

ENUMERATION OF MALAYAN EBENACEAE.  
(With brief descriptions of new and noteworthy species).

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On account of economic circumstances it will take a considerable time before my studies on the Malayan Ebenaceae can be printed in full. It is evident that the elaboration of such a complicated family as the Ebenaceae necessitated the removal of a large number of old specific names and a considerable addition of new ones. Therefore, to avoid further confusion in the nomenclature of the family, it is necessary to give at least a superficial survey, as soon as possible, of the results obtained. The following contribution serves to enumerate the number of species which, in my opinion, occur within both the Malay Archipelago and Peninsula.

While studying the Ebenaceae of the Malay region I became fully convinced that no valid grounds can be found for keeping the genus *Maba* separate from *Diospyros*. Hiern in his excellent monograph did not succeed in laying down hard and fast boundaries between the two genera on natural principles. But, when that work was published in 1873, much less material of intermediate and transition forms was known than at the present time. Therefore I decided to unite the genera *Diospyros* (sensu stricto) and *Maba* into one: *Diospyros* sensu latiore, the more so as it is impossible to indicate any practical advantage in the separation. In order not to lose sight of the old genus *Maba*, I thought it advisable to give it the rank of a subdivision together with three other subgenera, into which I now divide the enlarged genus *Diospyros* L., as far as the Malayan regions are concerned.

*Diospyros* DALECH ex LINN. (sensu latiore).  
(Conspectus subgenerum).

- A. Ovarium 3-6-loculare; loculis 1-2-ovulatis; ovulis in toto 6. Flores 3-meri, raro 4-5-meri. Calix aestivatione valvatus vel subvalvatus, interdum accrescens. Semina albumine aequabile vel ruminato.—Utriusque orbis reg. calid.  $\alpha$  subgen. *Maba* (J. R. et G. FORST.) BAKH.

- B. Ovarium 2-3-loculare; loculis 2-ovulatis; ovulis in toto 4-6. Flores 4-5-meri. Calicis lobi suborbiculares vel reniformes, aestivatione contorte imbricati, non vel vix accrescentes. Semina albumine ruminato.—Asia reg. calid.  $\beta$  subgen. **Hieriiodendron** BAKH.
- C. Ovarium 4-loculare; loculis 2-ovulatis; ovulis in toto 8. Flores 4-meri. Calicis lobi triangulares, aestivatione valvati. Semina albumine aequabile.—Australia.  $\gamma$  subgen. **Cargillia** (R.BR.) BAKH.
- D. Ovarium 4-5-, 8-10- vel 16-?20-loculare; loculis 1-ovulatis; ovulis in toto 4-5, 8-10 vel 16-?20. Flores 4-5-7-(?8-10)-meri. Calicis lobi valde variables vel rarius subnulli, aestivatione plerumque imbricati. Semina albumine aequabile vel ruminato.—Utriusque orbis reg. calid., Asia temp., America bor.  $\delta$  subgen. **Eu-Diospyros** (L.) BAKH.

$\alpha$  Subgen. **Maba** (J. R. et G. FORST.) BAKH.

1. **Diospyros carpinifolia** (RIDL.) BAKH., comb. nov.—*Maba sumatrana* MIQ.; *Maba carpinifolia* RIDL.
2. **D. confertiflora** (HIERN) BAKH., comb. nov.—*Maba confertiflora* HIERN.
3. **D. ellipticifolia** (STOKES) BAKH., comb. nov.—*Maba elliptica* J. R. et G. FORST.; *Ferreola ellipticifolia* STOKES.
4. **D. fasciculosa** F. V. MUELL.—*Maba fasciculosa* F. V. MUELL.
5. **D. ferrea** (WILLD.) BAKH., comb. nov.—*Maba buxifolia* (ROTTB.) A. L. JUSS.; *Ehretia ferrea* WILLD.
6. **D. hermaphroditica** (ZOLL.) BAKH., comb. nov.—*Maba hermaphroditica* ZOLL.
7. **D. Holttumii** BAKH., spec. nov. Plate XLVIII—Frutex; ramulis glabris. Folia tenuiter coriacea, ovato-oblonga, basi obtuse cuneata, apice obtuse acuminata, utrinque glabra; nervis lateralibus utrinsecus 7-10, utrinque prominulis, venis utrinque inconspicuis; petiolo semitereti, glabro, 0.5—1 cm longo. Flores dioici;—feminei solitarii, subsessiles; calice profunde 3-4-lobato, intus glabro, lobis ovato-oblongis, acute acuminatis,

