* Prance

## DESCRIPTION

**Leaf:** shape oblong-elliptic; **abaxial indumentum** waxy/pulverulent farinaceous; **petiole gland(s)** present. **Inflorescence:** type panicle. **Flower:** **receptacle shape** urceolate; **pedicel** sessile; **stamen number** 3; **filament length** included; **filament fusion** free. **Fruit:** **epicarp** unknown.

## ADDITIONAL DESCRIPTION

Tree, medium sized. Branches glabrous when young, not lenticellate. Leaves with stipules 2 mm long, lanceolate, coriaceous, persistent, adnate to base of petiole; petioles 3-5 mm long, glabrous, terete, with 2 sessile glands; lamina oblong-elliptic, coriaceous, 4.5-9 × 2-4.2 cm, acute at apex, rounded to subcuneate at base, glabrous above, with waxy pulverulent-farinaceous pubescence beneath; midrib glabrous and plane above; primary veins 5-7 pairs, prominent beneath, plane above. Inflorescences of short terminal and axillary panicles; rachis and branches tomentellous. Bracts and bracteoles 0.5-3 mm long, ovate, persistent, puberulous on exterior. Flowers 3-4 mm long, not in cymules. Receptacle narrowly urceolate with swollen base, sessile, tomentellous on exterior, puberulous within. Calyx lobes lanceolate, puberulous on both surfaces. Petals absent. Stamens 3, unilateral; filaments glabrous, free to base, shorter than calyx lobes. Ovary shortly pubescent. Style puberulous to apex, shorter than calyx lobes. Fruit not seen.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types

Ombrophyllous Forest (Tropical Rain Forest)

## Geographic Distribution

### Confirmed occurrences

North (Amazonas, Rondônia)

## HERBARIUM MATERIAL

N.T. Silva, 392, NY,  (NY00428496), K,  (K000220705), IAN, Rondônia, **Typus**

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. *Flora Neotropica* 9: 1-409.

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), *Species Plantarum: Flora of the World* 9. Australian Biological Resources Study, Canberra.

Sothers C.A., Prance G.T. & Chase, M.W. (2016). Towards a monophyletic *Licania*: a new generic classification of the polyphyletic Neotropical genus *Licania* (Chrysobalanaceae). *Kew Bull.* 71: 58.

# *Licania nitida* Hook.f.

## Has as synonym

basionym *Licania coriacea* var. *nitida* (Hook.f.) Fritsch

## DESCRIPTION

**Leaf:** shape oblong-elliptic/oblong; **abaxial indumentum** lanate; **petiole gland(s)** absent. **Inflorescence:** type racemose panicle. **Flower:** receptacle shape urceolate; **pedicel** sessile; **stamen number** 3/4; **filament length** included; **filament fusion** free. **Fruit:** epicarp pulverulent.

## ADDITIONAL DESCRIPTION

Shrub or low tree. Branches glabrous when young, conspicuously lenticellate. Leaves with stipules linear, c. 3 mm long, glabrous, persistent, adnate to extreme base of petiole; petioles 4-7 mm long, glabrescent or glabrous, terete to flattened, eglandular; lamina oblong to oblong-elliptic, thick-coriaceous, 4.5-10.5 × 2-5.5 cm, acute to bluntly acuminate at apex with acumen to 10 mm long, rounded to subcuneate at base, glabrous above, densely lanate beneath; midrib plane above, glabrous; primary veins 6-8 pairs, prominent beneath, prominulous above. Inflorescences terminal racemose panicles; rachis and branches tomentellous. Flowers 4-5 mm long, on primary branches of inflorescence. Bracts and bracteoles 0.8-1.5 mm long, linear, persistent, tomentellous on exterior. Receptacle urceolate, sessile, tomentellous on exterior, tomentose within. Calyx lobes acute, tomentellous on exterior, puberulous within. Petals absent. Stamens 3 (or 4), unilateral; filaments shorter than calyx lobes, glabrous. Ovary pilose. Style equalling filaments, pilose. Fruit pyriform, c. 3 cm long, on stipe c. 8 mm long; epicarp sordid-pulverulent; pericarp thin, hard, fibrous, tomentose within.

## Life Form

Shrub, Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Is endemic from Brazil

## Phytogeographic Domains

Caatinga, Central Brazilian Savanna, Atlantic Rainforest

## Vegetation Types

Cerrado (lato sensu), Ombrophyllous Forest (Tropical Rain Forest)

## Geographic Distribution

### Confirmed occurrences


Northeast (Bahia)


Central-west (Goiás)

Southeast (Espírito Santo, Minas Gerais, Rio de Janeiro, São Paulo)

## HERBARIUM MATERIAL

J.R. Pirani, 3496, SPF, K, Espírito Santo

Blanchet, J. S., 3290, G, G00177738,  (G00177738), Bahia, **Typus**

Blanchet, J. S., 3290, G, G00359670,  (G00359670), Bahia, **Typus**

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. *Flora Neotropica* 9: 1-409.

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), *Species Plantarum: Flora of the World* 9. Australian Biological Resources Study, Canberra.

Sothers C.A., Prance G.T. & Chase, M.W. (2016). Towards a monophyletic *Licania*: a new generic classification of the polyphyletic Neotropical genus *Licania* (Chrysobalanaceae). *Kew Bull.* 71: 58.

# *Licania orbicularis* Spruce ex Hook.f.

## DESCRIPTION

**Leaf:** shape elliptic/orbicular; **abaxial indumentum** waxy/pulverulent farinaceous; **petiole gland(s)** present. **Inflorescence:** type racemose panicle. **Flower:** **receptacle shape** urceolate; **pedicel** sessile; **stamen number** 2 - 4; **filament length** included; **filament fusion** free. **Fruit:** **epicarp** glabrous.

## ADDITIONAL DESCRIPTION

Trees. Branches puberulous when young, becoming glabrous and lenticellate with age. Leaves: stipules 1-4 mm long, deltoid, coriaceous, adnate to base of petiole, subpersistent; petioles 2-5 mm long, puberulous, becoming glabrescent with age, terete, with 2 rather obscure glands at lamina base; lamina predominantly orbicular but occasionally elliptic, thick-coriaceous, 3-10 × 1.8-7 cm, retuse rounded or acute at apex, rounded to subcuneate at base; margins revolute; upper surface glabrous; lower surface waxy grey pulverulent farinaceous pubescent; midrib glabrous and plane above; primary veins 7-11 pairs, prominent beneath, prominulous above. Inflorescences terminal and axillary little-branched racemose panicles, 6-10 cm long; rachis and branches tomentellous. Bracts and bracteoles lanceolate, c. 2 mm long, in small groups on primary branches of inflorescence. Receptacle urceolate, sessile, light brown tomentose on exterior, sparsely puberulous within. Calyx lobes acute, tomentellous on both surfaces. Petals absent. Stamens 2-4, unilateral; filaments shorter than calyx lobes, glabrous. Ovary pubescent. Style rising to base of filaments, pubescent. Fruit pyriform, c. 4 cm long, 2-2.5 cm broad; epicarp glabrous, drying yellow and wrinkled; mesocarp very thin; endocarp hard to 3 mm thick, granular and fibrous, velutinous within.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types

Riverine Forest and/or Gallery Forest, Ombrophylous Forest (Tropical Rain Forest), Amazonian Savanna




## Geographic Distribution

### Confirmed occurrences

North (Amazonas)

## HERBARIUM MATERIAL

I. Cordeiro, 98, INPA, NY

[Spruce, R.], 3760, P (P00746095), NY,  (NY00428507), K,  (K000220704), K,  (K000220703), **Typus**

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. Flora Neotropica 9: 1-409.

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), Species Plantarum: Flora of the World 9. Australian Biological Resources Study, Canberra.

Sothers C.A., Prance G.T. & Chase, M.W. (2016). Towards a monophyletic *Licania*: a new generic classification of the polyphyletic Neotropical genus *Licania* (Chrysobalanaceae). *Kew Bull.* 71: 58.



# *Licania ovalifolia* Kleinhoonte

## Has as synonym

heterotypic *Licania stahelii* Kleinhoonte

## DESCRIPTION

**Leaf:** shape elliptic/ovate; **abaxial indumentum** rufous lanate; **petiole gland(s)** absent. **Inflorescence:** type racemose panicle. **Flower:** **receptacle shape** urceolate; **pedicel** sessile; **stamen number** 3; **filament length** included; **filament fusion** free. **Fruit:** **epicarp** pubescent.

## ADDITIONAL DESCRIPTION

Trees. Branches puberulous when young, soon becoming glabrous and conspicuously lenticellate. Leaves: stipules lanceolate, 4-6 mm long, persistent, pubescent when young, adnate to lower portion of petiole; petioles 4-7 mm long, tomentellous when young, usually eglandular, terete; lamina oval to elliptic, thick-coriaceous, 3.5-10 × 2-6 cm usually rounded at apex but frequently acute, rounded at base, glabrous above; margins often recurved; lower surface densely rufous-lanate; midrib slightly impressed above, glabrous; primary veins 5-7 pairs, prominulous beneath, plane or slightly impressed above. Inflorescences terminal and axillary racemose panicles; rachis and branches rufous-tomentellous. Flowers 3-4 mm long, sessile on primary branches of inflorescence. Bracts and bracteoles 1.5-2.5 mm long, ovate, persistent, exterior tomentellous. Receptacle urceolate, sessile, tomentose on exterior and within. Calyx lobes acute, tomentellous on exterior, puberulous within. Petals absent. Stamens 3, unilateral; filaments shorter than calyx lobes, glabrous. Ovary pilose. Style equalling filaments, pubescent throughout. Fruit ellipsoid, 2.4-2.7 × 1.4-1.6 cm; exocarp yellow-brown pubescent.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types


Ombrophyllous Forest (Tropical Rain Forest)

## Geographic Distribution

### Confirmed occurrences

North (Amapá)

## HERBARIUM MATERIAL

Boschwezen, B.W., 6457, K,  (K000220737), **Typus**

N.A. Rosa, 1061, MG (MG052631), MG, Amapá

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. *Flora Neotropica* 9: 1-409.

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), *Species Plantarum: Flora of the World* 9. Australian Biological Resources Study, Canberra.

Sothers C.A., Prance G.T. & Chase, M.W. (2016). Towards a monophyletic *Licania*: a new generic classification of the polyphyletic Neotropical genus *Licania* (Chrysobalanaceae). *Kew Bull.* 71: 58.

# *Licania pallida* Spruce ex Sagot

## Has as synonym

homotype *Licania parviflora* var. *pallida* Hook.f.

## DESCRIPTION

**Leaf:** shape oblong-elliptic; **abaxial indumentum** stomatal-cavity; **petiole gland(s)** absent. **Inflorescence:** type panicle. **Flower:** **receptacle shape** campanulate; **pedicel** pedicellate; **stamen number** 3 - 5; **filament length** included; **filament fusion** free. **Fruit:** **epicarp** pulverulent.

## ADDITIONAL DESCRIPTION

Trees to 30 m tall. Branches glabrous and lenticellate when young. Leaves: stipules 2-3 mm long, linear, coriaceous, subpersistent, adnate to extreme base of petiole; petioles 5-7 mm long, glabrescent, eglandular, rugose, usually shallowly canaliculate; lamina oblong-elliptic, coriaceous, 5-13 × 2-6.5 cm, with a finely pointed acumen 6-15 mm long at apex, rounded-subcuneate at base; upper surface glabrous; lower surface with well developed stomatal cavities filled with lanate pubescence; reticulation on lower surface glabrescent and cavities conspicuous; midrib plane above, or slightly impressed toward base, glabrous; primary veins 7-10 pairs, prominent below, more or less plane above. Inflorescences terminal and axillary branched panicles; rachis and branches slender, puberulous. Flowers 1.5-2 mm long, usually on long slender peduncles attached to primary branches of inflorescence, rarely almost sessile on branches of inflorescence. Bracts and bracteoles persistent, 0.2-1 mm long, puberulous. Receptacle campanulate, tomentellous on exterior, tomentellous to puberulous within; pedicels c. 0.25 mm long. Calyx lobes acute, puberulous on both surfaces. Petals absent. Stamens 3-5, unilateral; filaments shorter than calyx lobes, glabrous, free to base. Ovary tomentose. Style equalling filaments, sparsely pubescent throughout. Fruit oblong; epicarp with short sordid reddish-brown pulverulent pubescence; pericarp thin, hard, fibrous, sparsely hirsutulous within.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types

Terra Firme Forest, Ombrophyllous Forest (Tropical Rain Forest)




## Geographic Distribution


### Confirmed occurrences



North (Amazonas, Pará, Rondônia, Roraima)

Northeast (Maranhão)

## HERBARIUM MATERIAL

G.T. Prance, 14070, US, 18808,  (US01352849), P, 18808 (P05562815), NY, 18808,  (NY01300663), NY, 18808,  (NY01292470), MG, 18808 (MG043649), INPA, K, R, Amazonas

G.T. Prance, 25087, RB, 319645,  (RB00070479), Pará

Spruce, R., 1576, GH, 18808,  (GH00046298), RB, 18808,  (RB00537086), Amazonas, **Typus**

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. Flora Neotropica 9: 1-409.

- Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), *Species Plantarum: Flora of the World 9*. Australian Biological Resources Study, Canberra.
- Sothers C.A., Prance G.T. & Chase, M.W. (2016). Towards a monophyletic *Licania*: a new generic classification of the polyphyletic Neotropical genus *Licania* (Chrysobalanaceae). *Kew Bull.* 71: 58.

# *Licania paraensis* Prance

## DESCRIPTION

**Leaf:** shape elliptic; **abaxial indumentum** pubescent; **petiole gland(s)** absent/present. **Inflorescence:** type racemose panicle. **Flower:** **receptacle shape** campanulate/cupuliform; **pedicel** sessile; **stamen number** 6; **filament length** included; **filament fusion** free. **Fruit:** **epicarp** rufous velutinous.

## ADDITIONAL DESCRIPTION

Trees. Branches puberulous when young, glabrescent. Leaves: stipules lanceolate, puberulous, 5-10 mm long, adnate to petiole; petioles 8-15 mm long, tomentellous, canaliculate, glandular or eglandular; lamina elliptic, chartaceous, 9-22 × 5.5-10 cm, rounded or mucronate at apex, rounded to subcuneate at base, glabrous above, deeply reticulate and with grey-lanate pubescence beneath; venation parallel; midrib impressed and glabrous above; primary veins 10-12 pairs, prominent beneath, plane above. Inflorescences of terminal and subterminal racemose panicles; rachis puberulous and branches ferruginous-tomentellous. Bracts and bracteoles 0.3-2 mm long, lanceolate, subsistent, puberulous on exterior. Flowers 2.5-3 mm long. Receptacle campanulate-cupuliform, sessile, ferruginous-tomentellous on exterior, tomentose within. Calyx lobes acute, tomentellous on exterior, puberulous within. Petals absent. Stamens 6, inserted around complete circle; filaments glabrous, free to base, shorter than calyx lobes. Ovary pilose. Style pilose to apex. Young fruit rufous-velutinous pubescent.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types


Terra Firme Forest, Ombrophyllous Forest (Tropical Rain Forest)

## Geographic Distribution

### Confirmed occurrences

North (Amazonas, Amapá, Pará, Rondônia)

## HERBARIUM MATERIAL

A. Ducke, s.n., RB, 18818, NY, K,  (K000220768), Pará, **Typus**

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. *Flora Neotropica* 9: 1-409.

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), *Species Plantarum: Flora of the World 9*. Australian Biological Resources Study, Canberra.

Sothers C.A., Prance G.T. & Chase, M.W. (2016). Towards a monophyletic *Licania*: a new generic classification of the polyphyletic Neotropical genus *Licania* (Chrysobalanaceae). *Kew Bull.* 71: 58.

# *Licania parviflora* Benth.

This treatment is composed of the following taxa: *Licania parviflora*, .

## DESCRIPTION

**Leaf: shape** oblong lanceolate/oblong ovate; **abaxial indumentum** stomatal-cavity/lanate tomentose; **petiole gland(s)** absent. **Inflorescence: type** racemose panicle. **Flower: receptacle shape** campanulate; **pedicel** sessile; **stamen number** 5 - 6; **filament length** included; **filament fusion** free. **Fruit: epicarp** pulverulent/velutinous pubescent.

## ADDITIONAL DESCRIPTION

Trees to 25 m tall. Branches glabrous and conspicuously lenticellate when young. Leaves: stipules linear, to 4 mm long, glabrous, persistent, adnate to extreme base of petiole; petioles 4-6 mm long, terete, eglandular, puberulous, soon becoming glabrous; lamina oblong-ovate to oblong-lanceolate, coriaceous to submembranous, 4.5-12.5 × 2-5.5 cm, with a finely pointed acumen 5-20 mm long at apex, often subfalcate, rounded to subcuneate at base, glabrous above; lower surface with well developed stomatal cavities filled with lanate pubescence, or smooth and lanate-tomentose without stomatal cavities; reticulation glabrous and conspicuous; midrib plane above, glabrous; primary veins 7-11 pairs, prominent beneath, plane above. Inflorescences racemose panicles with puberulous to glabrescent rachis and tomentellous to glabrescent branches. Flowers c. 2 mm long, on primary branches of inflorescence. Bracts and bracteoles 0.2-0.5 mm long, triangular, subsistent, puberulous on exterior. Receptacle campanulate, sessile, grey-tomentellous on exterior, tomentose within. Calyx lobes acute, tomentellous on exterior, puberulous within. Petals absent. Stamens 5 or 6, inserted in a nearly complete circle; filaments shorter than calyx lobes, glabrous. Ovary tomentose. Style equalling filaments, pubescent throughout. Fruit oblong-pyriform, 2.5-3 cm long; epicarp with sordid pulverulent-velutinous ferruginous pubescence; pericarp thin, hard, fibrous, sparsely hirsutulous within.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types

Cerrado (lato sensu), Riverine Forest and/or Gallery Forest, Inundated Forest (Igapó), Ombrophylous Forest (Tropical Rain Forest)

## Geographic Distribution


### Confirmed occurrences

North (Acre, Amazonas, Pará, Roraima)

Central-west (Mato Grosso)

## HERBARIUM MATERIAL

Santos, M.R., 162, MG, Roraima

Schomburgk, R.H., 977, K,  (K000220752), Amazonas, **Typus**

R. Spruce, 2885, G, G00359705,  (G00359705), Amazonas, **Typus**

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. Flora Neotropica 9: 1-409.

- Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), *Species Plantarum: Flora of the World 9*. Australian Biological Resources Study, Canberra.
- Sothers C.A., Prance G.T. & Chase, M.W. (2016). Towards a monophyletic *Licania*: a new generic classification of the polyphyletic Neotropical genus *Licania* (Chrysobalanaceae). *Kew Bull.* 71: 58.

# *Licania parvifructa* Fanshawe & Maguire

## DESCRIPTION

**Leaf:** shape oblong/ovate; **abaxial indumentum** pulverulent farinaceous; **petiole gland(s)** absent. **Inflorescence:** type panicle. **Flower:** **receptacle shape** campanulate; **pedicel** pedicellate; **stamen number** 3; **filament length** included; **filament fusion** free. **Fruit:** **epicarp** pulverulent.