striatis. Fructus depresso-globosus, nitidus, glaber, 1—2 cm diam.; seminibus 6-8, albumine aequabile; calice lobis coriaceis, apice reflexis, 0.75—1 cm longis, 0.5—0.75 cm latis.—Kedah (HOLTTUM 15122).

8. D. **Janowskyi** BAKH., spec. nov.—*Maba Janowskyi* BAKH., msc.—Frutex. Folia lanceolata vel ob lanceolata, dense verruculosa et pellucido-punctata, 7.5—17.5 cm longa, 2.5—5.5 cm lata, apice breviter subcaudato-obtuse acuminata; petiolo tereti, 0.15—0.3 cm longo. Cymae gracile pedunculatae, subpaniculatae, 3-5-florae. Flores masculi staminibus 9-12; feminei staminodiis 0; ovario pubescente, 6-loculare, loculis uniovulatis. Fructus oblongo-ellipsoideus vel subfusiformis, distincte verruculosus, pubescens vel maturitate glabrescens, 3—4.5 cm longus; seminibus albumine aequabile; calice 3-lobo, intus glabro, 0.35—0.5 cm diam.; lobis late ovatis obtusis.—Nova Guinea (JANOWSKY 109).
9. D. **malayana** BAKH., nom. nov.—*Maba punctata* (KORTH.) HIERN.
10. D. **rostrata** (MERR.) BAKH., comb. nov.—*Maba rostrata* MERR.
11. D. **tahanensis** BAKH., spec. nov.—*Maba tahanensis* BAKH., msc.—Arbor mediocris. Folia elliptico-oblonga vel lanceolata, basi obtusa vel rotundata, apice obtuse acuminata, verruculosa et dense pellucido-punctata, utrinque glaberrima, 10—22 cm longa, 2.5—6.5 cm lata; petiolo semitereti, 0.7—1 cm longo. Cymae subsessiles, multibracteatae. Fructus ovoideo-oblongus vel subellipsoideus, utrinque rotundatus, breviter apiculatus, verruculosus, primo tomentosus, maturitate glabrescens, 2—3 cm longus, 1.5—2 cm diam., 6-locularis, loculis monospermis; seminibus albumine aequabile; calice profunde 3-lobo, intus glabro, 0.5—1 cm diametro.—Pahang, Tahan River (RIDLEY—VIII. 1891).

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$\beta$  Subgen. **Hierniodendron** BAKH.

12. D. **evena** BAKH., spec. nov.—Arbor mediocris. Folia firmiter coriacea, elliptica vel oblanceolata, basi

angustata, obtusa, apice rotundata, emarginata, adulta utrinque glabra, 2—9 cm longa, 1—3 cm lata, venis inconspicuis; petiolo semitereti. Flores feminei solitarii, breviter pedunculati; pedunculo tomentoso, 0.15—0.2 cm longo; calice intus glabro. Fructus ellipsoideus, primo pubescens, denique glabratus, 2—3 cm longus.—Borneo (HAVILAND and HOSE 3348; Boschpr. bb. 7264, 7789, 12643).

13. D. *Maingayi* (HIERN) BAKH., comb. nov.—*Maba Maingayi* HIERN.
14. D. *puncticulosa* BAKH., nom. nov.—*Maba Beccari* HIERN.

γ Subgen. *Cargillia* (R.BR.) BAKH.

Only known from Australia.

δ Subgen. *Eu-Diospyros* (L.) BAKH.

15. D. *adenophora* BAKH., spec. nov.—Arbor parva; ramulis glabris. Folia coriacea, elliptico-oblonga, basi obtusa vel rotundata, apice breviter acute acuminata, utrinque levia, glaberrima, 15—25 cm longa, 5—7 cm lata, nervis venisque densis, utrinque inconspicuis, tenuiter prominulis; petiolo semitereti. Cymae femineae sessiles, 2-5-florae. Fructus mediocris, ovoideus, dense tuberculatus, primo tomentosus, denique glabratus, 8-10-loclaris; seminibus albumine aequabile; calice profunde 4-5-lobato, utrinque velutino; lobis ovatis acutis, medio incrassatis, marginibus dilatatis, inter lobos saccatim confluentibus, 0.5—0.7 cm longis, 1 cm latis.—Peninsula malayana (RIDLEY 13051; HENDERSON 22468).
16. D. *amboinensis* BAKH., spec. nov.—Arbor. Folia coriacea, oblongo-ovata, 20—35 cm longa, 5—12.5 cm lata, basi rotundata vel subcordata, apice breviter acute acuminata, subtus sericea, denique glabrescentia; petiolo brevi, semitereti. Fructus magnus, depresso-globosus, maturitate glabratus; seminibus albumine aequabile; calice 5-fido, intus glabro.—Ambo (TEYSMANN HB. 1917).
17. D. *apiculata* HIERN.
18. D. *areolata* KING et GAMBLE.
19. D. *argentea* GRIFF.

20. *D. aurea* TEYSM. et BINNEND.
21. *D. Baloen-idjoek* BAKH., spec. nov.—Arbor mediocris. Folia elliptico-oblonga, 2—10 cm longa, 1—3.5 cm lata, basi obtusa vel rotundata, apice obtuse acuminata, subtus primo appresse pilosa, denique costa excepta glabra, penninervia, costa utrinque prominula, nervis utrinsecus 5-7, basalibus ceteris longioribus, venis utrinque inconspicuis; petiolo tereti, tomentoso, 0.3—1 cm longo. Flores dioici, 4-meri;—masculi breviter cymosi, terni; cymis bibracteatis; calice profunde partito, extus tomentoso, intus glabro; tubo subnullo; lobis imbricatis, suborbicularibus, ciliatis, 0.15—0.2 cm longis, 0.1—0.15 cm latis; corolla hypocrateriforme, extus sericea, intus glabra, 1—1.5 cm longa; staminibus 8-16, pubescentibus.—Sunatra (Boschpr. bb. 9147, nom. vulg.: Baloen idjoek, Mal.).
22. *D. bangkana* BAKH., spec. nov.—Frutex; ramulis virgatis, juniores rufo-hirtis. Folia ovato-oblonga vel oblanceolata, 2.5—12 cm longa, 1.5—5 cm lata, basi cuneata vel obtusa, apice abrupte breviter acuminata, costa excepta utrinque glabra; petiolo subtereti, rufo-hirto, 0.3—0.7 cm longo. Aff. *D. malaccensis* BAKH.—Ins. Bangka (TEYSMANN 3404 HB.).
23. *D. bantamensis* KDS. et VAL., msc.—Arbor mediocris. Folia firmiter coriacea, ovato-oblonga vel oblongo-elliptica, 4—12 cm longa, 1.5—4 cm lata, basi obtusa vel rotundata, apice acuminata, nervis utrinsecus 5—10, cum venis tenuibus utrinque prominulis; petiolo semitereti, 0.5—1 cm longo. Fructus solitarius, brevissime pedunculatus, depresso-globosus, maturitate glabrescens, 4—6 cm diam.; seminibus 4-8, albumine ruminato; calice 4-lobato, utrinque tomentoso; lobis late ovatis reflexis, 0.7—1 cm longis, 1—2 cm latis.—Java, Bantam (KOORDERS 1718 $\beta$ .).
24. *D. Beccarii* HIERN.
25. *D. bibracteata* BAKH., spec. nov.—Arbor mediocris; ramulis verruculoso-lenticellatis. Folia chartacea, ovato-oblonga vel obverse oblonga, 17.5—35 cm longa, 7—11 cm lata, basi obtuse cuneata, apice breviter obtuse acuminata, glabrescentia, nervis utrinsecus 10-12, venis laxis obscuris, utrinque prominulis; petiolo semitereti. Flores feminei