## ADDITIONAL DESCRIPTION

Trees, large. Branches glabrous when young and lenticels inconspicuous. Leaves with stipules 1-2 mm long, linear, coriaceous, persistent, adnate to extreme base of petiole; petioles 3-6 mm long, glabrous to hirsutulous, eglandular, canaliculate; lamina ovate to oblong, coriaceous, 4-9 × 2.5-3.5 cm, with a fine acumen 5-18 mm long at apex, rounded and subconduplicate at base; upper surface glabrous; lower surface shortly pulverulent-farinaceous pubescent; venation shallow; midrib glabrous above, more or less plane or slightly impressed at base; primary veins 7-11 pairs, prominent beneath, plane above. Inflorescences terminal and axillary branched panicles; rachis and branches glabrescent. Flowers c. 1.5 mm long, in cymules on long slender peduncles attached to primary inflorescence branches. Bracts and bracteoles 0.2-1.5 mm long, persistent. Receptacle campanulate, glabrescent on exterior, tomentellous within; pedicels 1-3 mm long. Calyx lobes acute; puberulous on both surfaces. Petals absent. Stamens 3, unilateral; filaments shorter than calyx lobes, glabrous, free to base. Ovary inserted at base of receptacle, hirsutulous. Style rising to base of calyx lobes, pubescent throughout. Fruit to 1.5 mm long, pyriform; epicarp pulverulent; mesocarp thin; endocarp hard, thin, sparsely hirsutulous within.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types




Ombrophyllous Forest (Tropical Rain Forest)

## Geographic Distribution

### Confirmed occurrences

North (Amazonas, Amapá, Pará)

## HERBARIUM MATERIAL

C. Ferreira, 5589, US, 351754,  (US01352877), RB, 351754,  (RB00459486), NY,  (NY01254915), INPA

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. *Flora Neotropica* 9: 1-409.

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), *Species Plantarum: Flora of the World* 9. Australian Biological Resources Study, Canberra.

Sothers C.A., Prance G.T. & Chase, M.W. (2016). Towards a monophyletic *Licania*: a new generic classification of the polyphyletic Neotropical genus *Licania* (Chrysobalanaceae). *Kew Bull.* 71: 58.

# *Licania piresii* Prance

## DESCRIPTION

**Leaf:** shape oblong; **abaxial indumentum** pulverulent farinaceous; **petiole gland(s)** absent. **Inflorescence:** type panicle. **Flower:** **receptacle shape** campanulate; **pedicel** pedicellate; **stamen number** 4/5; **filament length** included; **filament fusion** free. **Fruit:** **epicarp** unknown.

## ADDITIONAL DESCRIPTION

Tree, small to medium-sized. Branches glabrous when young, lenticellate. Leaves with stipules coriaceous, linear, 2-3 mm long, persistent, adnate to base of petiole; petioles 3-4 mm long, glabrous, eglandular, shallowly canaliculate, rugose; lamina coriaceous, oblong, 6-15 × 3.5-6 cm; caudately acuminate at apex with acumen 5-12 mm long, subcuneate at base; upper surface glabrous; lower surface grey-pulverulent-farinaceous pubescent; primary vein glabrous, prominent above; secondary veins 7-9 pairs, prominent beneath, prominulous above; tertiary venation plane. Inflorescences terminal and axillary branched panicles; rachis and branches glabrous or glabrescent; bracts and bracteoles 0.2-0.7 mm long, persistent, puberulous; pedicels 0.25-0.5 mm long. Flowers c. 2 mm long, borne in 2- or 3-flowered cymules with short peduncles; receptacle campanulate, tomentellous outside, tomentose within. Calyx lobes acute, tomentellous on both surfaces. Petals absent. Stamens 4 or 5, unilateral; filaments shorter than calyx lobes, glabrous, free to base. Ovary inserted at base of receptacle, tomentellous. Style glabrous except around base. Fruit not seen.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types



Terra Firme Forest, Ombrophyllous Forest (Tropical Rain Forest)

## Geographic Distribution

### Confirmed occurrences

North (Amapá)

## HERBARIUM MATERIAL

J.M. Pires, 50435, NY,  (NY00428540), GH,  (GH00046305), Amapá, **Typus**

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. *Flora Neotropica* 9: 1-409.

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), *Species Plantarum: Flora of the World* 9. Australian Biological Resources Study, Canberra.

Sothers C.A., Prance G.T. & Chase, M.W. (2016). Towards a monophyletic *Licania*: a new generic classification of the polyphyletic Neotropical genus *Licania* (Chrysobalanaceae). *Kew Bull.* 71: 58.



# *Licania polita* Spruce ex Hook.f.

## Has as synonym

heterotypic *Licania laurifolia* Huber

heterotypic *Licania laxa* Fanshawe & Maguire

heterotypic *Licania poeppigii* Fritsch

## DESCRIPTION

**Leaf:** shape elliptic/ovate; **abaxial indumentum** glabrous; **petiole gland(s)** absent. **Inflorescence:** type racemose panicle. **Flower:** **receptacle shape** campanulate; **pedicel** sessile; **stamen number** 6 - 7; **filament length** included; **filament fusion** free. **Fruit:** **epicarp** tomentose.

## ADDITIONAL DESCRIPTION

Tree, medium to large-sized. Branches puberulous when young, becoming glabrous with age. Leaves with stipules lanceolate, 4-7 mm long, coriaceous, glabrous, persistent to subsistent, adnate to base of petioles; petioles 6-14 mm long, terete, rugose, eglandular, short-velutinous when young; lamina ovate to elliptic, thick-coriaceous, 7-18 × 3-11 cm, acute to acuminate at apex with acumen to 10 mm long, subcordate or rounded to subcuneate at base, glabrous on both surfaces; palisade glands present; venation often minutely papillose on lower surface; midrib plane to prominulous above, glabrous; primary veins 6ñ10 pairs, prominent beneath, prominulous above. Inflorescences terminal racemose panicles; rachis and branches puberulous to short-tomentellous. Flowers 2.5-3.5 mm long, densely crowded in small groups on primary branches of inflorescence. Bracts and bracteoles lanceolate to elliptic, often equaling flowers, puberulous on both surfaces, persistent, entire. Receptacle campanulate, sessile, short-velutinous-tomentose on exterior, tomentose within. Calyx lobes acute, tomentellous on both surfaces. Petals absent. Stamens 6 or 7, unilateral; filaments shorter than calyx lobes, free to base, sparsely pubescent. Ovary on short gynophore, densely villous. Style equalling calyx lobes, pubescent throughout. Fruit pyriform; epicarp ferrugineoustomentose; pericarp thin, undifferentiated, fragile, granular, fibrous, sparsely hirsute within.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types

Inundated Forest (Igapó), Terra Firme Forest, Ombrophyllous Forest (Tropical Rain Forest)

## Geographic Distribution

### Confirmed occurrences

North (Acre, Amazonas, Pará, Rondônia)

Central-west (Mato Grosso)

## HERBARIUM MATERIAL

R. Spruce, 2676, BM, BR, C, CGE, E, F, GH, GOET, LD, LE, NY, OXF, P, RB, K,  (K000220680)

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. *Flora Neotropica* 9: 1-409.

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), *Species Plantarum: Flora of the World* 9. Australian Biological Resources Study, Canberra.

Sothers C.A., Prance G.T. & Chase, M.W. (2016). Towards a monophyletic *Licania*: a new generic classification of the polyphyletic Neotropical genus *Licania* (Chrysobalanaceae). *Kew Bull.* 71: 58.

# *Licania pruinosa* Benoist

## DESCRIPTION

**Leaf:** shape oblong-elliptic/oblong; **abaxial indumentum** lanate farinaceous; **petiole gland(s)** absent. **Inflorescence:** type panicle. **Flower:** **receptacle shape** urceolate; **pedicel** sessile; **stamen number** 3; **filament length** included; **filament fusion** free. **Fruit:** **epicarp** unknown.

## ADDITIONAL DESCRIPTION

Tree to 20 m tall. Branches glabrous when young, conspicuously lenticellate. Leaves with stipules linear, c. 3 mm long, glabrous, persistent, axillary; petioles 5-6 mm long, terete, glabrous, eglandular; lamina oblong to oblong-elliptic, membranous, 5-10 × 2-5 cm, acuminate at apex with acumen 4-11 mm long, cuneate at base, glabrous above, with short grey-brown lanate farinaceous pubescence beneath; midrib plane above, glabrous; primary veins 6-8 pairs, prominent beneath, plane above. Inflorescences terminal racemose panicles; rachis glabrescent; branches puberulous to tomentellous. Flowers 3.5-5 mm long, on primary branches of inflorescence. Bracts and bracteoles 0.2-0.5 mm long, triangular, persistent, puberulous on exterior. Receptacle urceolate, sessile, tomentellous on exterior, hirsute within. Calyx lobes acute, puberulous on both surfaces. Petals absent. Stamens 3, unilateral; filaments shorter than calyx lobes, glabrous. Ovary pilose. Style equalling filaments, hirsute. Fruit unknown.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types





Riverine Forest and/or Gallery Forest, Ombrophyllous Forest (Tropical Rain Forest)

## Geographic Distribution

### Confirmed occurrences

North (Amapá)

## HERBARIUM MATERIAL

H.S. Irwin, 47836, US,  (US01352927), MG (MG026457), IAN (IAN109029), F, RB, NY, 1254790,  (NY01254790), Amapá  
H.S. Irwin, s.n., RB, 134159,  (RB00070235), Amapá  
H.S. Irwin, 47914, NY, 1254787,  (NY01254787), Amapá

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. *Flora Neotropica* 9: 1-409.

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), *Species Plantarum: Flora of the World* 9. Australian Biological Resources Study, Canberra.

Sothers C.A., Prance G.T. & Chase, M.W. (2016). Towards a monophyletic *Licania*: a new generic classification of the polyphyletic Neotropical genus *Licania* (Chrysobalanaceae). *Kew Bull.* 71: 58.

# *Licania riedelii* Prance

## DESCRIPTION

**Leaf:** shape elliptic/oblong; **abaxial indumentum** stomatal-cavity; **petiole gland(s)** absent. **Inflorescence:** type racemose panicle. **Flower:** receptacle shape campanulate; **pedicel** subsessile; **stamen number** 5; **filament length** included; **filament fusion** free. **Fruit:** epicarp tomentulose.

## ADDITIONAL DESCRIPTION

Shrubs. Branches puberulous when young, glabrescent, lenticellate. Leaves: stipules linear, 1.5-2 mm long, persistent, puberulous, adnate to base of petiole; petioles 3-5 mm long, terete, eglandular, puberulous; lamina elliptic to narrowly oblong, thickly coriaceous, 5-10.5 × 1.6-4.7 cm, acute at apex, rounded at base, glabrous and shiny above, with stomatal cavities filled with lanate pubescence beneath; venation glabrous and conspicuous; midrib impressed above, tomentose when young; primary veins 9-10 pairs, prominent beneath, plane or slightly impressed above. Inflorescences of dense terminal and axillary racemose panicles; rachis and branches ferruginous-pubescent. Bracts and bracteoles 0.5-2 mm long, ovate, persistent, ferruginous-pubescent on exterior. Flowers 2.5-3 mm long. Receptacle campanulate, subsessile, ferruginous-tomentose on exterior, tomentose within. Calyx lobes acute, tomentose on both surfaces. Petals absent. Stamens 5, unilateral; filaments glabrous, free to base, shorter than calyx lobes. Ovary tomentose. Style pubescent to apex, shorter than calyx lobes. Fruit pyriform, 1.5 cm long; exocarp tomentellous; mesocarp 2-3 mm thick; endocarp thin, hard, pubescent within.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Is endemic from Brazil

## Phytogeographic Domains

Atlantic Rainforest

## Vegetation Types

Seasonally Semideciduous Forest, Ombrophyllous Forest (Tropical Rain Forest)




## Geographic Distribution

### Confirmed occurrences

Southeast (Minas Gerais, Rio de Janeiro)

## HERBARIUM MATERIAL

H. C. de Lima, 2178, RB, 231835,  (RB00559075), GUA, Rio de Janeiro

L. Riedel, 518, NY,  (NY00428555), NY,  (NY00428554), NY, 428556,  (NY00428556), Minas Gerais, **Typus**

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. *Flora Neotropica* 9: 1-409.

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), *Species Plantarum: Flora of the World* 9. Australian Biological Resources Study, Canberra.

Sothers C.A., Prance G.T. & Chase, M.W. (2016). Towards a monophyletic *Licania*: a new generic classification of the polyphyletic Neotropical genus *Licania* (Chrysobalanaceae). *Kew Bull.* 71: 58.

# *Licania robusta* Sagot

## Has as synonym

heterotypic *Licania pachystachya* Kleinhoonte

## DESCRIPTION

**Leaf:** shape elliptic; **abaxial indumentum** lanate; **petiole gland(s)** absent. **Inflorescence:** type racemose panicle. **Flower:** **receptacle shape** campanulate/urceolate; **pedicel** subsessile; **stamen number** 5 - 6; **filament length** included; **filament fusion** free. **Fruit:** **epicarp** pubescent.

## ADDITIONAL DESCRIPTION

Tree to 25 m tall. Branches glabrous when young, conspicuously lenticellate. Leaves with stipules linear, c. 4 mm long, glabrous, persistent, adnate to base of petiole; petioles 1.2-2 cm long, glabrous, eglandular, canaliculate; lamina elliptic, coriaceous, 8-25 × 4.5-8.5 cm, acuminate at apex with acumen 5-15 mm long, rounded at base, glabrous above; lower surface with dense brown-lanate pubescence obscuring the prominent deeply reticulate venation; midrib prominulous above, glabrous; primary veins 6-8 pairs, prominent beneath, prominulous above. Inflorescences terminal and subterminal racemose panicles; rachis glabrous or glabrescent, lenticellate, with puberulous to tomentellous branches. Flowers 2.5-3 mm long, solitary or in small groups on primary branches of inflorescence. Bracts and bracteoles 0.3-1.5 mm long, triangular to linear, subsistent; exterior puberulous. Receptacle narrowly campanulate to urceolate, subsessile; exterior tomentellous; interior tomentose. Calyx lobes acute, tomentellous on both surfaces. Petals absent. Stamens 5 or 6, unilateral; filaments shorter than calyx lobes, glabrous. Ovary tomentose. Style equalling filaments, lanate. Fruit (immature) oblong; epicarp with short yellow-brown pubescence.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types

Ombrophylous Forest (Tropical Rain Forest)


## Geographic Distribution

### Confirmed occurrences

North (Pará)

## HERBARIUM MATERIAL

E. Oliveira, 230, IAN, Pará

A. Ducke, s.n., RB, 18815,  (RB00070217), Pará

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. *Flora Neotropica* 9: 1-409.

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), *Species Plantarum: Flora of the World* 9. Australian Biological Resources Study, Canberra.

Sothers C.A., Prance G.T. & Chase, M.W. (2016). Towards a monophyletic *Licania*: a new generic classification of the polyphyletic Neotropical genus *Licania* (Chrysobalanaceae). *Kew Bull.* 71: 58.

# *Licania rodriguesii* Prance

## DESCRIPTION

**Leaf:** shape elliptic/oblong; **abaxial indumentum** lanate-pubescent; **petiole gland(s)** absent. **Inflorescence:** type racemose panicle. **Flower:** **receptacle shape** campanulate; **pedicel** sessile; **stamen number** 5; **filament length** included; **filament fusion** free. **Fruit:** **epicarp** rufous velutinous.

## ADDITIONAL DESCRIPTION

Tree, large. Branches puberulous when young, glabrescent, lenticellate. Leaves with stipules linear, glabrous, subsistent, extrapetiolar; petioles 6-12 mm long, glabrescent, eglandular, terete or slightly canaliculate; lamina elliptic to oblong, coriaceous, 9-16 × 3-7 cm, with acumen 8-15 mm long, subcuneate at base, glabrous above, densely lanate-pubescent beneath; venation smooth; midrib glabrous above, slightly prominent; primary veins 6 or 7 pairs, prominent beneath, plane and arcuate above. Inflorescences of terminal and subterminal racemose panicles; rachis and branches tomentellous or puberulous. Bracts and bracteoles 0.5-1.5 mm long, ovate, persistent, puberulous on exterior. Flowers 2-2.5 mm long. Receptacle campanulate, sessile, tomentellous on exterior, tomentose within. Calyx lobes acute, tomentellous on both surfaces. Petals absent. Stamens 5, unilateral; filaments glabrous, free to base, shorter than calyx lobes. Ovary tomentose. Style pubescent to apex. Fruit with rufous-velutinous exocarp; pericarp thin, hard, fibrous, hirsutulous within.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types




Terra Firme Forest, Ombrophyllous Forest (Tropical Rain Forest)

## Geographic Distribution

Confirmed occurrences

North (Amazonas, Pará)

## HERBARIUM MATERIAL

A. Ducke, s.n., K, RB, 19788,  (RB00537094), RB, 18814,  (RB00537096), RB, 18812,  (RB00537095), Pará, **Typus**

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. Flora Neotropica 9: 1-409.

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), Species Plantarum: Flora of the World 9. Australian Biological Resources Study, Canberra.

Sothers C.A., Prance G.T. & Chase, M.W. (2016). Towards a monophyletic *Licania*: a new generic classification of the polyphyletic Neotropical genus *Licania* (Chrysobalanaceae). *Kew Bull.* 71: 58.

# *Licania rufescens* Klotzsch ex Fritsch

## DESCRIPTION

**Leaf:** shape oblong-elliptic; **abaxial indumentum** rufous lanate; **petiole gland(s)** absent. **Inflorescence:** type racemose panicle. **Flower:** **receptacle shape** campanulate; **pedicel** sessile; **stamen number** 5 - 6; **filament length** included; **filament fusion** free. **Fruit:** **epicarp** unknown.

## ADDITIONAL DESCRIPTION

Trees to 35 m tall. Branches puberulous when young. Leaves: stipules lanceolate, to 3 mm long, axillary, pubescent, caducous; petioles 5-8 mm long, tomentellous, shallowly canaliculate, eglandular; lamina oblong-elliptic, coriaceous, 5-10 × 1.8-5.5 cm, acuminate or acute at apex with acumen to 8 mm long, subcuneate at base, glabrous above, with rufous-lanate pubescence beneath obscuring deeply reticulate venation; midrib usually impressed above, glabrous; primary veins 5-8 pairs, prominent beneath, usually slightly impressed above. Inflorescences terminal and subterminal racemose panicles; rachis and branches rufoustomentellous. Flowers c. 2 mm long, sessile on primary branches of inflorescence. Bracts and bracteoles 0.5-1 mm long, ovate, tomentellous on exterior, persistent. Receptacle sessile, campanulate, tomentose on exterior and within. Calyx lobes acute, tomentellous on both surfaces. Petals absent. Stamens 5 or 6, unilateral; filaments shorter than calyx lobes, free to base, glabrous. Ovary pilose. Style rising to base of filaments, pilose throughout. Fruit unknown.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types



Ombrophyllous Forest (Tropical Rain Forest)

## Geographic Distribution

### Confirmed occurrences

North (Amapá, Pará, Roraima)

## HERBARIUM MATERIAL

N.T. Silva, 474, NY,  (NY01254976), IAN (IAN096884), Amapá Schomburgk, 601 (935 B), P (P00746072), P (P00746071), K,  (K000220731), Roraima, **Typus**

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. Flora Neotropica 9: 1-409.

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), Species Plantarum: Flora of the World 9. Australian Biological Resources Study, Canberra.

Sothers C.A., Prance G.T. & Chase, M.W. (2016). Towards a monophyletic *Licania*: a new generic classification of the polyphyletic Neotropical genus *Licania* (Chrysobalanaceae). *Kew Bull.* 71: 58.

# *Licania sandwichii* Prance

## DESCRIPTION

**Leaf:** shape ovate orbicular; **abaxial indumentum** lanate/farinaceous; **petiole gland(s)** absent. **Inflorescence:** type racemose panicle. **Flower:** **receptacle shape** cupuliform; **pedicel** sessile; **stamen number** 6 - 8; **filament length** included; **filament fusion** free. **Fruit:** **epicarp** unknown.

## ADDITIONAL DESCRIPTION

Trees. Branches rufous-hirsutulous when young, soon becoming glabrous and lenticellate. Leaves: stipules elliptic, 3-5 mm long, hirsutulous, persistent, axillary; petioles 4-5 mm long, densely hirsutulous, terete, eglandular; lamina thickly coriaceous, ovate-orbicular, 6-11.5 × 4-7.5 cm; rounded to acute at apex, rounded at base, glabrous and shiny above, lanate-farinaceous pubescent and deeply reticulate beneath; midrib slightly impressed, hirsutulous on basal portion above, hirsutulous beneath; primary veins 7-9 pairs, impressed and glabrous above, prominent and hirsutulous beneath. Inflorescences terminal and axillary racemose panicles; rachis and branches rufous-tomentose. Bracts and bracteoles ovate, to 3 mm long, persistent, tomentose on exterior. Flowers 3.5-5 mm long, sessile. Receptacle broadly cupuliform, densely rufous tomentose on both surfaces. Calyx lobes acute, tomentose on both surfaces. Petals absent. Stamens 6-8, unilateral; filaments free to base, glabrous, shorter than calyx lobes. Ovary villous. Style villous, shorter than calyx lobes. Fruit not seen.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types

Terra Firme Forest, Ombrophyllous Forest (Tropical Rain Forest)


## Geographic Distribution

### Confirmed occurrences

North (Amazonas)

## HERBARIUM MATERIAL

[Boyan, R.], 7916, K,  (K000220727), **Typus**

Assunção, P.A.C.I., 677, US,  (US01352955), MBM (MBM243225), K (K001250200), IAN (IAN171580), INPA, Amazonas

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. Flora Neotropica 9: 1-409.

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), Species Plantarum: Flora of the World 9. Australian Biological Resources Study, Canberra.

Sothers C.A., Prance G.T. & Chase, M.W. (2016). Towards a monophyletic *Licania*: a new generic classification of the polyphyletic Neotropical genus *Licania* (Chrysobalanaceae). *Kew Bull.* 71: 58.



# *Licania santosii* Prance

## DESCRIPTION

**Leaf: shape** ovate orbicular; **abaxial indumentum** stomatal-cavity; **petiole gland(s)** absent. **Inflorescence: type** panicle. **Flower: receptacle shape** campanulate; **pedicel** pedicellate; **stamen number** 7; **filament length** included; **filament fusion** free. **Fruit: epicarp** unknown.

## ADDITIONAL DESCRIPTION

Trees to 4 m tall. Branches glabrous when young, conspicuously lenticellate. Leaves: stipules adnate to extreme base of petioles, persistent, lanceolate, c. 2 mm long; petioles 8–10 mm long, terete, sparsely puberulous when young, eglandular, slightly rugulose; lamina ovate-orbicular, coriaceous, becoming thickly coriaceous with age, 6–10 × 4–6.5 cm, rounded at base, rounded to slightly acute at apex; upper surface glabrous; lower surface with stomatal crypts filled by dense lanate pubescence; venation reticulate and conspicuous since it is not covered by pubescence; midrib plane above, prominent beneath; primary veins 7 or 8 pairs, plane above, prominent beneath. Inflorescences of little-branched panicles 3–4 cm; rachis and branches brown-tomentellous. Bracts and bracteoles 1–2 mm long, ovate, persistent, tomentellous on exterior. Flowers c. 2.5 mm long, in few-flowered cymules attached to rachis and primary branches by long slender peduncles. Receptacle campanulate, brown-tomentellous on exterior, tomentose within; pedicels 0.2 mm long. Calyx lobes 5, acute, tomentellous-puberulous on both surfaces. Petals absent. Stamens 7, inserted around complete circle; anthers and filaments of variable size; filaments shorter than calyx lobes, glabrous, free to base. Ovary villous. Style extending to base of filaments, tomentose on lower 1/2. Fruit not seen.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Is endemic from Brazil

## Phytogeographic Domains

Atlantic Rainforest

## Vegetation Types

Ombrophyllous Forest (Tropical Rain Forest)



## Geographic Distribution

### Confirmed occurrences

Northeast (Bahia)

## HERBARIUM MATERIAL

J. Almeida, 150, NY, 428567,   (NY00428567), Bahia, **Typus**

A.M. Carvalho, 353, NY,  (NY00378642), MBM (MBM090529), CEPEC,  (CEPEC00022900), Bahia

## REFERENCE

- Prance, G.T. 1989. Chrysobalanaceae (Supplement). *Flora Neotropica* 9: 1-267.
- Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), *Species Plantarum: Flora of the World* 9. Australian Biological Resources Study, Canberra.
- Sothers C.A., Prance G.T. & Chase, M.W. (2016). Towards a monophyletic *Licania*: a new generic classification of the polyphyletic Neotropical genus *Licania* (Chrysobalanaceae). *Kew Bull.* 71: 58.

# *Licania savannarum* Prance

## DESCRIPTION

**Leaf:** shape elliptic/oblong/oblong lanceolate; **abaxial indumentum** lanate farinaceous; **petiole gland(s)** absent. **Inflorescence:** type panicle. **Flower:** receptacle shape urceolate; **pedicel** sessile; **stamen number** 3; **filament length** included; **filament fusion** free. **Fruit:** epicarp glabrous.

## ADDITIONAL DESCRIPTION

Shrubs or small trees. Branches puberulous when young, soon becoming glabrous and lenticellate. Leaves: stipules to 1 mm long, linear, caducous, extrapetiolar; petioles 2-3 mm long, glabrous, eglandular, rugose, terete; lamina elliptic or oblong to oblong-lanceolate, coriaceous, 3-8 × 1.2-3.5 cm, glabrous above, with a dense lanate-farinaceous pubescence beneath; apex rounded to acute; base cuneate to subcuneate; midrib glabrous and plane above; primary veins 5-8 pairs, prominulous beneath, plane above. Flowers 2.5-3 mm long. Inflorescence of terminal and axillary panicles; rachis and branches densely puberulous. Bracts and bracteoles 0.5-1.5 mm long, linear, persistent, tomentellous on exterior. Receptacle urceolate, sessile, rufous-brown-tomentose on exterior, tomentose within. Calyx lobes acute, tomentose on both surfaces. Petals absent. Stamens 3, unilateral; filaments glabrous, shorter than calyx lobes, free to base. Ovary tomentose. Style hirsute to mid point. Fruit pyriform; exocarp glabrous, rugose when dry; mesocarp thin; endocarp thick, woody, hard, hirsute within.

## Life Form

Shrub, Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types




Riverine Forest and/or Gallery Forest, Amazonian Savanna

## Geographic Distribution

### Confirmed occurrences

North (Amazonas)

## HERBARIUM MATERIAL

G.T. Prance, 17816, US,  (US01352959), P (P04828759), NY,  (NY01254830), MG (MG047385), INPA, Amazonas Maguire, B., 37584, K,  (K000220738), **Typus**

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. *Flora Neotropica* 9: 1-409.

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), *Species Plantarum: Flora of the World* 9. Australian Biological Resources Study, Canberra.

Sothers C.A., Prance G.T. & Chase, M.W. (2016). Towards a monophyletic *Licania*: a new generic classification of the polyphyletic Neotropical genus *Licania* (Chrysobalanaceae). *Kew Bull.* 71: 58.

# *Licania silvae* Prance

## DESCRIPTION

**Leaf:** shape oblong-elliptic/oblong; **abaxial indumentum** glabrous; **petiole gland(s)** present. **Inflorescence:** type panicle. **Flower:** **receptacle shape** campanulate; **pedicel** sessile; **stamen number** 3; **filament length** included; **filament fusion** free. **Fruit:** **epicarp** unknown.

## ADDITIONAL DESCRIPTION

Trees. Branches sparsely puberulous when young, soon becoming glabrous and lenticellate. Leaves: stipules minute, lanceolate, coriaceous, subpersistent, extrapetiolar; petioles 2-4 mm long, glabrous, rugose, terete, with 2 glands near to lamina base; lamina oblong to oblongelliptic, coriaceous, 6-11.5 × 2.5-5.5 cm, glabrous on both surfaces, with pustulate venation beneath; apex acute to acuminate with acumen 2-6 mm long; base rounded to subcuneate; midrib glabrous, prominulous above; primary veins 7-8 pairs, prominulous on both surfaces. Flowers c. 1.5 mm long. Inflorescence of terminal and subterminal panicles; rachis and branches densely puberulous. Receptacle campanulate, sessile, tomentellous on exterior, tomentose within. Calyx lobes acute, tomentellous on both surfaces. Petals absent. Stamens 3, unilateral; filaments shorter than calyx lobes, sparsely puberulous, free to base. Ovary tomentose. Style villous to apex. Fruit unknown.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types

Terra Firme Forest, Ombrophyllous Forest (Tropical Rain Forest)








## Geographic Distribution

### Confirmed occurrences

North (Amazonas, Pará)

Northeast (Maranhão)

## HERBARIUM MATERIAL

G.T. Prance, 58968, INPA, 37668,  (INPA0037668), UB, 2076,  (UB0036771), UB, 2076,  (UB0036770), US, 2692314,  (US00067680), NY,  (NY00428575), K,  (K000220682), GH,  (GH00046311), UB, Pará, **Typus**

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. *Flora Neotropica* 9: 1-409.

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), *Species Plantarum: Flora of the World* 9. Australian Biological Resources Study, Canberra.

Sothers C.A., Prance G.T. & Chase, M.W. (2016). Towards a monophyletic *Licania*: a new generic classification of the polyphyletic Neotropical genus *Licania* (Chrysobalanaceae). *Kew Bull.* 71: 58.

# *Licania spicata* Hook.f.

## Has as synonym

homotype *Licania organensis* (Miers) Fritsch

homotype *Moquilea organensis* Miers

## DESCRIPTION

**Leaf:** shape oblong; **abaxial indumentum** lanate; **petiole gland(s)** absent. **Inflorescence:** type racemose panicle/spike(s). **Flower:** **receptacle shape** globose/cupuliform; **pedicel** sessile; **stamen number** 5 - 6; **filament length** included; **filament fusion** free. **Fruit:** **epicarp** tomentose.

## ADDITIONAL DESCRIPTION

Tree. Branches puberulous when young, becoming glabrous and lenticellate with age. Leaves with stipules deciduous (not seen); petioles 6-9 mm long, tomentellous, canaliculate, eglandular; lamina oblong, subcoriaceous, 4.5-9 × 1.5-3.7 cm, with finely pointed acumen 5-15 mm long, subcuneate to cuneate at base; upper surface glabrous or sparsely strigose when young, densely yellow-brown lanate below; midrib slightly impressed above, glabrous; primary veins 8-11 pairs, prominent beneath, plane above. Inflorescences comprising axillary unbranched spikes and terminal few-branched racemose panicles; rachis and branches puberulous to tomentellous. Flowers c. 2.5 mm long, on rachis and primary branches of inflorescence. Bracts and bracteoles 0.3-0.8 mm long, ovate, persistent, tomentellous on exterior. Receptacle cupuliform-globose, sessile, tomentellous to puberulous on exterior, tomentose within. Calyx lobes acute, tomentellous on exterior, puberulous within. Stamens 5 or 6, slightly unilateral; filaments shorter than calyx lobes, glabrous. Ovary villous. Style equalling filaments, villous throughout. Fruit (immature) with densely tomentose epicarp.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Is endemic from Brazil

## Phytogeographic Domains

Atlantic Rainforest

## Vegetation Types

Ombrophylous Forest (Tropical Rain Forest)

## Geographic Distribution


### Confirmed occurrences

Northeast (Bahia)

Southeast (Espírito Santo, Minas Gerais, Rio de Janeiro)

## HERBARIUM MATERIAL

E.P. Heringer, 2813, RB, Minas Gerais

Miers, J., 4095, K,  (K000220755), Rio de Janeiro

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. *Flora Neotropica* 9: 1-409.

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), *Species Plantarum: Flora of the World* 9. Australian Biological Resources Study, Canberra.

Sothers C.A., Prance G.T. & Chase, M.W. (2016). Towards a monophyletic *Licania*: a new generic classification of the polyphyletic Neotropical genus *Licania* (Chrysobalanaceae). *Kew Bull.* 71: 58.



# *Licania stewardii* Prance

## DESCRIPTION

**Leaf:** shape oblong; **abaxial indumentum** lanate/waxy; **petiole gland(s)** absent. **Inflorescence:** type racemose panicle. **Flower:** **receptacle shape** campanulate; **pedicel** pedicellate; **stamen number** 9 - 11; **filament length** included; **filament fusion** fused basally. **Fruit:** **epicarp** unknown.

## ADDITIONAL DESCRIPTION

Trees, 3-5 m tall. Branches puberulous when young, soon glabrate. Leaves: stipules linear, 2-3 mm long, persistent, tomentellous, adnate to petioles; petioles 1.5-2.5 mm long, terete, eglandular, tomentellous when young; lamina oblong, chartaceous, 4-8 × 2.2-4 cm, rounded or subcordate at base, rounded, acute or retuse at apex, glabrous above with a waxy lanate appressed pubescence beneath; midrib slightly impressed above, prominent beneath; primary veins 7-9 pairs, plane above, prominent beneath; secondary venation conspicuously reticulate. Inflorescences of terminal or subterminal little branched racemose panicles or simple racemes 2-7 cm long; rachis and branches grey-tomentellous. Bracts and bracteoles narrowly lanceolate, 1-2 mm long, tomentellous on exterior, persistent. Flowers 3-3.5 mm long. Receptacle campanulate, grey-tomentellous on exterior, lanate within; pedicels 0.25-0.5 mm long. Calyx lobes 5, acute, grey-tomentellous on exterior, puberulous within. Petals absent. Stamens 9-11, inserted around complete circle, shorter than calyx lobes; filaments connate at base, with united part lanate. Ovary densely lanate. Style equalling filaments. Fruit unknown.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types






Amazonian Campinarana, Ombrophyllous Forest (Tropical Rain Forest)

## Geographic Distribution

### Confirmed occurrences

North (Amazonas, Roraima)

## HERBARIUM MATERIAL

Steward, W.C., P20251, US, 2838961,  (US00170064), INPA, 44173,  (INPA0044173), S (S-R-8116), P (P00746062), NY,   (NY00428581), MO (MO255322), MG (MG048767), GH,  (GH00046313), P, K,  (K000220740), Amazonas, **Typus**

## REFERENCE

- Prance, G.T. 1989. Chrysobalanaceae (Supplement). *Flora Neotropica* 9: 1-267.
- Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), *Species Plantarum: Flora of the World* 9. Australian Biological Resources Study, Canberra.
- Sothers C.A., Prance G.T. & Chase, M.W. (2016). Towards a monophyletic *Licania*: a new generic classification of the polyphyletic Neotropical genus *Licania* (Chrysobalanaceae). *Kew Bull.* 71: 58.

# *Licania teixeirae* Prance

## DESCRIPTION

**Leaf:** shape ovate; **abaxial indumentum** waxy; **petiole gland(s)** absent. **Inflorescence:** type raceme/racemose panicle. **Flower:** **receptacle shape** urceolate; **pedicel** sessile; **stamen number** 5; **filament length** included; **filament fusion** free. **Fruit:** epicarp unknown.

## ADDITIONAL DESCRIPTION

Trees. Branches glabrous when young, lenticellate. Leaves: stipules linear, 1 mm long, adnate to base of petiole; petioles 4-6 mm long, glabrous, canaliculate; lamina narrowly ovate, chartaceous, 4-5.5 × 1.7-2.3 cm, subcuneate and slightly unequal at base, caudate at apex with acumen 1.2-1.8 mm long, glabrous above, with a waxy pulverulent-farinaceous pubescence beneath; midrib glabrous and plane above, prominent beneath; primary veins 7-9 pairs, inconspicuous on both surfaces. Inflorescences of terminal and axillary little-branched racemose panicles or racemes; rachis and branches tomentellous; apical panicles 3-4 cm long; axillary racemes 1-2 cm long. Bracts and bracteoles lanceolate, persistent, c. 0.5 mm long, tomentellous. Flowers c. 3 mm long, sessile on primary branches of inflorescence. Receptacle urceolate, sessile, rufous-brown-tomentellous on exterior, densely tomentellous within. Calyx lobes 5, acute, rufous-brown-tomentellous on exterior contrasting sharply with grey-white-tomentellous pubescence of inner surface. Petals absent. Stamens 5, inserted around 2/3 of circle; filaments shorter than calyx lobes, tomentellous. Ovary sparsely tomentellous on exterior. Style equalling filaments, lanate-pubescent. Fruit unknown.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Is endemic from Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types






Ombrophyllous Forest (Tropical Rain Forest)

## Geographic Distribution

### Confirmed occurrences

North (Rondônia)

## HERBARIUM MATERIAL

Teixeira, L.O.A., 728, US, 3095619,  (US00007854), INPA, 104465,  (INPA0104465), NY,   (NY00428591), MO (MO255318), MG (MG097137), K,  (K000220714), Rondônia, **Typus**

## REFERENCE

- Prance, G.T. 1989. Chrysobalanaceae (Supplement). *Flora Neotropica* 9: 1-267.
- Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), *Species Plantarum: Flora of the World* 9. Australian Biological Resources Study, Canberra.
- Sothers C.A., Prance G.T. & Chase, M.W. (2016). Towards a monophyletic *Licania*: a new generic classification of the polyphyletic Neotropical genus *Licania* (Chrysobalanaceae). *Kew Bull.* 71: 58.

# *Licania tocantina* Prance

## DESCRIPTION

**Leaf:** shape elliptic; **abaxial indumentum** stomatal-cavity; **petiole gland(s)** present. **Inflorescence:** type racemose panicle. **Flower:** **receptacle shape** campanulate; **pedicel** sessile; **stamen number** 3; **filament length** included; **filament fusion** free. **Fruit:** **epicarp** pubescent.

## ADDITIONAL DESCRIPTION

Tree 20 m tall. Branches sparsely puberulous when young, soon glabrate. Leaves with stipules triangular, c. 5 mm long, c. 2.5 mm broad at base, inserted on base of petioles, persistent; petioles 4-6 mm long, with 2 large conspicuous glands when young, canaliculate, tomentellous when young, becoming glabrous and rugulose with age; lamina elliptic, chartaceous, 8-15 × 3.5-7.2 cm, subcuneate at base, acuminate at apex with acumen 7-12 mm long, glabrous above, with stomatal cavities filled by dense lanate pubescence beneath; midrib plane or slightly impressed above. Inflorescences of terminal and subterminal racemose panicles; rachis and branches puberulous. Bracts and bracteoles 1-2 mm long, triangular, persistent, puberulous on both surfaces. Flowers c. 1.5 mm long, sessile on primary branches of inflorescence. Receptacle campanulate, sessile, tomentose on exterior and within. Calyx lobes 5, acute, puberulous on both surfaces. Petals absent. Stamens 3, unilateral; filaments shorter than calyx lobes, glabrous. Ovary inserted at base of receptacle, pilose. Style equalling filaments, hirsute 3/4 of length. Fruit pyriform c. 2 cm long (5 mm stipe); exocarp ferrugineous-pubescent; mesocarp thin; endocarp hard, granular, 1 mm thick.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Is endemic from Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types

Riverine Forest and/or Gallery Forest, Terra Firme Forest, Ombrophyllous Forest (Tropical Rain Forest)

## Geographic Distribution

### Confirmed occurrences

North (Pará)

## HERBARIUM MATERIAL

Silva, M.G., 3508, RB, 271231,  (RB00537099), NY, MG, INPA, Pará, **Typus**

## REFERENCE

- Prance, G.T. 1989. Chrysobalanaceae (Supplement). *Flora Neotropica* 9: 1-267.
- Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), *Species Plantarum: Flora of the World* 9. Australian Biological Resources Study, Canberra.
- Sothers C.A., Prance G.T. & Chase, M.W. (2016). Towards a monophyletic *Licania*: a new generic classification of the polyphyletic Neotropical genus *Licania* (Chrysobalanaceae). *Kew Bull.* 71: 58.