solitarii vel terni, pedunculati; pedunculo bibracteato; calice coriaceo, utrinque pubescente, medio 4-lobato; lobis late ovatis, obtusis vel rotundatis, marginibus reflexis; ovario globoso, sericeo, 8-loculare; loculis uniovulatis. Aff. *D. perfidae* BAKH.—Pahang (HENDERSON 24512).

26. *D. borneensis* HIERN.
27. *D. brevicalyx* BOERL. et KDS. ex KDS., in KDS.—SCHUM., Syst. Verzeich., II, Sumatra (1911) 50.
28. *D. buxifolia* (BL.) HIERN.
29. *D. campanulata* BAKH., spec. nov.—Folia chartacea, oblongo-elliptica vel lanceolato-oblonga, 9—20 cm longa, 3.5—8 cm lata, basi obtusa, apice subcaudato-obtusiuscule acuminata, costa excepta utrinque glabra, nervis utrinsecus 10-15, venis laxis, utrinque prominulis; petiolo semitereti, 1—1.25 cm longo. Fructus solitarius, pedunculatus, globosus, nitidus, glaber; calice valde accrescente, quadrangulare campanulato, utrinque glaberrimo, 2—3 cm longo, 3.5—5 cm diam., tubo cruciato, crasso; lobis marginibus dilatatis, coriaceis, nervosis, confluentibus, inter lobos saccatis.—Borneo (TEYSMANN 7962 HB.).
30. *D. cauliflora* BL.
31. *D. celebica* BAKH., spec. nov.—Arbor mediocris; ramulis sericeis. Folia coriacea, linearis elliptica, 12—35 cm longa, 2.5—7 cm lata, basi angustata, apice acuminata, supra nitida, glabra, subtus glauca, sericea, nervis densis, venis tenuibus, utrinque prominulis; petiolo semitereti, sericeo, 0.3—1 cm longo. Flores 4-meri;—feminei solitarii;—masculi cymosi; calice utrinque sericeo vel intus glabrescente, lobis ovato-oblongis, basi unilateraliter cordatis, obtusis vel rotundatis, 0.5—0.7 cm longis, 0.3—0.5 cm latis; corolla hypocrateriforme; staminibus 16, sessilibus. Fructus subsessilibus, ovoideus, primo sericeus, denique glabratus; seminibus 4-8, albumine aequabile; calice intus glabrescente, 2 cm diametro.—Celebes (HEYNE 2564 et 2878).
32. *D. clavipes* BAKH., spec. nov.—Folia chartacea, oblongo-elliptica, 9—15 cm longa, 4—6 cm lata, basi cuneata, apice breviter acuminata, subtus glabrescentia, basi glandulis 2-4, nervis utrinsecus 6-10; petiolo semitereti, 0.5—1 cm longo. Fructus

pedunculatus, depresso-globosus, tomentosus, 3—3.5 cm diam.; seminibus albumine aequabile; calice campanulato, utrinque pubescente, leviter 4-lobato; lobis late ovatis, 0.5—0.7 cm longis, 1.5—2 cm latis.—Borneo (TEYSMANN 11397 HB.).