# *Licania triandra* Mart. ex Hook.f.

## Has as synonym

homotype *Licania micrantha* var. *triandra* (Mart. ex Hook.f.) Fritsch

heterotypic *Licania pulchravenia* Killip & Cuatrec.

## DESCRIPTION

**Leaf:** shape oblong/ovate elliptic; **abaxial indumentum** stomatal-cavity; **petiole gland(s)** absent. **Inflorescence:** type racemose panicle. **Flower:** **receptacle shape** campanulate; **pedicel** sessile; **stamen number** 3; **filament length** included; **filament fusion** free. **Fruit:** **epicarp** short velutinous.

## ADDITIONAL DESCRIPTION

Trees to 26 m tall. Branches puberulous when young, soon becoming glabrous and lenticellate. Leaves: stipules 3-4 mm long, lanceolate, glabrous, persistent, axillary; petioles 5-9 mm long, puberulous when young, soon becoming glabrous, terete, eglandular; lamina ovate-elliptic to oblong, thick-coriaceous, 7-17 × 4-10 cm, caudate-acuminate or acuminate at apex with acumen 5-15 mm long, rounded at base, glabrous above; margins plane; lower surface with deeply reticulate venation and poorly developed stomatal cavities; venation glabrous or glabrescent (hence conspicuous), usually with several conspicuous glands on lower surface of lamina towards base; midrib plane above, glabrous; primary veins 7-9 pairs, prominent beneath, plane above. Inflorescences terminal and subterminal racemose panicles; rachis and branches tomentellous. Flowers c. 2 mm long, sessile on primary branches of inflorescence. Bracts and bracteoles 0.5-1 mm long, triangular, persistent, puberulous on exterior. Receptacle campanulate, sessile, tomentose on exterior, tomentose within. Calyx lobes acute, tomentellous on exterior, puberulous within. Petals absent. Stamens 3, unilateral; filaments shorter than calyx lobes, glabrous. Ovary tomentose. Style equalling filaments, pilose throughout. Fruit pyriform, to 3.5 cm long; epicarp short-velutinous; pericarp thin, hard, fibrous, sparsely hirsutulous to glabrous within.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types

Terra Firme Forest, Ombrophyllous Forest (Tropical Rain Forest)




## Geographic Distribution



### Confirmed occurrences

North (Acre, Amazonas)

## HERBARIUM MATERIAL

C. Ferreira, 9290, US,  (US01353197), NY,  (NY01254756), INPA, K, Amazonas

G.T. Prance, 22807, US,  (US01353196), P (P04828768), NY,  (NY01254755), INPA, 47390,  (INPA0047390), Amazonas

Spruce, R., 2490, GH,  (GH00046318), K,  (K000220743), Amazonas, **Typus**

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. Flora Neotropica 9: 1-409.

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), Species Plantarum: Flora of the World 9. Australian Biological Resources Study, Canberra.

Sothers C.A., Prance G.T. & Chase, M.W. (2016). Towards a monophyletic *Licania*: a new generic classification of the polyphyletic Neotropical genus *Licania* (Chrysobalanaceae). *Kew Bull.* 71: 58.

# *Licania urceolaris* Hook.f.

## DESCRIPTION

**Leaf:** shape oblong ovate; **abaxial indumentum** waxy/pulverulent farinaceous; **petiole gland(s)** present. **Inflorescence:** type racemose panicle. **Flower:** **receptacle shape** urceolate; **pedicel** sessile; **stamen number** 5; **filament length** included; **filament fusion** free. **Fruit:** **epicarp** glabrous.

## ADDITIONAL DESCRIPTION

Trees to 25 m tall. Branches puberulous when young, becoming glabrous and lenticellate with age. Leaves: stipules c. 2 mm long, lanceolate, coriaceous, adnate to base of petiole, caducous or subpersistent; petioles 3-6 mm long, terete or shallowly canaliculate, puberulous, becoming glabrous with age, with 2 medial sessile glands; lamina oblong-ovate, chartaceous to coriaceous, 5.5-12.5 × 2.5-6.2 cm, with a well developed acumen 4-12 mm long, rounded to subcuneate at base; margins plane; upper surface glabrous; lower surface short waxy grey-pulverulent farinaceous pubescent; venation glabrous beneath; midrib glabrous above, plane or slightly impressed; primary veins 6-10 pairs, prominulous beneath, plane above. Inflorescences little-branched terminal and axillary racemose panicles; rachis and branches tomentellous. Flowers 3-4 mm long, solitary or in small groups along primary branches of inflorescence. Bracts and bracteoles 0.5-1.5 mm long, deltoid, persistent, tomentellous on exterior. Receptacle urceolate, sessile, tomentose on exterior, tomentellous within. Calyx lobes acute, tomentellous on both surfaces. Petals absent. Stamens 5, inserted in an arc of c. 270°; filaments shorter than calyx lobes, glabrous, free to base. Ovary tomentose. Style equalling filaments, sparsely pubescent to glabrous. Fruit (immature) pyriform; epicarp glabrous, drying yellow and wrinkled; mesocarp thin; endocarp thick, hard, pubescent within.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types

Terra Firme Forest, Ombrophyllous Forest (Tropical Rain Forest)

## Geographic Distribution

### Confirmed occurrences

North (Acre, Amazonas)

## HERBARIUM MATERIAL

R. Spruce, 2422, K,  (K000220710), BM, BR, CGE, E, GH, GOET, LD, LE, NY, OXF, P, RB, **Typus**

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. Flora Neotropica 9: 1-409.

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), Species Plantarum: Flora of the World 9. Australian Biological Resources Study, Canberra.

Sothers C.A., Prance G.T. & Chase, M.W. (2016). Towards a monophyletic *Licania*: a new generic classification of the polyphyletic Neotropical genus *Licania* (Chrysobalanaceae). *Kew Bull.* 71: 58.

# *Licania vaupesiana* Killip & Cuatrec.

## Has as synonym

heterotypic *Licania parviflora* var. *grandifolia* Hook.f.

## DESCRIPTION

**Leaf:** shape elliptic; **abaxial indumentum** lanate; **petiole gland(s)** absent. **Inflorescence:** type panicle. **Flower:** receptacle shape campanulate; **pedicel** sessile; **stamen number** 5 - 7; **filament length** included; **filament fusion** free. **Fruit:** epicarp pubescent.

## ADDITIONAL DESCRIPTION

Tree. Branches puberulous when young, soon becoming glabrous and lenticellate. Leaves with stipules linear, c. 5 mm long, intrapetiolar or adnate to inside of extreme base of petiole, puberulous, persistent; petioles 4-7 mm long, puberulous, terete, eglandular; lamina elliptic, coriaceous, 7-14 × 3.7-5.5 cm, with acumen 5-10 mm long, rounded at base, glabrous above, densely brown-lanate beneath; midrib impressed above, pubescent towards base; primary veins 11 or 12 pairs, prominent beneath, plane above. Inflorescences terminal and subterminal panicles; rachis and branches puberulous. Flowers c. 2 mm long, in small subsessile groups or solitary on primary branches of inflorescence. Bracts and bracteoles to 1 mm long, triangular, persistent, puberulous on exterior. Receptacle campanulate, sessile, tomentose on exterior and within. Calyx lobes acute, tomentellous on both surfaces. Petals absent. Stamens 5-7, unilateral; filaments shorter than calyx lobes, glabrous. Ovary tomentose. Style equalling filaments, tomentose throughout. Fruit (immature) oblong; epicarp sordid-ferruginous pubescent, wrinkled when dry; pericarp thin, hard, woody, sparsely hirsute within.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types


Riverine Forest and/or Gallery Forest, Ombrophyllous Forest (Tropical Rain Forest)

## Geographic Distribution

### Confirmed occurrences

North (Amazonas)

## HERBARIUM MATERIAL

A.D.C. Mota, 2637, INPA, 72435,  (INPA0072435), Amazonas

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. *Flora Neotropica* 9: 1-409.

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), *Species Plantarum: Flora of the World* 9. Australian Biological Resources Study, Canberra.

Sothers C.A., Prance G.T. & Chase, M.W. (2016). Towards a monophyletic *Licania*: a new generic classification of the polyphyletic Neotropical genus *Licania* (Chrysobalanaceae). *Kew Bull.* 71: 58.

# *Microdesmia* (Benth.) Sothers & Prance

This treatment is composed of the following taxa: *Microdesmia*, *Microdesmia arborea*, *Microdesmia rigida*.

## HOW TO CITE

Sothers, C.A., Prance, G.T. 2020. *Microdesmia* in **Flora do Brasil 2020**. Jardim Botânico do Rio de Janeiro. Available at: <http://floradobrasil.jbrj.gov.br/reflora/floradobrasil/FB604709>.

## DESCRIPTION

Trees to 20 m. Leaf: stipules linear, axillary, caducous; lamina lower surface lanate-pubescent and deeply reticulate; with hair-filled stomatal cavities present. Petiole with two glands. Bracteoles small, persistent, not enclosing flower buds. Inflorescence racemose panicles. Flowers bisexual, sub-actinomorphic. Sepals 5. Petals 5. Stamens 8–14, inserted in a complete circle, equalling calyx lobes; filaments equalling calyx lobes, connate for half their length. Ovary 1-carpellary, 1-locular, inserted at base of receptacle. Style filiform, indistinctly 3-lobed at apex. Fruit a drupe, 3–5.5 cm long; epicarp smooth, glabrous; endocarp thin, fragile, and fibrous, with fibres arranged longitudinally, promoting longitudinal dehiscence; sparsely pubescent or glabrous within.

## COMMENTS

A genus of two species with essentially allopatric distribution. *Microdesmia arborea* is widely distributed from Mexico and Central America to northwestern South America. *M. rigida* is restricted to northeastern Brazil. Both species produce a seed oil used in paints, soaps, candles and as grease; their wood is durable and used for building and construction purposes. As a result they have been cultivated extensively.

### Life Form

Tree

### Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

### Phytogeographic Domains

Amazon Rainforest, Caatinga

### Vegetation Types

Caatinga (stricto sensu), Riverine Forest and/or Gallery Forest

### Geographic Distribution

#### Confirmed occurrences

North (Acre)

Northeast (Bahia, Ceará, Paraíba, Piauí, Rio Grande do Norte)

Southeast (Minas Gerais, São Paulo)

## IDENTIFICATION KEY

1. Stamens 8 – 12; pubescence of inflorescence light grey; Mexico and Central America to western and central South America . . . . . **M. arborea**
1. Stamens c. 14; pubescence of inflorescence ferruginous; restricted to northeastern Brazil. . . . . **M. rigida**

## REFERENCE

- Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), Species Plantarum: Flora of the World 9. Australian Biological Resources Study, Canberra.
- Sothers C.A., Prance G.T. & Chase, M.W. (2016). Towards a monophyletic *Licania*: a new generic classification of the polyphyletic Neotropical genus *Licania* (Chrysobalanaceae). *Kew Bull.* 71: 58.

# *Microdesmia arborea* (Seem) Sothers & Prance

## Has as synonym

basionym *Licania arborea* Seem.

heterotypic *Licania bullatifolia* Cuatrec.

heterotypic *Licania retusa* Pilg.

heterotypic *Licania seleriana* Loes.

## DESCRIPTION

**Leaf:** shape elliptic/ovate; **petiole** gland(s). **Flower:** stamen number 8 - 12; **receptacle** campanulate. **Fruit:** exocarp glabrous/smooth.

## COMMENTS

Tree to 20 m tall. Branches pubescent when young, soon becoming glabrous. Leaves with stipules to 3 mm long, linear, axillary, membranous, caducous; petioles 5-12 mm long, terete, tomentose when young, glabrescent, with 2 sessile glands near lower surface of lamina; lamina ovate-orbicular to oblong, 5-12 × 2.5-8 cm on fertile branches (usually much larger on sterile branches), glabrous and shining above; lower surface with deep reticulation quite or nearly describing stomatal cavities, lanate-pubescent among venation, sometimes with dense lanate pubescence obscuring venation when young; apex obtuse, rounded, or retuse; base cordate to rounded; midrib prominulous above, glabrous; primary veins 11-18 pairs, prominent beneath, slightly impressed above. Inflorescences terminal and axillary racemose panicles; rachis and branches densely brown to ferruginous-tomentose. Flowers 2.5-3 mm long, solitary and densely clustered on primary and secondary branches of inflorescence. Bracts and bracteoles deltoid to lanceolate, to 1.5 mm long, persistent, tomentose on exterior, puberulous within, entire to serrulate, eglandular. Receptacle campanulate, sessile, tomentose on exterior, villous within. Calyx lobes acute, tomentose on both surfaces. Petals 5, small, oblong, pubescent. Stamens 8-12, inserted in a complete circle; filaments equalling calyx lobes, connate in groups for 1/2 their length, densely villous. Ovary densely pilose. Style equalling filaments, pilose throughout. Fruit oblong, to 3 cm long; epicarp smooth and glabrous, drying black or green; mesocarp thin and fleshy; endocarp thin, soft and fibrous, with fibres arranged longitudinally, glabrous within.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types

Riverine Forest and/or Gallery Forest


## Geographic Distribution



Confirmed occurrences

North (Acre)

### HERBARIUM MATERIAL

J. F. Lima, 231, NY,  (NY00867086), Acre

Cuming, Hugh, 1109, E,  (E00326648), **Typus**

Ule, E., 9568, K, 18811,  (K000220640), RB, 18811,  (RB00537093), Acre, **Typus**

### REFERENCE

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), Species Plantarum: Flora of the World 9. Australian Biological Resources Study, Canberra.

Sothers C.A., Prance G.T. & Chase, M.W. (2016). Towards a monophyletic *Licania*: a new generic classification of the polyphyletic Neotropical genus *Licania* (Chrysobalanaceae). *Kew Bull.* 71: 58.



# *Microdesmia rigida* (Benth.) Sothers & Prance

## Has as synonym

basionym *Licania rigida* Benth.

heterotypic *Pleragina umbrosissima* Arruda

## DESCRIPTION

**Leaf:** shape elliptic/ovate; **petiole** gland(s). **Flower:** stamen number 14; **receptacle** campanulate. **Fruit:** exocarp glabrous/smooth.

## ADDITIONAL DESCRIPTION

Tree to 15 m tall, with spreading crown. Branches lanate to tomentellous when young, soon becoming glabrous and lenticellate. Leaves with stipules linear, to 10 mm long, membranous, caducous; petioles 5-8 mm long, tomentose when young, becoming glabrescent with age, terete, with 2 sessile glands; lamina oblong to elliptic, 6-13 (-16) × 2.8-6.5 cm, coriaceous, rounded to retuse at apex, rounded to cordate at base, glabrous and shining on upper surface; lower surface with deeply reticulate venation quite or nearly describing stomatal cavities, with lanate pubescence among but not on venation; midrib prominulous above, puberulous towards base when young; primary veins 11-16 pairs, prominent on lower surface, prominulous above. Inflorescences racemose panicles; rachis and branches grey-tomentose. Flowers 2.5-3.5 mm long, in small groups, sessile on primary branches of inflorescence. Bracts and bracteoles 1.5-2.5 mm long, ovate, tomentose on exterior, persistent, entire to serrulate, eglandular. Receptacle campanulate, grey-tomentose on exterior, tomentose within; pedicels to 0.5 mm long. Calyx lobes acute, tomentose on exterior, tomentellous within. Petals 5, densely pubescent. Stamens c. 14; filaments equalling calyx lobes, connate to about 1/2 way from base, densely pubescent. Ovary villous. Style equalling calyx lobes, villous nearly to apex. Fruit elliptic, 4-5.5 cm long; epicarp smooth, drying green or black; mesocarp thin, fleshy; endocarp thin, fibrous, fragile, with fibres arranged longitudinally promoting longitudinal dehiscence, sparsely pubescent within.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Is endemic from Brazil

## Phytogeographic Domains

Caatinga

## Vegetation Types

Caatinga (stricto sensu), Riverine Forest and/or Gallery Forest






## Geographic Distribution

### Confirmed occurrences

Northeast (Bahia, Ceará, Paraíba, Piauí, Rio Grande do Norte)

Southeast (Minas Gerais, São Paulo)

## HERBARIUM MATERIAL

George Gardner, 1592, US, 1066625,  (US00130855), P (P00746079), P (P00746077), P (P00746078), NY,  (NY00842387), NY,  (NY00428557), K,  (K000220638), GH,  (GH00046308), Ceará, **Typus**

## REFERENCE

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), Species Plantarum: Flora of the World 9. Australian Biological Resources Study, Canberra.

Sothers C.A., Prance G.T. & Chase, M.W. (2016). Towards a monophyletic *Licania*: a new generic classification of the polyphyletic Neotropical genus *Licania* (Chrysobalanaceae). *Kew Bull.* 71: 58.

# Moquilea Aubl.

This treatment is composed of the following taxa: *Moquilea*, *Moquilea angustata*, *Moquilea annea*, *Moquilea araneosa*, *Moquilea brittoniana*, *Moquilea egléri*, *Moquilea fritschii*, *Moquilea guianensis*, *Moquilea longipedicellata*, *Moquilea longipetala*, *Moquilea maranhensis*, *Moquilea minutiflora*, *Moquilea salzmännii*, *Moquilea silvatica*, *Moquilea tomentosa*, *Moquilea unguiculata*.

## HOW TO CITE

Sothers, C.A., Prance, G.T. 2020. *Moquilea* in **Flora do Brasil 2020**. Jardim Botânico do Rio de Janeiro. Available at: <http://floradobrasil.jbrj.gov.br/reflora/floradobrasil/FB48179>.

## Has as synonym

*Dahuronia* Scop.

## DESCRIPTION

Trees. Leaves: stipules small, subulate, lateral or axillary, usually persistent; lamina lower surface glabrous or lanate. Petiole with or without glands. Inflorescence panicles, racemes or racemose panicles. Bracts and bracteoles small, usually eglandular and not enclosing the flower-buds. Flowers bisexual, sub-actinomorphic. Receptacle globose, cupuliform, or campanulate, hairy within, but throat without long retrorse hairs. Sepals 5. Petals 4–5. Stamens 11–60 (–90), in 1–several rows, inserted in a complete circle; filaments usually far exceeding calyx lobes, less frequently only slightly exceeding or rarely equalling the calyx lobes, free or slightly united at base; staminodes usually absent, rarely represented by a short denticulate ridge. Style filiform, indistinctly 3-lobed at apex. Ovary 1-carpellary, 1-locular, inserted at base of receptacle. Fruit to 11–15 × 10 cm, epicarp glabrous, smooth, lenticellate, crustaceous or pubescent; endocarp glabrous or sparsely pubescent within, without any special mechanisms for seedling escape.

## COMMENTS

A genus with 54 species distributed from Mexico, Central America (Panama, Nicaragua and Costa Rica), the Leeward and Windward Islands, and throughout most of South America.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest, Central Brazilian Savanna, Atlantic Rainforest

## Vegetation Types

Flooded Field (Várzea), Cerrado (lato sensu), Riverine Forest and/or Gallery Forest, Terra Firme Forest, Inundated Forest (Várzea), Ombrophyllous Forest (Tropical Rain Forest), Coastal Forest (Restinga)

## Geographic Distribution

### Confirmed occurrences

North (Acre, Amazonas, Amapá, Pará, Rondônia, Roraima, Tocantins)

Northeast (Alagoas, Bahia, Ceará, Maranhão, Paraíba, Pernambuco, Piauí, Rio Grande do Norte, Sergipe)

Central-west (Distrito Federal, Goiás, Mato Grosso do Sul, Mato Grosso)

Southeast (Espírito Santo)

### Possible occurrences

North (Acre)

## IDENTIFICATION KEY

1. Petals unguiculate; fruit usually drawn out into a pointed apex.
  2. Flowers 5-6 mm long; pedicels 2-2.5 mm long, ovary pilose..... **M. unguiculata**
  2. Flowers 3 mm long; pedicels 0-0.25 mm long; ovary glabrescent.....**M. longipetala**
1. Petals not unguiculate, rounded at base; fruit without pointed apex.
  3. Inflorescence and exterior of receptacle entirely glabrous.
    4. Leaf broadly acuminate, the acumen 4-8 mm long; flowers 2.5-3 mm tall; pedicels 2-5 mm long.....**M. salzmanni**
    4. Leaf apex with finely pointed acumen 8-22 mm long; flowers 4-6 mm tall; pedicels 1-3 mm long.....**M. guianensis**
  3. Inflorescence and exterior of receptacle pubescent, usually densely tomentose.
    5. Pedicels 3-7 mm long; leaf apex finely acuminate, the acumen 1.5-2.5 cm long; stamens 35-45.....**M. longipedicellata**
    5. Pedicels 0-2.5 mm long; leaf apex blunt acuminate, the acumen less than 10 mm long; stamens 14-30.
      6. Stamens equalling calyx-lobes in length; flowers sessile;
        7. Stipules 8-12 mm long. linear, subpersistent; leaf lower surface glabrous; petioles 6-9 mm long; stamens c. 25.....**M. silvatica**
        7. Stipules c 1 mm, persistent; leaf lower surface densely lanate-pubescent; petioles 2-3 mm long; stamens 15-17.....**M. araneosa**
      6. Stamens exerted beyond calyx-lobes; flowers with pedicels 0.5-1 mm long (except sessile in *M. maranhensis*).
        8. Inflorescence predominantly of axillary racemes or few-branched panicles .....**M. tomentosa**
        8. Inflorescence of predominantly terminal much-branched panicles.
          9. Primary leaf veins slightly impressed above; laminas oblong-lanceolate, 10-25 cm long.
            10. Petioles 10-13 mm long; leaves 10-14.5 x 2.5-5.2 cm; primary veins 11-17 Pairs; stamens 17.....**M. angustata**
            10. Petioles 5-7 mm long; leaves 14-25 x 4.5-8 cm; primary veins 18-22 pairs; stamens 12-14..... **M. anaeae**
          9. Primary leaf veins plane or prominulous above; laminas elliptic or ovate, 4.5-15.5 cm long (to 18.5 cm in *M. maranhensis*)
            11. Leaf base subcordate; leaves 15-18.5 x 7.5-9.5 cm; flowers sessile; petioles 3-5 mm long..... **M. maranhensis**
            11. Leaf base cuneate to rounded; leaves not exceeding 15.5 cm long; flowers pedicellate; petioles 6-12 mm long (except in *M. egleri* 2-5 mm).
              12. Petioles 2-5 mm long; leaf apex retuse or apiculate at apex..... **M. egleri**
              12. Petioles 6-12 mm long; leaf apex acuminate or apiculate.
                13. Inflorescence rachis and branches sparsely grey-pubescent.... **M. fritschii**
                13. Inflorescence rachis and branches tomentose.
                  14. Flowers 2 mm long, buds globose; leaves 5.5-11 x 2-6 cm.**M. minutiflora**
                  14. Flowers 2.5-3 mm long, buds ovoid; leaves 8-16 x 3-7.5 cm.**M. brittoniana**

## REFERENCE

- Aublet, Hist. Pl. Guiane 1: 521 1775.
- Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), Species Plantarum: Flora of the World 9. Australian Biological Resources Study, Canberra.
- Sothers C.A., Prance G.T. & Chase, M.W. (2016). Towards a monophyletic *Licania*: a new generic classification of the polyphyletic Neotropical genus *Licania* (Chrysobalanaceae). *Kew Bull.* 71: 58.

# *Moquilea angustata* (Prance) Sothers & Prance

## Has as synonym

basionym *Licania angustata* Prance

## DESCRIPTION

**Leaf:** shape oblong/lanceolate; **indumentum** glabrous; **petiole gland(s)** absent. **Inflorescence:** type panicle/racemose. **Flower:** **stamen number** exerted/17; **pedicel** pedicellate; **receptacle** campanulate - cupuliform. **Fruit:** epicarp unknown.

## ADDITIONAL DESCRIPTION

Trees. Branches tomentellous when young, glabrescent. Leaves: stipules ovate to linear, 1-2 mm long, axillary, caducous; petioles 10-13 mm long, tomentose when young, eglandular, slightly canaliculate; lamina oblong-lanceolate, 10-14.5 × 2.5-5.2 cm, coriaceous, acuminate at apex with acumen 7-12 mm long, rounded to subcuneate at base, glabrous on both surfaces, with paired glands beneath; midrib prominent above, sparsely pubescent, soon becoming glabrous; primary veins 11-17 pairs, slightly impressed above, prominent beneath. Inflorescence terminal and subterminal racemose panicles; rachis and branches villous-tomentose. Bracts and bracteoles lanceolate, to 2.2 mm long, persistent, tomentose on exterior. Flowers c. 3.5 mm long. Receptacle campanulate-cupuliform, tomentose on exterior, villous tomentose within; pedicels c. 0.5 mm long. Calyx lobes acute, tomentose on exterior, puberulous within. Petals 5, sparsely pubescent. Stamens c. 17, inserted around a complete circle; filaments glabrous, exceeding calyx lobes, free to base. Ovary lanate-pubescent. Style exceeding calyx lobes. Fruit unknown.

## Life Form

Tree

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types




Terra Firme Forest

## Geographic Distribution

### Confirmed occurrences

North (Amazonas)

## HERBARIUM MATERIAL

B. A. Krukoff, 8445, S (S-R-8075), P (P00745986), NY,   (NY00428327), MO (MO255268), A,  (A00046244), Amazonas, **Typus**

## REFERENCE

Sothers C.A., Prance G.T. & Chase, M.W. (2016). Towards a monophyletic *Licania*: a new generic classification of the polyphyletic Neotropical genus *Licania* (Chrysobalanaceae). *Kew Bull.* 71: 58.

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), Species Plantarum: Flora of the World 9. Australian Biological Resources Study, Canberra.

# *Moquilea anneae* (Prance) Sothers & Prance

## Has as synonym

basionym *Licania anneae* Prance

## DESCRIPTION

**Leaf:** shape oblong/lanceolate; **indumentum** pilose; **petiole gland(s)** absent. **Inflorescence:** type panicle/racemose. **Flower:** **stamen number** exerted/12 - 14; **pedicel** subsessile; **receptacle** cupuliform. **Fruit:** **epicarp** unknown.

## ADDITIONAL DESCRIPTION

Trees to 7 m tall. Branches sparsely puberulous when young, soon becoming glabrous. Leaves: stipules caducous (not seen); petiole 5-7 mm long, rugulose, slightly canaliculate, puberulous when young; lamina oblong-lanceolate, coriaceous, 14-25 × 4.5-8 cm, rounded at the base, shortly acuminate or acute at the apex (acumen 2-6 mm long), glabrous above, pilose with a few sparse appressed hairs beneath, especially on the primary veins; midrib glabrous and prominulous above, prominent and puberulous beneath; primary veins 18-22 pairs, slightly impressed above, prominent and puberulous beneath, arcuate and conspicuously anastomosing c. 2-3 mm from the margin. Inflorescences terminal and axillary racemose panicles; rachis and branches light brown-tomentellous. Bracts 5-18 mm long, oblong to lanceolate, membranous, persistent, tomentellous on the exterior, sparsely puberulous within; bracteoles ovate, persistent, membranous, glabrous or with a few sparse hairs and ciliate margins. Flowers 3-3.5 mm long, inserted on primary branches of inflorescence. Receptacle cupuliform, extremely regular and round at the apex, short brown-tomentellous on exterior, tomentellous within. Calyx lobes 5, acute, triangular, small, tomentellous on both surfaces, but more sparsely on inner surface. Petals 5, oblong, white, glabrous with ciliate margins, caducous. Stamens 12-14, inserted around a complete circle, filaments slightly exceeding calyx lobes, glabrous, connate at base forming a ring 1 mm tall that is hirsute on both surfaces. Ovary tomentose-pilose. Style lanate almost to apex. Fruit unknown.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Is endemic from Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types




Flooded Field (Várzea), Terra Firme Forest

## Geographic Distribution

### Confirmed occurrences

North (Pará)

## HERBARIUM MATERIAL

G.T. Prance, 25652, RB, 241795,  (RB00537055), NY, ,  (NY00428329), MO (MO255267), MG (MG060253), K (K001181600), Pará

## REFERENCE

Sothers C.A., Prance G.T. & Chase, M.W. (2016). Towards a monophyletic *Licania*: a new generic classification of the polyphyletic Neotropical genus *Licania* (Chrysobalanaceae). *Kew Bull.* 71: 58.

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), *Species Plantarum: Flora of the World 9*. Australian Biological Resources Study, Canberra.



# *Moquilea araneosa* (Taub.) Sothers & Prance

## Has as synonym

basionym *Licania araneosa* Taub.

## DESCRIPTION

**Leaf:** shape oblong/lanceolate; **indumentum** glabrous; **petiole gland(s)** absent. **Inflorescence:** type panicle. **Flower:** stamen number equal/15/17; **pedicel** sessile; **receptacle** cupuliform. **Fruit:** epicarp glabrous/verrucose.

## ADDITIONAL DESCRIPTION

Trees. Branches tomentellous when young, becoming glabrous with age, not lenticellate.

Leaves: stipules c. 1 mm long, linear, coriaceous, persistent, extrapetiolar; petioles 2-3 mm long, lanate, eglandular, terete; lamina oblong-lanceolate, coriaceous, 2-7 × 1.3-3 cm, acute

or short-mucronate at apex with acumen not exceeding 1 mm long, cuneate at base, glabrous above, with easily rubbed off lanate pubescence beneath; midrib prominulous above, lanate; primary veins 9-11 pairs, prominulous beneath, plane above. Inflorescences terminal and axillary little branched panicles; rachis and branches tomentellous. Flowers 1.5 mm long, sessile on primary and secondary branches of inflorescence. Bracts and bracteoles 0.5-2.5 mm long, ovate to linear, pubescent on exterior. Receptacle cupuliform, sessile, tomentose on exterior, densely tomentose within. Calyx lobes acute, tomentose on exterior, glabrous within. Petals 5, sparsely pubescent, ciliate. Stamens 15-17, inserted in a complete circle; filaments equalling calyx lobes, free to base, glabrous. Ovary pilose. Fruit (immature) globose; epicarp glabrous, verrucose; mesocarp thin, fleshy; endocarp thin, granular, fragile.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Is endemic from Brazil

## Phytogeographic Domains

Central Brazilian Savanna

## Vegetation Types

Cerrado (lato sensu), Riverine Forest and/or Gallery Forest

## Geographic Distribution

### Confirmed occurrences

Central-west (Distrito Federal, Goiás)

## HERBARIUM MATERIAL

Ule, E.H.G., 459 [=2885], R-, 63804,  (R000063804), P, 63804 (P05561837), Goiás, **Typus**

## REFERENCE

Sothers C.A., Prance G.T. & Chase, M.W. (2016). Towards a monophyletic *Licania*: a new generic classification of the polyphyletic Neotropical genus *Licania* (Chrysobalanaceae). *Kew Bull.* 71: 58.

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), *Species Plantarum: Flora of the World 9*. Australian Biological Resources Study, Canberra.

# *Moquilea brittoniana* (Fritsch) Sothers & Prance

## Has as synonym

homotype *Licania brittoniana* Fritsch

heterotypic *Licania elata* (Pilg.) Pilg. ex Ll. Williams

heterotypic *Moquilea elata* Pilg.

## DESCRIPTION

**Leaf:** shape oblong-elliptic; **indumentum** glabrous; **petiole gland(s)** absent. **Inflorescence:** type panicle/racemose. **Flower:** **stamen number** exerted/16 - 23; **pedicel** pedicellate; **receptacle** campanulate. **Fruit:** **epicarp** crustaceous.

## ADDITIONAL DESCRIPTION

Trees to 50 m tall. Branches glabrous and lenticellate when young. Leaves: stipules 2 mm long, subulate, glabrous, persistent, axillary; petioles 8-12 mm long, with sparse arachnoid pubescence when young, glabrescent, shallowly canaliculate, eglandular; lamina oblong-elliptic to oblong, coriaceous, 8-15.5 × 3-7 cm, acuminate at apex with acumen 3-7 mm long, rounded to subcordate at base, glabrous on both surfaces; palisade glands present beneath, with 2 glands at junction of lamina and petiole on lower surface; midrib glabrous above, plane or nearly so; primary veins 9-15 pairs, prominulous above, prominent beneath. Inflorescences terminal racemose panicles; rachis and branches grey-tomentose. Flowers 2-3 mm long, solitary but densely crowded on primary and secondary branches of inflorescence. Bracts and bracteoles c. 1.5 mm long, caducous, tomentose on exterior. Receptacle campanulate, grey-tomentose on exterior, pilose-tomentose within; pedicels 0.5 mm long. Calyx lobes acute, tomentose on exterior, puberulous within. Petals 5, sparsely pubescent; margins ciliate. Stamens 16-23, inserted in a complete circle; filaments far exceeding calyx lobes, with bases slightly connate. Carpels 1 (-2), with second carpel occasionally developing. Ovary inserted at base of receptacle, lanate. Style pilose almost to apex, equalling filaments. Fruit ovoid to 8 cm long; epicarp crustaceous; mesocarp thick and hard; endocarp thin, hard, sparsely pubescent within.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types

Terra Firme Forest, Inundated Forest (Várzea)

## Geographic Distribution

### Confirmed occurrences

North (Acre, Amazonas, Pará)

## HERBARIUM MATERIAL

D. C. Daly, 7890, NY,  (NY00867089), Acre

## REFERENCE

Sothers C.A., Prance G.T. & Chase, M.W. (2016). Towards a monophyletic *Licania*: a new generic classification of the polyphyletic Neotropical genus *Licania* (Chrysobalanaceae). *Kew Bull.* 71: 58.

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), *Species Plantarum: Flora of the World* 9. Australian Biological Resources Study, Canberra.

# *Moquilea egleri* (Prance) Sothers & Prance

## Has as synonym

basionym *Licania egleri* Prance

## DESCRIPTION

**Leaf:** shape elliptic/obovate; **indumentum** glabrous; **petiole gland(s)** absent. **Inflorescence:** type panicle/racemose. **Flower:** **stamen number** exerted/15; **pedicel** pedicellate; **receptacle** campanulate. **Fruit:** **epicarp** glabrous/smooth.

## ADDITIONAL DESCRIPTION

Trees, small to medium sized. Branches glabrous when young, lenticellate. Leaves: stipules small, 1-2 mm long, ovate, membranous, axillary, subpersistent; petiole 2-5 mm long, glabrous, rugose, terete, eglandular; lamina obovate to elliptic, coriaceous, 4.5-8.5 × 2-4 cm, glabrous on both surfaces with glands on lower surface and 2 glands at junction with petiole; apex retuse or shortly apiculate; base rounded to subcuneate; midrib prominent and glabrous above; secondary veins 8-13 pairs, prominulous on both surfaces, inconspicuous. Inflorescence of terminal and subterminal racemose panicles; rachis and branches puberulous. Bracts and bracteoles 0.5-1.5 mm long, ovate, membranous, persistent, sparsely pubescent. Flowers 2-2.5 mm long. Receptacle campanulate, grey-tomentellous on exterior, tomentose within; pedicels 0.5-1 mm long. Calyx lobes acute, tomentellous on exterior, puberulous within. Petals 5, pubescent. Stamens c. 15, inserted around complete circle; filaments exerted, glabrous, free to base. Ovary villous-tomentose. Style villous. Fruit ovoid, 4-5 cm long; exocarp smooth, glabrous.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest, Central Brazilian Savanna

## Vegetation Types

Cerrado (lato sensu), Riverine Forest and/or Gallery Forest, Terra Firme Forest

## Geographic Distribution

### Confirmed occurrences

North (Amazonas, Amapá, Pará, Rondônia)

Central-west (Goiás, Mato Grosso do Sul, Mato Grosso)

## HERBARIUM MATERIAL

W. A. Egler, 887, NY,  (NY00428388), Pará, **Typus**

## REFERENCE

Sothers C.A., Prance G.T. & Chase, M.W. (2016). Towards a monophyletic *Licania*: a new generic classification of the polyphyletic Neotropical genus *Licania* (Chrysobalanaceae). *Kew Bull.* 71: 58.

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), *Species Plantarum: Flora of the World 9*. Australian Biological Resources Study, Canberra.



# *Moquilea fritschii* (Prance) Sothers & Prance

## Has as synonym

basionym *Licania fritschii* Prance

## DESCRIPTION

**Leaf:** shape elliptic; **indumentum** glabrous; **petiole gland(s)** absent. **Inflorescence:** type panicle. **Flower:** stamen number exerted/16 - 25; **pedicel** pedicellate; **receptacle** campanulate/cupuliform. **Fruit:** epicarp glabrous.

## ADDITIONAL DESCRIPTION

Trees. Branches glabrous when young, not lenticellate. Leaves: stipules minute, subulate, glabrous, persistent, axillary; petioles 6-10 mm long, terete or weakly canaliculate, glabrous, eglandular; lamina elliptic, coriaceous, 9-15 × 4-7 cm, acuminate at apex with acumen 4-10 mm long, rounded at base, glabrous on both surfaces; sparsely glandular and with 2 glands towards base on lower surface; midrib prominent and glabrous above; primary veins 9-11 pairs, slightly prominent on both surfaces. Inflorescences terminal and subterminal panicles; rachis and branches sparsely puberulous. Bracts and bracteoles 0.3-0.8 mm long, puberulous, caducous. Flowers 3-3.5 mm long. Receptacle campanulate-cupuliform, brownpuberulous on exterior, tomentose within, pedicels 0.5-1 mm long. Calyx lobes acute, puberulous on both surfaces. Petals 5, sparsely pubescent. Stamens 16-25, inserted around complete circle; filaments far exerted, free to base, glabrous. Ovary pilose-tomentose. Style pilose. Fruit obovoid, c. 11 × 9 cm; exocarp glabrous, drying uneven and knobby, 4-6 mm thick; endocarp thin, c. 1 mm thick, with fibrous exterior, glabrous within.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Is endemic from Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types



Flooded Field (Várzea), Inundated Forest (Várzea)

## Geographic Distribution

### Confirmed occurrences

North (Amazonas, Pará)

## HERBARIUM MATERIAL

J. M. Pires, 6731, UB, 2067,  (UB0036776), NY,  (NY00428400), Pará, **Typus**

## REFERENCE

Sothers C.A., Prance G.T. & Chase, M.W. (2016). Towards a monophyletic *Licania*: a new generic classification of the polyphyletic Neotropical genus *Licania* (Chrysobalanaceae). *Kew Bull.* 71: 58.