33. **D. Clementium** BAKH., spec. nov.—Frutex; ramulis virgatis, piloso-hispidis, glabrescentibus. Folia brevissime petiolata, membranacea, linearis-oblonga, 1.5—4 cm longa, 0.5—1 cm lata; basi rotundata vel leviter cordata, apice angustata, obtusa, margine ciliata, dense pellucido-punctata, subtus sparse pilosa, penninervia, nervis subdensis, subinconspicuis; petiolo tereti, rufo-hispido, 0.1 cm longo. Aff. *D. subrhomboideae* K. et G.—Borneo, Sarawak (J. et M.S. CLEMENS 20098).
34. **D. conformis** BAKH., spec. nov.—Arbor mediocris. Folia coriacea, elliptico-oblonga, basi late cuneata, apice subabrupte acuminata, utrinque rugosa, glabra, nervis cum venis utrinque prominulis; petiolo semi-tereti, glabro, 1—1.5 cm longo. Flores feminine solitarii, longiter pedunculati; calice campanulato, 4-5-lobato, intus pubescente. Fructus pedunculatus, submagnus, ovoideo-globosus, glaber, 8-locularis; loculis monospermis; seminibus albumine ruminata; calice applanato, subquadro, statu sicco sublignoso, intus tomentoso, 3—4 cm diam.—Perak (HAMID 10384).
35. **D. confusa** BAKH., spec. nov.—Folia chartacea, oblonga vel lanceolato-oblonga, 5.5—8.5 cm longa, 1.5—3 cm lata, basi obtuse cuneata, apice acuminata, subtus appresse pubescentia, pellucido-punctata, nervis venisque tenuibus, utrinque leviter prominulis; petiolo tereti, tomentoso, 0.2—0.5 cm longo. Flores dioici;—masculi subsessiles, cymosi; calice 4-fido, extus pubescente, intus glabro, lobis ovatis, obtusis vel rotundatis, 0.3—0.35 cm longis, 0.2—0.25 cm latis; corolla hypocrateriforme, extus sericea, intus glabra; staminibus—12, glabris.—Hort. Bot. Singapore (C. A. BAKER).
36. **D. cordata** (HIERN) BAKH., comb. nov.—*Maba cordata* HIERN.
37. **D. coriacea** HIERN.
38. **D. crassipes** BAKH., spec. nov.—Folia chartacea, lanceolato-oblonga, 7—15 cm longa, 2.5—6 cm

*lata*, basi *cuneata*, apice *breviter subcaudato-acuminata*, utrinque *glabra*, dense *pellucido-punctata*, basi *glandulis* 2-4, *nervis utrinsecus* 4-7; petiolo *semitereti*, *glabro*, 0.5—1 cm longo. *Fructus breviter pedunculatus*, *rufo-hispidus*, *glabrescens*; *calice late campanulato*, *medio 4-lobato*, *intus pubescente*, *lobis deltoideis*, *erectis*; *pedunculo tumido*. Aff. *D. clavipedis* BAKH.—Borneo, Sarawak (BECCARI 2041).

39. *D. cubica* BAKH., spec. nov.—Arbor; ramulis *glabris*. *Folia coriacea*, *elliptico-oblonga*, 15—20 cm longa, 7—9 cm lata, basi *obtusa*, apice *breviter acuminata*, utrinque *glabra*, *nervis utrinsecus* 10—15, supra cum *venis inconspicuis*, *impressis*; petiolo *semitereti*, *glabro* ± 1 cm longo. *Fructus solitarius*, *subsessilis*, *statu sicco subcubicus*, basi *apiceque truncatus*, *verrucosus*, *glaber*; *seminibus* 8-10; *calice reflexo*, *profunde 5-lobo*, *intus basi excepta glabro*, *lobis ovatis*. Aff. *D. oblongae* WALL. ex G. DON.—Borneo, Sarawak (BECCARI 830).
40. *D. Curranii* MERR.
41. *D. curraniopsis* BAKH., spec. nov.—Arbor parva. *Folia membranacea*, *oblonga vel lanceolata*, 5—20 cm longa, 1.5—7 cm lata, basi *cuneata*, apice *acuminata*, utrinque mox *glabra*, *penninervia*, *nervis lateralibus laxis*, *tenuibus*, *venis inconspicuis*; petiolo *semitereti*, *glabro*, 0.5—1.5 cm longo. *Flores dioici*, 4-5-meri; *calice utrinque tomentoso*; —masculi *cymosi*; *staminibus* 12-24, *glabris*; —feminei *ovario sericeo* 4-5-loculare; *loculis uniovulatis*. *Fructus breviter pedunculatus*, *globosus*, *glabrescens*, 1.5—2 cm diametro; *seminibus albumine aequabile*; *calice* 1.25—1.75 cm diam., *lobis late ovatis*, *marginibus reflexis*. Aff. *D. Curranii* MERR.—Borneo (ENDERT 4883; ELMER 21464; Boschpr. bb. 13037).
42. *D. dajakensis* BAKH., spec. nov.—Arbor *mediocris*. *Folia coriacea*, *oblongo-lanceolata*, 12—25 cm longa, 3.5—8.5 cm lata, basi *obtusa vel rotundata*, apice *breviter acuminata*, *subtus primo pubescentia*, denique *glabrescentia*; *nervis lateralibus* 6-8, *tenuibus*, *laxis*, *venis obscuris*, *prominulis*; petiolo *semitereti*, 1—1.5 cm longo. *Fructus solitarius*, *breviter pedunculatus*. Aff. *D. tristis* K. et G.—Borneo (Boschpr. bb. 10490).