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), *Species Plantarum: Flora of the World 9*. Australian Biological Resources Study, Canberra.



# Moquilea guianensis Aubl.

## Has as synonym

homotype *Licania guianensis* (Aubl.) Griseb.

## DESCRIPTION

**Leaf:** shape oblong/oblong-elliptic; **indumentum** glabrous; **petiole gland(s)** absent. **Inflorescence:** type panicle/racemose. **Flower:** **stamen number** exerted/35; **pedicel** pedicellate; **receptacle** cupuliform. **Fruit:** **epicarp** glabrous/smooth.

## ADDITIONAL DESCRIPTION

Tree to 15 m tall. Branches glabrous when young, inconspicuously lenticellate. Leaves with stipules caducous (not seen); petioles 5-7 mm long, canaliculate, glabrous, eglandular; lamina oblong-elliptic to oblong, coriaceous, 7-18 × 2-5.5 cm, with finely pointed apical acumen 8-22 mm long, cuneate to subcuneate at base, glabrous on both surfaces; palisade glands sparsely distributed on lower surface, especially towards lamina base; midrib prominulous above, glabrous; primary veins 8-12 pairs, prominulous beneath, plane above. Inflorescences terminal and axillary racemose panicles; rachis and branches with only a few short hairs otherwise glabrous. Flowers 4-6 mm long, on primary and secondary branches of inflorescence. Bracts and bracteoles 1-4 mm long, caducous. Receptacle cupuliform, almost glabrous on exterior, densely lanate within; pedicels 1-3 mm long. Calyx lobes glabrous or sparsely puberulent, acute; margins ciliolate. Petals 5; margins ciliolate. Stamens c. 35, inserted in a complete circle; filaments far exceeding calyx lobes, glabrous, free almost to base. Ovary villous. Style equalling filaments with lower portion densely lanate. Fruit oblong to globose, to 5 cm diameter; epicarp smooth and glabrous, drying black; mesocarp thin, fleshy, fibrous; endocarp thin, fragile, glabrous within.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types

Riverine Forest and/or Gallery Forest, Terra Firme Forest, Ombrophyllous Forest (Tropical Rain Forest)

## Geographic Distribution

### Confirmed occurrences

North (Acre, Amazonas, Amapá, Pará, Rondônia)

Northeast (Maranhão)

## HERBARIUM MATERIAL

M.J. Pires, 1617, K (K001181576), Pará

## REFERENCE

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), Species Plantarum: Flora of the World 9. Australian Biological Resources Study, Canberra.

Sothers C.A., Prance G.T. & Chase, M.W. (2016). Towards a monophyletic *Licania*: a new generic classification of the polyphyletic Neotropical genus *Licania* (Chrysobalanaceae). *Kew Bull.* 71: 58.

# *Moquilea longipedicellata* (Ducke) Sothers & Prance

## Has as synonym

basionym *Licania longipedicellata* Ducke

## DESCRIPTION

**Leaf:** shape oblong/linear; **indumentum** glabrous; **petiole gland(s)** absent. **Inflorescence:** type panicle. **Flower:** stamen number exserted/35 - 45; **pedicel** pedicellate; **receptacle** cupuliform. **Fruit:** epicarp unknown.

## ADDITIONAL DESCRIPTION

Trees. Branches glabrous when young. Leaves: stipules linear, to 20 mm long, membranous, glabrous, subsistent, intrapetiolar; petioles 7-10 mm long, glabrous, eglandular, terete; lamina oblong-linear, coriaceous, 16-33 × 5-12 cm, cuspidate-acuminate at apex with acumen 15-25 mm long, rounded at base, glabrous on both surfaces; palisade glands absent; midrib prominulous above, glabrous; primary veins 13-17 pairs, prominent beneath, plane or nearly so above. Inflorescences terminal panicles; rachis and branches short-puberulous. Flowers 6-7 mm long, in clusters on primary and secondary branches of inflorescence. Bracts at base of branches ovate, to 6 mm long; other bracts and bracteoles ovate, to 3.5 mm long, persistent, puberulous on exterior. Receptacle cupuliform, sericeousvelutinous on exterior, tomentellous within, with a mass of lanate hairs around throat; pedicels 3-7 mm long, with 2-3 mm below articulation. Calyx lobes acute, sericeoustomentose on both surfaces. Petals 5, puberulous, white. Stamens 35-45, inserted in a complete circle; filaments free to base, glabrous, far exceeding calyx lobes. Ovary lanate. Style lanate for 1/2 of length, equalling the filaments. Fruit unknown.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types



Riverine Forest and/or Gallery Forest

## Geographic Distribution

### Confirmed occurrences

North (Amazonas)

## HERBARIUM MATERIAL

Ducke, A., 23603, S, 23603 (S-R-8101), RB, 23603,  (RB00537077), P (P00746008), K,  (K000220596), Amazonas, **Typus**

## REFERENCE

Sothers C.A., Prance G.T. & Chase, M.W. (2016). Towards a monophyletic *Licania*: a new generic classification of the polyphyletic Neotropical genus *Licania* (Chrysobalanaceae). *Kew Bull.* 71: 58.

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), *Species Plantarum: Flora of the World 9*. Australian Biological Resources Study, Canberra.

# *Moquilea longipetala* (Prance) Sothers & Prance

## Has as synonym

basionym *Licania longipetala* Prance

## DESCRIPTION

**Leaf:** shape elliptic/oblong-elliptic; **indumentum** glabrous; **petiole gland(s)** present. **Inflorescence:** type panicle/racemose. **Flower:** **stamen number** exerted/14; **pedicel** sessile/subsessile; **receptacle** campanulate. **Fruit:** **epicarp** glabrous/smooth.

## ADDITIONAL DESCRIPTION

Tree, large. Branches glabrescent when young, lenticellate. Leaves with stipules lanceolate, c. 3 mm long, axillary, membranous, persistent; petioles 3-5 mm long, terete, glabrous, rugose, with 2 glands on upper surface; lamina oblong-elliptic to elliptic, coriaceous, 8-16 × 3-6.5 cm, acuminate at apex with acumen 5-15 mm long, rounded to subcuneate at base, glabrous on both surfaces, with scattered glands beneath; midrib slightly prominent and glabrous above; primary veins 9-12 pairs, prominent beneath, prominulus above. Inflorescences of terminal and subterminal racemose panicles; rachis and branches puberulous. Bracts and bracteoles 0.3-1 mm long, ovate, persistent, puberulous on exterior. Receptacle campanulate, subsessile, grey-tomentellous on exterior, densely villous-tomentose within; pedicels 0-0.25 mm long. Calyx lobes acute, tomentellous on both surfaces. Petals 5, pubescent, unguiculate, persistent, exceeding calyx lobes. Stamens c. 14, inserted around complete circle; filaments glabrous, slightly exerted beyond calyx lobes, connate at base. Ovary glabrescent. Style sparsely hirsute. Fruit narrowly ellipsoid, 6-7 × 1-1.5 cm; exocarp smooth, glabrous; mesocarp thin, fleshy; endocarp thin, hard, bony, sparsely puberulous within.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types


Flooded Field (Várzea), Inundated Forest (Várzea)

## Geographic Distribution

### Confirmed occurrences

North (Acre, Amazonas, Pará, Rondônia, Roraima, Tocantins)

## HERBARIUM MATERIAL

Pires, JM, 12676, NY,  (NY01254306), IAN (IAN128783), Pará

## REFERENCE

Sothers C.A., Prance G.T. & Chase, M.W. (2016). Towards a monophyletic *Licania*: a new generic classification of the polyphyletic Neotropical genus *Licania* (Chrysobalanaceae). *Kew Bull.* 71: 58.

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), *Species Plantarum: Flora of the World 9*. Australian Biological Resources Study, Canberra.

# *Moquilea maranhensis* (Prance) Sothers & Prance

## Has as synonym

basionym *Licania maranhensis* Prance

## DESCRIPTION

**Leaf:** shape elliptic; **indumentum** glabrous; **petiole gland(s)** absent. **Inflorescence:** type panicle. **Flower:** stamen number exerted/20; **pedicel** subsessile; **receptacle** campanulate/cupuliform. **Fruit:** epicarp unknown.

## ADDITIONAL DESCRIPTION

Trees. Branches tomentellous when young, glabrescent. Leaves: stipules caducous (not seen); petioles c. 8 mm long, tomentellous when young, terete, eglandular; lamina elliptic, coriaceous, 15-18.5 × 7.5-9.5 cm; acuminate at apex with acumen c. 5 mm long, subcordate at base, glabrous on both surfaces, with 2 glands towards base beneath; midrib slightly prominent above, sparsely appressed-pubescent; primary veins 14-15 pairs, prominent beneath. Inflorescences of terminal and axillary panicles; rachis and branches sparsely tomentellous. Bracts and bracteoles 1-3.5 mm long, membranous, persistent. Flowers 2 mm long in bud. Receptacle subsessile, campanulate-cupuliform, tomentose on exterior, tomentose within. Calyx lobes acute, tomentose on exterior. Petals 5. Stamens c. 20, inserted around complete circle; filaments glabrous, exerted. Ovary pilose. Style tomentose to apex. Fruit not seen.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Is endemic from Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types

Riverine Forest and/or Gallery Forest

## Geographic Distribution

### Confirmed occurrences

Northeast (Maranhão)

## HERBARIUM MATERIAL

A. Lisboa, 2462, RB, 15222,  (RB00537079), RB, 15222,  (RB00538892), NY,  (NY00428474), Maranhão, **Typus**

## REFERENCE

Sothers C.A., Prance G.T. & Chase, M.W. (2016). Towards a monophyletic *Licania*: a new generic classification of the polyphyletic Neotropical genus *Licania* (Chrysobalanaceae). *Kew Bull.* 71: 58.

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), *Species Plantarum: Flora of the World 9*. Australian Biological Resources Study, Canberra.

# Moquilea minutiflora Sagot

## Has as synonym

basionym *Licania minutiflora* (Sagot) Fritsch

heterotypic *Licania riparia* (Gleason) Standl.

heterotypic *Licania rondonii* Pilg.

heterotypic *Moquilea riparia* Gleason

## DESCRIPTION

**Leaf:** shape oblong-elliptic; **indumentum** glabrous; **petiole gland(s)** present/absent. **Inflorescence:** type panicle. **Flower:** **stamen number** exerted/14 - 21; **pedicel** subsessile; **receptacle** campanulate/cupuliform. **Fruit:** **epicarp** glabrous/verrucose.

## ADDITIONAL DESCRIPTION

Tree to 45 m tall. Branches glabrous when young.

Leaves: stipules ovate, 1.5 mm long, persistent, axillary; petioles 6-11 mm long, tomentose when young, glandular or eglandular, terete; lamina ovate to oblong-elliptic, coriaceous, 5.5-11 × 2-6 cm, apiculate-acuminate at apex with acumen 1-6 cm long, rounded to subcuneate at base, glabrous on both surfaces, usually without palisade glands; midrib prominulous above, sparsely pubescent when young; primary veins 8-13 pairs, prominulous beneath. Inflorescences spreading terminal and subterminal panicles; rachis and branches brown-tomentose. Bracts and bracteoles 0.2-1 mm long, caducous, tomentose on exterior. Flowers c. 2 mm long, solitary or in small groups on primary branches of inflorescence. Receptacle campanulate-cupuliform, densely brown-tomentose on exterior, tomentose within; pedicels c. 1 mm long. Calyx lobes acute, tomentose on both surfaces. Petals 4 or 5, creamwhite, sparsely pubescent. Stamens 14-21, inserted in a complete circle; filaments far exceeding calyx lobes, slightly connate at base. Ovary lanate. Style hirsute almost to apex, equalling or exceeding filaments. Fruit ellipsoid, 3.5-4.5 cm long; epicarp minutely lenticellate, glabrous; mesocarp thick, fibrous; endocarp thin, hard, glabrous within.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types

Riverine Forest and/or Gallery Forest, Terra Firme Forest

## Geographic Distribution

### Confirmed occurrences

North (Amazonas, Amapá, Pará, Roraima)




Northeast (Maranhão)

Central-west (Mato Grosso do Sul, Mato Grosso)

### Possible occurrences

North (Acre)

## HERBARIUM MATERIAL

G.T. Prance, 10883, US, 2845104,  (US01352754), INPA, 29234,  (INPA0029234), NY,  (NY01254477), MG (MG042209), K (K001181637), Roraima

## REFERENCE

- Sothers C.A., Prance G.T. & Chase, M.W. (2016). Towards a monophyletic *Licania*: a new generic classification of the polyphyletic Neotropical genus *Licania* (Chrysobalanaceae). *Kew Bull.* 71: 58.
- Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), *Species Plantarum: Flora of the World 9*. Australian Biological Resources Study, Canberra.



# *Moquilea salzmannii* Hook.f.

## Has as synonym

homotype *Licania salzmannii* (Hook.f.) Fritsch

## DESCRIPTION

**Leaf:** shape elliptic; **indumentum** glabrous; **petiole gland(s)** absent. **Inflorescence:** type panicle/racemose. **Flower:** stamen number exserted/20 - 25; **pedicel** pedicellate; **receptacle** cupuliform. **Fruit:** epicarp glabrous.

## ADDITIONAL DESCRIPTION

Tree. Branches glabrous when young, conspicuously lenticellate. Leaves with stipules caducous (not seen); petioles 5-6 mm long, glabrous, canaliculate, eglandular; lamina elliptic, coriaceous, 5-10 × 2-4.5 cm, acuminate at apex, subcuneate at base, shining and glabrous above; palisade glands absent; midrib prominulous and glabrous above; primary veins 9-11 pairs, inconspicuous on both surfaces. Inflorescences terminal and axillary racemose panicles; rachis and branches sparsely appressed-puberulous. Bracts and bracteoles minute, linear, caducous. Flowers 2.5-3 mm long, solitary on primary branches of inflorescence. Receptacle cupuliform, exterior and interior sparsely puberulous; pedicels 2-5 mm long. Calyx lobes acute, narrow, puberulous on both surfaces. Petals 5, sparsely puberulous. Stamens 20-25, inserted in a complete circle; filaments exserted beyond calyx lobes, free almost to base. Ovary lanate. Style lanate at base only. Fruit ovoid, 10.5 × 5.7 cm; exocarp glabrous and densely lenticellate; mesocarp 6-7 mm thick; endocarp c. 1 mm thick, fibrous, glabrous within, filled by a single large seed.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Is endemic from Brazil

## Phytogeographic Domains

Atlantic Rainforest

## Vegetation Types

Coastal Forest (Restinga)

## Geographic Distribution

### Confirmed occurrences

Northeast (Bahia)

Southeast (Espírito Santo)

## HERBARIUM MATERIAL

P. Salzmann, s.n., P (P00746070), P (P00746069), P (P00746067), MO (MO255323), Bahia, **Typus**

## REFERENCE

Sothers, C., Alves, F.M., Prance, G.T. 2015. Chrysobalanaceae in Lista de Espécies da Flora do Brasil. Jardim Botânico do Rio de Janeiro. Disponível em: <<http://floradobrasil.jbrj.gov.br/jabot/floradobrasil/FB48208>>.

BFG. Growing knowledge: an overview of Seed Plant diversity in Brazil. Rodriguésia, v.66, n.4, p.1085-1113. 2015. (DOI: 10.1590/2175-7860201566411)

Sothers C.A., Prance G.T. & Chase, M.W. (2016). Towards a monophyletic *Licania*: a new generic classification of the polyphyletic Neotropical genus *Licania* (Chrysobalanaceae). *Kew Bull.* 71: 58.

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), *Species Plantarum: Flora of the World* 9. Australian Biological Resources Study, Canberra.

# *Moquilea silvatica* (Glaz. ex Prance) Sothers & Prance

## Has as synonym

basionym *Licania silvatica* Glaz. ex Prance

## DESCRIPTION

**Leaf:** shape oblong/lanceolate; **indumentum** glabrous; **petiole gland(s)** present. **Inflorescence:** type panicle. **Flower:** stamen number equal/25; **pedicel** sessile; **receptacle** cupuliform. **Fruit:** epicarp unknown.

## ADDITIONAL DESCRIPTION

Tree. Branches tomentose when young, glabrescent. Leaves: stipules linear, 8-12 mm long, membranous, axillary, subsistent; petioles 6-9 mm long, tomentose, canaliculate, with 2 glands next to lamina beneath; lamina oblong to oblong-lanceolate, coriaceous, 6-10 × 2.2-3.5 cm, acuminate at apex with acumen 5-8 mm long, rounded at base, glabrous on both surfaces with sparse glands beneath; midrib plane and glabrous above; primary veins 11-14 pairs, slightly prominent beneath, impressed above. Inflorescences of terminal panicles; rachis and branches grey-brown tomentose. Flowers c. 2 mm long. Bracts and bracteoles small, ovate-lanceolate, persistent, tomentellous on exterior. Receptacle cupuliform, sessile, tomentose on exterior, villous-tomentose within. Calyx lobes acute, tomentose on both surfaces. Petals 5, puberulous. Stamens c. 25, inserted around complete circle; filaments glabrous, connate at base, equalling calyx lobes. Ovary villous-pubescent. Style villous, equalling calyx lobes. Fruit not seen.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION


Native, Is endemic from Brazil

## Geographic Distribution

### Confirmed occurrences

Southeast (Espírito Santo)

## HERBARIUM MATERIAL

Glaziou, A.F.M., 10702, P (P00746073), K,  (K000220642), Espírito Santo, **Typus**

## REFERENCE

Sothers C.A., Prance G.T. & Chase, M.W. (2016). Towards a monophyletic *Licania*: a new generic classification of the polyphyletic Neotropical genus *Licania* (Chrysobalanaceae). *Kew Bull.* 71: 58.

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), *Species Plantarum: Flora of the World 9*. Australian Biological Resources Study, Canberra.

# Moquilea tomentosa Benth.

This treatment is composed of the following taxa: *Moquilea tomentosa*, .

## Has as synonym

homotype *Licania tomentosa* (Benth.) Fritsch  
 homotype *Moquilea tomentosa* var. *latifolia* Hook.f.  
 heterotypic *Moquilea tomentosa* var. *angustifolia* Hook.f.  
*Pleragina odorata* Arruda

## DESCRIPTION

**Leaf: shape** oblong/oblong-elliptic/lanceolate; **indumentum** glabrous; **petiole gland(s)** present. **Inflorescence: type** panicle/raceme/racemose. **Flower: stamen number** exserted/30; **pedicel** pedicellate; **receptacle** campanulate. **Fruit: epicarp** glabrous/smooth.

## ADDITIONAL DESCRIPTION

Tree to 20 m tall. Branches lanate-tomentose when young, soon becoming glabrous. Leaves: stipules caducous, linear, membranous, axillary; petioles 4-6 mm long, lanate when young, becoming glabrous with age, with 2 glands, shallowly canaliculate; lamina oblong-elliptic to oblong-lanceolate, chartaceous, 4.5-12 × 1.5-4.5 cm, apiculate-acuminate at apex with acumen 2-4 mm long, cuneate to subcuneate at base, farinaceous-lanate on both surfaces when young, becoming glabrous with age; lamina base with 2 glands, but other palisade glands absent; midrib prominulous above, lanate-pubescent when young; primary veins 7-10 pairs, thin, prominulous beneath, level or nearly so and inconspicuous above. Inflorescences little-branched racemose panicles or racemes, predominantly axillary; rachis sparsely grey-tomentose. Flowers c. 3 mm long, solitary but densely crowded along rachis. Receptacle campanulate, sparsely grey-tomentose on exterior, tomentose within; pedicels 1-2 mm long. Calyx lobes acute, tomentellous on exterior, puberulous within. Petals 5, almost glabrous, with ciliate margins. Stamens c. 30, inserted in a complete circle; filaments far exceeding calyx lobes, slightly connate at base. Ovary lanate. Style hirsute most of its length, equalling or exceeding filaments. Fruit oblong; epicarp smooth, drying black; pericarp thick, fragile, fibrous, glabrous within.

## COMMENTS

This species is extensively cultivated throughout Brazil as a street tree.

### Life Form

Tree

### Substrate

Terrestrial

## DISTRIBUTION

Native, Is endemic from Brazil

### Phytogeographic Domains

Atlantic Rainforest

### Vegetation Types

Ombrophyllous Forest (Tropical Rain Forest)

### Geographic Distribution

Confirmed occurrences

Northeast (Alagoas, Bahia, Ceará, Paraíba, Pernambuco, Piauí, Rio Grande do Norte, Sergipe)

### HERBARIUM MATERIAL

Nascimento, M.T., 153, HUENF,  (HUENF00000838), Rio de Janeiro

### REFERENCE

Sothers C.A., Prance G.T. & Chase, M.W. (2016). Towards a monophyletic *Licania*: a new generic classification of the polyphyletic Neotropical genus *Licania* (Chrysobalanaceae). *Kew Bull.* 71: 58.

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), *Species Plantarum: Flora of the World 9*. Australian Biological Resources Study, Canberra.

# *Moquilea unguiculata* (Prance) Sothers & Prance

## Has as synonym

basionym *Licania unguiculata* Prance

## DESCRIPTION

**Leaf:** shape elliptic; **indumentum** glabrous; **petiole gland(s)** present. **Inflorescence:** type panicle/racemose. **Flower:** stamen number exserted/14; **pedicel** pedicellate; **receptacle** campanulate. **Fruit:** epicarp glabrous/smooth.

## ADDITIONAL DESCRIPTION

Trees. Branches puberulous soon becoming glabrous when young, lenticellate. Leaves: stipules lanceolate 2-4 mm long, axillary, membranous, persistent; petioles 2-5 mm long, terete, glabrous, rugose, with 2 glands on upper surface; lamina ovate to elliptic, coriaceous, 5.5-16 × 3.5-6.8 cm, acuminate at apex with acumen 3-15 mm long, rounded to subcuneate at base, glabrous on both surfaces, with scattered glands beneath; midrib prominent and glabrous above; primary veins 7-10 pairs, prominent beneath, slightly prominent above. Inflorescences terminal and subterminal racemose panicles; rachis and branches puberulous. Bracts and bracteoles 0.3-1 mm long, elliptic, persistent, puberulous on exterior. Flowers 5-6 mm long. Receptacle campanulate, tomentellous on exterior, densely villous-tomentose within; pedicels 2-2.5 mm long. Calyx lobes acute, tomentellous on both surfaces. Petals 5, pubescent, unguiculate, persistent, exceeding calyx lobes. Stamens c. 14, inserted around complete circle; filaments slightly exserted beyond calyx lobes, glabrous, connate at base. Ovary villous-tomentose. Style hirsute to apex. Fruit elongate-cylindrical; exocarp smooth, glabrous; pericarp fibrous, glabrous within.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types

Terra Firme Forest

## Geographic Distribution





### Confirmed occurrences

North (Amazonas, Pará, Rondônia, Roraima)

### Possible occurrences

North (Acre)

## HERBARIUM MATERIAL

Ducke, A., 23599, RB, 23599,  (RB00537102), RB, 23599,  (RB00536996), NY,  (NY00428602), K,  (K000220603), Amazonas, **Typus**

## REFERENCE

Sothers C.A., Prance G.T. & Chase, M.W. (2016). Towards a monophyletic *Licania*: a new generic classification of the polyphyletic Neotropical genus *Licania* (Chrysobalanaceae). *Kew Bull.* 71: 58.

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), *Species Plantarum: Flora of the World 9*. Australian Biological Resources Study, Canberra.

# Parinari Aubl.

This treatment is composed of the following taxa: *Parinari*, *Parinari alvimii*, *Parinari brachystachya*, *Parinari brasiliensis*, *Parinari campestris*, *Parinari cardiophylla*, *Parinari klugii*, *Parinari leontopitheci*, *Parinari littoralis*, *Parinari montana*, *Parinari obtusifolia*, *Parinari occidentalis*, *Parinari parvifolia*, *Parinari rodolphii*, *Parinari sprucei*.

## HOW TO CITE

Barbosa-Silva, R.G. 2020. *Parinari* in **Flora do Brasil 2020**. Jardim Botânico do Rio de Janeiro. Available at: <http://floradobrasil.jbrj.gov.br/reflora/floradobrasil/FB16859>.

## Has as synonym

homotype *Dugortia* Scop.  
 homotype *Petrocarya* Schreb.  
 heterotypic *Balantium* Desv. ex Ham.  
 heterotypic *Ferolia* Kuntze  
 heterotypic *Lepidocarpa* Korth.  
 heterotypic *Parinarium* Juss.

## DESCRIPTION

Árvores, frequentemente emergentes, troncos aéreos ou subterrâneos, lenhosos, bases digitadas ou retas, com ou sem sapopemas; ritidomas escamosos, lenticelados ou reticulados; casca interna avermelhada; ramos jovens pilosos, glabrescentes ou glabros, lenticelados, catáfilos caducos, raramente persistentes. Folhas alternas, inteiras, dísticas; lâminas foliares com margem plana ou revoluta, cartáceas ou coriáceas; face abaxial com nervuras proeminentes, criptas estomáticas cobertas por tricomas simples presentes ou ausentes, araquinóides, frequentemente com nectários discóides ao longo de toda a margem; face adaxial lustrosa, levemente pilosa quando jovem, glabrescente quando madura; pecíolo com um par de nectários sésseis na região mediana ou próximo a lâmina foliar, nectários ausentes ou raro dois; estípulas laterais ao pecíolo finas, semelhantes aos catáfilos, precocemente caducas. Inflorescências em tirso provenientes de gemas laterais, castanhas, pilosas ou velutinas, paracládios dispostos em cimas simples ou compostas; brácteas de primeira e segunda ordem eglandulares, convexas, castanhas, tomentosas e pilosas, precocemente caducas. Flores bissexuais, ligeiramente zigomorfas; receptáculos maiores que as sépalas, campanulados, infundibuliformes ou ligeiramente gibosos, ligeiramente volumoso em um dos lados, esverdeados a castanhos, tricomas acastanhados in vivo, densamente vilosos internamente; sépalas 5-mera, castanhas ou esverdeadas, densamente pilosas em ambas as superfícies, frequentemente reflexas, ápice agudo; pétalas 5-mera, alvas ou rosadas, caducas, margem ciliada; estames 6–10, dispostos em semicírculo, opostos ao ovário, ligeiramente curvados, inclusos; filetes livres, alvos, largos na base, glabros; estaminódios 7, opostos aos estames; ovário unicarpelar, bilocular, inserido na parte lateral superior do receptáculo; estilete inclusivo, filiforme. Drupas fibrosas, epicarpo verrucoso e lenticelado, mesocarpo frequentemente verde, endocarpo espesso, fibroso e coberto por um denso indumento araquinoideo, com duas obturações basais. Sementes elípticas, retas, enrijecidas. Germinação hipógea

## COMMENTS

O gênero possui distribuição Pantropical, abriga 39 espécies e apresenta dois centros de diversidade, a região neotropical com 19 espécies e o sul da Ásia com 15 espécies. As florestas tropicais úmidas concentram a maior riqueza no gênero, com seus representantes possuindo em sua maioria hábito arbóreo emergente, embora algumas espécies que ocorrem em vegetações abertas e apresentam adaptações no hábito nesses ambientes como caules subterrâneos espessos.

Morfologicamente *Parinari* é reconhecido pela presença de duas glândulas no pecíolo e ao longo da margem da lâmina foliar, criptas estomáticas na face abaxial da lâmina foliar recobertas por tricomas, brácteas em grupos envolvendo as flores, receptáculo subcampanulado, corola alva, raramente rósea, estames 6-8, ovário bilocular inserido na porção superior do receptáculo, fruto com epicarpo verrucoso e endocarpo com duas pequenas obturações. *Parinari* é considerado um gênero de complexa taxonomia, especialmente devido à pouca variação morfológica observada nas flores e frutos ) e também pela existência de vários complexos de espécies

## Life Form

Shrub, Tree



**Substrate**

Terrestrial

**DISTRIBUTION**

Native, Not endemic to Brazil

**Phytogeographic Domains**

Amazon Rainforest, Central Brazilian Savanna, Atlantic Rainforest

**Vegetation Types**

Cerrado (lato sensu), Riverine Forest and/or Gallery Forest, Inundated Forest (Igapó), Terra Firme Forest, Seasonally Semideciduous Forest, Ombrophylous Forest (Tropical Rain Forest)

**Geographic Distribution**Confirmed occurrences

North (Acre, Amazonas, Amapá, Pará, Rondônia, Roraima, Tocantins)  
 Northeast (Alagoas, Bahia, Ceará, Maranhão, Pernambuco, Piauí, Sergipe)  
 Central-west (Distrito Federal, Goiás, Mato Grosso do Sul, Mato Grosso)  
 Southeast (Espírito Santo, Minas Gerais, Rio de Janeiro, São Paulo)  
 South (Paraná, Santa Catarina)

**IDENTIFICATION KEY**

1. Pecíolo com nectários na região mediana ou próximo a lamina foliar..... 2
- 1'. Pecíolo com nectários adnato ao ramo.... *Parinari campestris*, *P. cardiophylla*, *P. sprucei*\*
2. Subarbusto ou arbusto, caule subterrâneo .....*Parinari obtusifolia* (Cerrado)
- 2'. Árvores, caule aéreo .....3
3. Lâmina foliar convexa ..... *Parinari alvimii*
- 3'. Lâmina foliar plana .....4
4. Flores com receptáculo 9-10 mm comp..... *Parinari montana*
- 4'. Flores com receptáculo 4-8 mm comp .....5
5. Estípulas 25-40 mm de comp..... *Parinari rodolphii*
- 5'. Estípulas 16-20 mm de comp. ....6
6. Lâmina foliar coriácea..... *Parinari leontopitheci*, *P. littoralis*\*\*
- 6'. Lâmina foliar cartácea.....7
7. Inflorescências corimbiformes .....8
- 7'. Inflorescências não corimbiforme.....9
8. Inflorescência, brácteas e flores acinzentadas; ápice da folha com acumem de 8,0-12,0 mm de compr.; ramos jovens com tricomas longos e rígidos..... *Parinari klugii*
- 8'. Inflorescência, brácteas e flores marrom-amarelada; ápice da folha com acumem menor que 7 mm de compr.; ramos jovens com tricomas curtos ..... *Parinari occidentalis*
9. Estípulas ca. de 10 x 4-6 mm..... *Parinari brachystachia*, *P. parvifolia*\*\*\*
- 9'. Estípulas 12-16 x ca. 2,7 mm ..... *Parinari brasiliensis*

\* A distinção entre *Parinari campestris*, *P. cardiophylla*, *P. sprucei* não é clara\*\* A distinção entre *Parinari leontopitheci* e *P. littoralis* não é clara\*\*\* A distinção entre *Parinari brachystachia* e *P. parvifolia*\*\*\* não é clara**REFERENCE**

- Barboza-Silva, R.G. 2018. Taxonomia e micromorfologia de *Parinari* Aubl. (Chrysobalanaceae) na Floresta Atlântica. Dissertação de Mestrado. Universidade Estadual de Feira de Santana.
- Prance, G.T. 1972. Flora neotropica. Chrysobalanaceae. New York: Hafner Publishing Company 410p.
- Prance, G.T. & Sothers, A.S. (2003) Chrysobalanaceae 1: Chrysobalanus to Parinari. Species Plantarum. Flora of the World 10: 1-319



# *Parinari alvimii* Prance

## DESCRIPTION

**Stem:** branch aerial. **Leaf:** stipule persistent; length of the stipule above of the 2 cm; nectary extrafloral on the region median of the petiole; leaf ovate/broad ovate; base of the leaf rounded; nectary extrafloral on the margin of the side abaxial frequently present; acumen absent; distance between to the veins secondary 3 to 5.5 mm; margin of the leaf strongly revolute. **Inflorescence:** inflorescence terminal. **Flower:** hypanthium smaller than 6 mm. **Fruit:** fruit elliptic.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Is endemic from Brazil

## Phytogeographic Domains

Atlantic Rainforest

## Vegetation Types

Ombrophyllous Forest (Tropical Rain Forest)

## Geographic Distribution

### Confirmed occurrences

Northeast (Bahia)

## HERBARIUM MATERIAL

T.S. dos Santos, 457, CEPEC,  (CEPEC00005297), FHO

J. Almeida, 164, NY, 428633,  (NY00428633), Bahia, **Typus**

A.M. Amorim, 9539, CEPEC,  (RB00994602), Bahia

## FIELD IMAGES / ILLUSTRATIONS



Figure 1: *Parinari alvimii* Prance



Figure 2: *Parinari alvimii* Prance



Figure 3: *Parinari alvimii* Prance



Figure 4: *Parinari alvimii* Prance

## REFERENCE

Barboa-Silva, R.G. 2018. Taxonomia e micromorfologia de *Parinari* Aubl. (Chrysobalanaceae) na Floresta Atlântica. Dissertação de Mestrado. Universidade Estadual de Feira de Santana.

# *Parinari brachystachya* Benth.

## Has as synonym

heterotypic *Ferolia amazonica* Kuntze  
heterotypic *Parinari laxiflora* var. *lata* Ducke  
heterotypic *Parinari laxiflora* Ducke  
heterotypic *Parinari laxiflorum* Ducke  
heterotypic *Parinarium brachystachyum* Benth.

## DESCRIPTION

**Stem:** branch aerial. **Leaf:** stipule caducous; **length of the stipule** below of the 2 cm; **nectary extrafloral** on the region median of the petiole; **leaf** ovate/elliptic; **base of the leaf** cuneate; **nectary extrafloral on the margin of the side abaxial** frequently present; **acumen** to 5 mm; **distance between to the veins secondary** 1 to 3; **margin of the leaf** flat. **Inflorescence:** inflorescence lateral. **Flower:** **hypanthium** smaller than 6 mm. **Fruit:** fruit elliptic.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types

Terra Firme Forest, Ombrophyllous Forest (Tropical Rain Forest)

## Geographic Distribution

### Confirmed occurrences


North (Acre, Amazonas, Amapá, Pará, Rondônia, Roraima)

Central-west (Mato Grosso)

## HERBARIUM MATERIAL

Pires, J.M., 2333, MG (MG139992), Pará

Schomburgk, 785, K,  (K000220809), **Typus**

G. Pereira-Silva et. al., 16233, RB, 591654,  (RB00830790), Rondônia

## FIELD IMAGES / ILLUSTRATIONS



Figure 1: *Parinari brachystachya* Benth.



Figure 2: *Parinari brachystachya* Benth.

## REFERENCE

Barbosa-Silva, R.G. 2018. Taxonomia e micromorfologia de *Parinari* Aubl. (Chrysobalanaceae) na Floresta Atlântica. Feira de Santana - Bahia.

# *Parinari brasiliensis* (Schott) Hook.f.

## Has as synonym

homotype *Parinarium brasiliense* Hook.f.  
heterotypic *Ferolia brasiliensis* (Schott) Kuntze  
heterotypic *Ferolia pohlii* (Hook.f.) Kuntze  
heterotypic *Parinari pohlii* Hook.f.  
heterotypic *Parinarium pohlii* (A.DC.) Hook.f.  
heterotypic *Petrocarya brasiliensis* Schott

## DESCRIPTION

**Stem:** branch aerial. **Leaf:** stipule caducous; **length of the stipule** 1.5 to 4 mm; **nectary extrafloral** on the region median of the petiole; **leaf** ovate; **base of the leaf** cuneate; **nectary extrafloral on the margin of the side abaxial** frequently present; **acumen** 9 to 12 mm; **distance between to the veins secondary** 3 to 5.5 mm; **margin of the leaf** flat. **Inflorescence:** **inflorescence** terminal. **Flower:** **hypanthium** bigger than 7 mm. **Fruit:** **fruit** obovate.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Is endemic from Brazil

## Phytogeographic Domains

Atlantic Rainforest

## Vegetation Types





Ombrophyllous Forest (Tropical Rain Forest)

## Geographic Distribution

### Confirmed occurrences

Northeast (Alagoas, Bahia, Pernambuco)  
Southeast (Espírito Santo, Minas Gerais, Rio de Janeiro, São Paulo)  
South (Paraná, Santa Catarina)

## HERBARIUM MATERIAL

Schott, H., 4222, NY, 428638,  (NY00428638), W, K, **Typus**  
Glaziou, 13796, P (P04829283), Rio de Janeiro  
A. Glaziou, 7602, P (P04829277), Rio de Janeiro  
G. Martinelli, 8466, RB,  (RB00070443), Rio de Janeiro  
Kuhlmann, M, 2738, SPF,  (SPF00072189), São Paulo  
S. Aragaki, 11, K,  (K001172335), São Paulo

## FIELD IMAGES / ILLUSTRATIONS





Figure 1: *Parinari brasiliensis* (Schott) Hook.f.



Figure 2: *Parinari brasiliensis* (Schott) Hook.f.



Figure 3: *Parinari brasiliensis* (Schott) Hook.f.

## REFERENCE

Barboa-Silva, R.G. 2018. Taxonomia e micromorfologia de *Parinari* Aubl. (Chrysobalanaceae) na Floresta Atlântica. Dissertação de Mestrado. Universidade Estadual de Feira de Santana.

# *Parinari campestris* Aubl.

## Has as synonym

heterotypic *Balantium cordifolium* Desv. ex Ham.

heterotypic *Dugortia nucamentosa* J.F.Gmel.

heterotypic *Ferolia campestris* (Aubl.) Kuntze

heterotypic *Petrocarya campestris* (Aubl.) Willd.

## DESCRIPTION

**Stem:** branch aerial. **Leaf:** stipule caducous/persistent; **length of the stipule** above of the 2 cm; **nectary extrafloral** on the base of the petiole/on the region median of the petiole; **leaf** ovate/broad ovate; **base of the leaf** rounded/subcordate; **nectary extrafloral on the margin of the side abaxial** frequently present; **acumen** 9 to 12 mm; **distance between to the veins secondary** 3 to 5.5 mm; **margin of the leaf** flat. **Inflorescence:** **inflorescence** terminal/lateral. **Flower:** **hypanthium** smaller than 6 mm. **Fruit:** **fruit** obovate.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest, Central Brazilian Savanna

## Vegetation Types

Cerrado (lato sensu), Riverine Forest and/or Gallery Forest

## Geographic Distribution

### Confirmed occurrences


North (Amazonas, Amapá, Pará, Roraima)

Northeast (Ceará, Maranhão, Piauí)

## HERBARIUM MATERIAL

J.G.Kuhlmann, 1926, RB, 146878,  (RB00070469), Rio de Janeiro

J.M. Pires, 14508, MG

J.M. Pires, 14597, RB, 169308,  (RB00070487), Roraima

G. T. Prance, 4366, NY,  (NY01292528), Roraima

## FIELD IMAGES / ILLUSTRATIONS



Figure 1: *Parinari campestris* Aubl.



Figure 2: *Parinari campestris* Aubl.



Figure 3: *Parinari campestris* Aubl.



Figure 4: *Parinari campestris* Aubl.



Figure 5: *Parinari campestris* Aubl.

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. Flora Neotropica 9: 1-409.

# *Parinari cardiophylla* Ducke

## DESCRIPTION

**Stem:** branch aerial. **Leaf:** stipule caducous; **length of the stipule** below of the 2 cm; **nectary extrafloral** on the region median of the petiole; **leaf** oblong; **base of the leaf** subcordate; **nectary extrafloral on the margin of the side abaxial** frequently present; **acumen** 9 to 12 mm; **distance between to the veins secondary** 3 to 5.5 mm; **margin of the leaf** flat. **Inflorescence:** **inflorescence** lateral. **Flower:** **hypanthium** smaller than 6 mm. **Fruit:** **fruit** elliptic.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Is endemic from Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types

Terra Firme Forest

## Geographic Distribution

### Confirmed occurrences

North (Amazonas, Pará)

## HERBARIUM MATERIAL

R.L. Fróes, 29070, IAN, UB

A. Ducke, s.n., RB, 24182,  (RB00537107), Amazonas

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. Flora Neotropica 9: 1-409.

# *Parinari klugii* Prance

## DESCRIPTION

**Stem:** branch aerial. **Leaf:** stipule caducous; **length of the stipule** below of the 2 cm; **nectary extrafloral** on the region median of the petiole; **leaf** elliptic; **base of the leaf** cuneate; **nectary extrafloral on the margin of the side abaxial** frequently present; **acumen** 9 to 12 mm; **distance between to the veins secondary** 3 to 5.5 mm; **margin of the leaf** involute. **Inflorescence:** **inflorescence** terminal. **Flower:** **hypanthium** smaller than 6 mm. **Fruit:** **fruit** elliptic.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types




Riverine Forest and/or Gallery Forest, Terra Firme Forest

## Geographic Distribution

### Confirmed occurrences

North (Acre, Amazonas)

## HERBARIUM MATERIAL

C. Ferreira, 7291, NY,  (NY01300624), K,  (K001172362), US, INPA  
Klug, G., 3870, K,  (K000220823), **Typus**

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. Flora Neotropica 9: 1-409.

# *Parinari leontopithecii* Prance

## DESCRIPTION

**Stem:** branch aerial. **Leaf:** stipule caducous; **length of the stipule** 1.5 to 4 mm; **nectary extrafloral** absent node petiole; **leaf** ovate/broad ovate; **base of the leaf** rounded; **nectary extrafloral on the margin of the side abaxial** frequently present; **acumen** to 5 mm; **distance between to the veins secondary** 1 to 3; **margin of the leaf** strongly revolute. **Inflorescence:** inflorescence terminal. **Flower:** hypanthium smaller than 6 mm. **Fruit:** fruit elliptic.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Is endemic from Brazil

## Phytogeographic Domains

Atlantic Rainforest

## Vegetation Types



Ombrophyllous Forest (Tropical Rain Forest)

## Geographic Distribution

### Confirmed occurrences

Northeast (Bahia)

## HERBARIUM MATERIAL

A.M. Amorim, 1261, CEPEC (CEPEC00058393), K,  (K000220816), K,  (K000220815), **Typus**



# *Parinari littoralis* Prance

## Has as synonym

heterotypic *Parinari subrotunda* Rizzini

## DESCRIPTION

**Stem:** branch aerial. **Leaf:** stipule caducous; **length of the stipule** 1.5 to 4 mm; **nectary extrafloral** on the region median of the petiole; **leaf** elliptic/oblong; **base of the leaf** rounded; **nectary extrafloral on the margin of the side abaxial** frequently present; **acumen** to 5 mm; **distance between to the veins secondary** 3 to 5.5 mm/1 to 3; **margin of the leaf** flat. **Inflorescence:** **inflorescence** terminal/lateral. **Flower:** **hypanthium** smaller than 6 mm. **Fruit:** **fruit** elliptic.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Is endemic from Brazil

## Phytogeographic Domains

Atlantic Rainforest

## Vegetation Types



Ombrophyllous Forest (Tropical Rain Forest)

## Geographic Distribution

### Confirmed occurrences

Northeast (Alagoas, Bahia, Sergipe)

## HERBARIUM MATERIAL

Belém, R.P., 1833, BR, IAN, NY, UB  
Passos Júnior, LA, 686, ALCB (ALCB042681), Bahia  
Miranda, A.M., 5125, UFRN,  (UFRN00009552), Bahia  
A.M. Carvalho, 6805, NY,  (NY02206171), Bahia  
Fonseca, MR, 1090, ALCB (ALCB042705), Bahia  
M.L.S. Guedes, 7722, ALCB (ALCB042696), Bahia  
M.L.S. Guedes, s/n, ALCB (ALCB042699), Bahia  
Prata, AP, 2818, ASE (ASE0028049), Sergipe  
Queiroz, EP, 3512, MBM (MBM397962), Bahia

## FIELD IMAGES / ILLUSTRATIONS



Figure 1: *Parinari littoralis* Prance



Figure 2: *Parinari littoralis* Prance



Figure 3: *Parinari littoralis* Prance



Figure 4: *Parinari littoralis* Prance



Figure 5: *Parinari littoralis* Prance



Figure 6: *Parinari littoralis* Prance

## REFERENCE

Barboa-Silva, R.G. 2018. Taxonomia e micromorfologia de *Parinari* Aubl. (Chrysobalanaceae) na Floresta Atlântica. Dissertação de Mestrado. Universidade Estadual de Feira de Santana.

# *Parinari montana* Aubl.

## Has as synonym

homotype *Chrysobalanus montanus* (Aubl.) M.Gómez

heterotypic *Ferolia montana* (Aubl.) Kuntze

heterotypic *Parinari pajura* Benoist

heterotypic *Petrocarya montana* (Aubl.) Willd.

## DESCRIPTION

**Stem:** branch aerial. **Leaf:** stipule caducous; **length of the stipule** 1.5 to 4 mm; **nectary extrafloral** on the region median of the petiole; **leaf** elliptic/oblong; **base of the leaf** cuneate; **nectary extrafloral on the margin of the side abaxial** frequently present; **acumen** 9 to 12 mm; **distance between to the veins secondary** 3 to 5.5 mm; **margin of the leaf** flat. **Inflorescence:** **inflorescence** lateral. **Flower:** **hypanthium** bigger than 7 mm. **Fruit:** **fruit** circular.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types

Terra Firme Forest


## Geographic Distribution

### Confirmed occurrences

North (Acre, Amazonas, Amapá, Pará)

## HERBARIUM MATERIAL

P.J.M. Maas, 12762, NY, INPA

J.E. Huber, 15028, K,  (K000220807)

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. Flora Neotropica 9: 1-409.

# *Parinari obtusifolia* Hook.f.

## Has as synonym

homotype *Parinari obtusifolium* Hook.f.

heterotypic *Ferolia obtusifolia* (Hook.f.) Kuntze

## DESCRIPTION

**Stem:** branch subterranean. **Leaf:** stipule caducous; length of the stipule 1.5 to 4 mm; nectary extrafloral on the region median of the petiole; leaf broad ovate; base of the leaf rounded/subcordate; nectary extrafloral on the margin of the side abaxial frequently present; acumen absent; distance between to the veins secondary 3 to 5.5 mm; margin of the leaf involute. **Inflorescence:** inflorescence lateral. **Flower:** hypanthium smaller than 6 mm. **Fruit:** fruit obovate.

## Life Form

Shrub

## Substrate

Terrestrial

## DISTRIBUTION

Native, Is endemic from Brazil

## Phytogeographic Domains

Amazon Rainforest, Central Brazilian Savanna

## Vegetation Types

Cerrado (lato sensu), Seasonally Semideciduous Forest

## Geographic Distribution

### Confirmed occurrences


North (Pará, Tocantins)

Northeast (Bahia)

Central-west (Distrito Federal, Goiás, Mato Grosso do Sul, Mato Grosso)

Southeast (Minas Gerais, São Paulo)

## HERBARIUM MATERIAL

G. Gardner, 3137, K,  (K000220820)

B.A.S. Pereira, 2996, IBGE, K

## FIELD IMAGES / ILLUSTRATIONS



Figure 1: *Parinari obtusifolia* Hook.f.



Figure 2: *Parinari obtusifolia* Hook.f.



Figure 3: *Parinari obtusifolia* Hook.f.

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. Flora Neotropica 9: 1-409.

# *Parinari occidentalis* Prance

## DESCRIPTION

**Stem:** branch aerial. **Leaf:** stipule caducous; **length of the stipule** below of the 2 cm; **nectary extrafloral** absent node petiole/ on the region median of the petiole; **leaf** ovate/elliptic; **base of the leaf** cuneate/rounded; **nectary extrafloral on the margin of the side abaxial** frequently present; **acumen** to 5 mm; **distance between to the veins secondary** 3 to 5.5 mm; **margin of the leaf** flat. **Inflorescence:** **inflorescence** terminal/lateral. **Flower:** **hypanthium** smaller than 6 mm. **Fruit:** **fruit** elliptic/obovate.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types


Terra Firme Forest

## Geographic Distribution

### Confirmed occurrences

North (Acre, Amazonas)

## HERBARIUM MATERIAL

B. A. Krukoff, 11113, NYBG, 428655,  (NY00428655), **Typus**

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. Flora Neotropica 9: 1-409.



# *Parinari parvifolia* Sandwith

## DESCRIPTION

**Stem:** branch aerial. **Leaf:** stipule caducous; **length of the stipule** 1.5 to 4 mm; **nectary extrafloral** on the region median of the petiole; **leaf** elliptic; **base of the leaf** cuneate; **nectary extrafloral on the margin of the side abaxial** frequently present; **acumen** to 5 mm; **distance between to the veins secondary** 1 to 3; **margin of the leaf** flat. **Inflorescence:** inflorescence lateral. **Flower:** **hypanthium** smaller than 6 mm. **Fruit:** fruit elliptic/obovate.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types

Terra Firme Forest


## Geographic Distribution

### Confirmed occurrences

North (Amazonas, Amapá, Pará)

## HERBARIUM MATERIAL

Sothers, C.A., 991, INPA, K

Sandwith, N.Y., 139, RB, 24907,  (RB00537112), **Typus**

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. Flora Neotropica 9: 1-409.

# *Parinari rodolphii* Huber

## Has as synonym

heterotypic *Parinari lucidissima* Standl.

## DESCRIPTION

**Stem:** branch aerial. **Leaf:** stipule persistent; length of the stipule 5 to 40 mm; nectary extrafloral on the region median of the petiole; leaf elliptic/oblong; base of the leaf cuneate/rounded; nectary extrafloral on the margin of the side abaxial frequently present; acumen 9 to 12 mm; distance between to the veins secondary 1 to 3; margin of the leaf strongly revolute. **Inflorescence:** inflorescence terminal. **Flower:** hypanthium smaller than 6 mm. **Fruit:** fruit obovate.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types

Inundated Forest (Igapó), Terra Firme Forest


## Geographic Distribution

### Confirmed occurrences

North (Amapá, Pará)


Northeast (Maranhão)

## HERBARIUM MATERIAL

J.J. Wurdack, s.n., RB, 97842,  (RB00071330)

J.M. Pires, 10690, NY, IAN

Berti, L.M., 84, MBM (MBM064972)

A. Duck, s.n., RB, 18337,  (RB00071350), Pará

## FIELD IMAGES / ILLUSTRATIONS

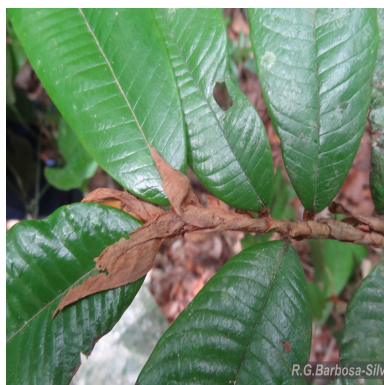


Figure 1: *Parinari rodolphii* Huber

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. Flora Neotropica 9: 1-409.

# *Parinari sprucei* Hook.f.

## Has as synonym

homotype *Parinarium sprucei* Hook.f.

heterotypic *Ferolia sprucei* (Hook.f.) Kuntze

## DESCRIPTION

**Stem:** branch aerial. **Leaf:** stipule caducous; **length of the stipule** below of the 2 cm; **nectary extrafloral** on the base of the petiole; **leaf** ovate/broad ovate; **base of the leaf** subcordate; **nectary extrafloral on the margin of the side abaxial** frequently present; **acumen** 9 to 12 mm; **distance between to the veins secondary** 3 to 5.5 mm; **margin of the leaf** flat. **Inflorescence:** **inflorescence** lateral. **Flower:** **hypanthium** smaller than 6 mm. **Fruit:** **fruit** obovate.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types


Riverine Forest and/or Gallery Forest


## Geographic Distribution


### Confirmed occurrences

North (Amazonas, Roraima)

## HERBARIUM MATERIAL

Kawasaki, M. L. (Kawasaki, Maria Lucia), 220, US,  (US01856449), Amazonas

R.G. Barbosa-Silva, 245, RB,  (RB00873517), Amazonas

R. Spruce, 2539, BM, BR, C, CGE, E, GH, GOET, LD, LE, NY, OXF, P, RB, K,  (K000220812)

## REFERENCE

Prance, G.T. 1972. Chrysobalanaceae. Flora Neotropica 9: 1-409.

# *Parinariopsis* (Huber) Sothers & Prance

This treatment is composed of the following taxa: *Parinariopsis*, *Parinariopsis licaniiflora*.

## HOW TO CITE

Sothers, C.A., Prance, G.T. 2020. *Parinariopsis* in **Flora do Brasil 2020**. Jardim Botânico do Rio de Janeiro. Available at: <http://floradobrasil.jbrj.gov.br/reflora/floradobrasil/FB604708>.

## DESCRIPTION

Trees. Leaves: stipules caducous, axillary; petioles usually with 2 prominent glands, sometimes eglandular or glands near lamina base; lamina obovate, elliptic to oblong, coriaceous; lower surface conspicuously reticulate and lanate, with  $\pm$ parallel secondary veins. Inflorescences terminal panicles. Bracts and bracteoles enclosing small groups of flower buds. Flowers bisexual, zygomorphic, densely disposed along primary and secondary branches of inflorescence. Receptacle campanulate, slightly tapered at base but sessile. Sepals 5. Petals 5. Stamens 16-25 inserted in a complete circle; filaments slightly exerted, free nearly to base; staminodes absent. Ovary 1-carpellary, 1-locular, inserted laterally at side of base of receptacle. Style equalling filaments. Fruit a drupe; epicarp lenticellate; mesocarp thick; endocarp thin, hard, fibrous, glabrous within; without any special mechanisms for seedling escape.

## COMMENTS

A monospecific genus widespread in the Amazonia. Occurs in open forest at river margins, savanna margins and in secondary forest.

### Life Form

Tree

### Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

### Phytogeographic Domains

Amazon Rainforest

### Vegetation Types

Terra Firme Forest

### Geographic Distribution

#### Confirmed occurrences

North (Acre, Amazonas, Pará)

#### Possible occurrences

North (Rondônia)

## REFERENCE

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), *Species Plantarum: Flora of the World 9*. Australian Biological Resources Study, Canberra.

Sothers C.A., Prance G.T. & Chase, M.W. (2016). Towards a monophyletic *Licania*: a new generic classification of the polyphyletic Neotropical genus *Licania* (Chrysobalanaceae). *Kew Bull.* 71: 58.

# *Parinariopsis licaniiflora* (Sagot) Sothers & Prance

## Has as synonym

basionym *Moquilea licaniiflora* Sagot  
 homotype *Licania bracteosa* Fritsch  
 homotype *Licania licaniiflora* (Sagot) Blake  
 heterotypic *Licania capinensis* Huber  
 heterotypic *Licania huberiana* Maguire  
 heterotypic *Licania obovatifolia* Maguire  
 heterotypic *Licania parinarioides* var. *latifolia* Maguire  
 heterotypic *Licania parinarioides* Huber  
 heterotypic *Licania wilson-brownei* Maguire

## DESCRIPTION

Trees to 30 m tall. Branches hispid-puberulous when young, soon becoming glabrous and conspicuously lenticellate. Leaves: stipules to 13 mm long, ovate, membranous, caducous, axillary; petioles 7-20 mm long, terete, strigose-puberulous, eventually glabrous, usually with 2 prominent medial glands, sometimes eglandular or glands near lamina base; lamina obovate, elliptic to oblong, coriaceous, 5-23 × 2.5-10 cm, apiculate to mucronate at apex with acumen 0-5 mm long, glabrous above, conspicuously reticulate on lower surface with ±parallel secondary veins; veins appressed-strigose with intervening spaces grey-lanate pubescent; midrib impressed its entire length above, glabrous except when young; primary veins 8-17 pairs, prominent beneath, impressed above. Inflorescences spreading terminal panicles; rachis and branches tomentellous. Flowers 5-6 mm long, densely disposed along primary and secondary branches of inflorescence. Bracts and bracteoles 3-6 mm long, triangular, enclosing small groups of flowers, tomentellous on exterior, glabrescent within. Receptacle campanulate, slightly tapered at base but sessile, tomentose on exterior and within. Calyx lobes acute, tomentellous on both surfaces. Petals 5, oblong, short-clawed, puberulous on exterior. Stamens 18-25, inserted in a complete circle; filaments slightly exceeding calyx lobes, free nearly to base, hirsutulous. Ovary inserted laterally at the side of receptacle, villous. Style equalling filaments, pubescent throughout. Fruit oblong, 6-8 cm long, 3-4.5 cm broad, stipitate when young, becoming sessile by expansion of the stipe; epicarp covered with large conspicuous lenticels; mesocarp thick; endocarp thin, hard, fibrous, glabrous within.

## Life Form

Tree

## Substrate

Terrestrial

## DISTRIBUTION

Native, Not endemic to Brazil

## Phytogeographic Domains

Amazon Rainforest

## Vegetation Types

Terra Firme Forest

## Geographic Distribution

Confirmed occurrences

North (Acre, Amazonas, Pará)

Possible occurrences

North (Rondônia)

## HERBARIUM MATERIAL

Davidse, G., 18056, INPA, 131674, , ,  (INPA0131674), US,  (US01352668), NY,  (NY01254297), MG (MG095701), Pará

## REFERENCE

<http://www.ipni.org/urn:lsid:ipni.org:names:77156118-1>

Prance, G.T. & Sothers, C. A. (2003). Chrysobalanaceae 1, Chrysobalanus to Parinari. In: A. E. Orchard & A. J. G. Wilson (eds), Species Plantarum: Flora of the World 9. Australian Biological Resources Study, Canberra.

Sothers C.A., Prance G.T. & Chase, M.W. (2016). Towards a monophyletic *Licania*: a new generic classification of the polyphyletic Neotropical genus *Licania* (Chrysobalanaceae). *Kew Bull.* 71: 58.