43. **D. demona** BAKH., spec. nov.—Arbor mediocris; innovationibus basi bracteis pluribus imbricatis. Folia coriacea, oblonga, basi rotundata, apice obtusa, subtus subvelutina, nervis lateralibus utrinsecus 10-15, cum venis supra impressis; petiolo subtereti, rufo-hirto, 0.5—0.75 cm longo. Flores dioici; feminei solitarii, subsessiles, bracteis imbricatis 4-6 suffulti. Fructus subglobosus, 6—8 cm diametro; seminibus 8, albumine aequabile; calice parvo, 4-lobato, extus sericeo, intus glabro, 1.2—1.5 cm diametro; lobis late ovatis vel subreniformibus.—Pahang (HENDERSON 25030).
44. **D. densa** BAKH., spec. nov.—Arbor parva; ramulis subdensis. Folia densa, chartacea, oblonga, 2.5—7.5 cm longa, 1—2.5 cm lata, basi obtuse cuneata, apice breviter anguste acuminata, costa excepta utrinque glabra, nervis lateralibus utrinsecus 6-9, supra inconspicuis; petiolo semitereti, setoso, 0.3—0.5 cm longo. Aff. *D. poiensis* BAKH., *D. setosae* BAKH. et *D. singaporense* BAKH.—Borneo (Boschpr. bb. 11018).
45. **D. dictyoneura** HIERN.
46. **D. Diepenhorstii** MIQ.
47. **D. discocalyx** MERR.
48. **D. discolor** WILLD.
49. **D. durionoides** BAKH., spec. nov.—Arbor alta; ramulis primo sericeis, denique glabrescentibus. Folia chartacea, elliptico-oblonga, 7—20 cm longa, 2.5—7 cm lata, basi obtusa, apice breviter acuminata, supra costa excepta glabra, subtus primo sericea, denique glabrescentia, nervis lateralibus densis, cum venis utrinque prominulis; petiolo semitereti, sericeo, 0.5—1.25 cm longo. Aff. *D. Poncei* MERR.—Borneo (Boschpr. bb. 7978, 10050 et 12456).
50. **D. Ebenum** KOEN.
51. **D. elegantissima** BAKH., nom. nov.—*Maba elegans* RIDL.—Plate XLIX.
52. **D. ellipsoidea** KING et GAMBLE.
53. **D. elliptifolia** MERR.
54. **D. Elmeri** MERR.
55. **D. Enderti** BAKH., spec. nov.—Folia tenuiter coriacea, elliptico-oblonga, 20—45 cm longa, 6—13 cm lata,

basi obtusa vel subcordata, apice obtusiuscule acuminata, subtus sparse pubescentia, glabrescentia, nervis utrinsecus 15-30, supra tenuiter conspicuis, venis reticulatis densis, utrinque prominulis; petiolo semitereti, tomentello, 1—2.5 cm longo. Fructus solitarius, pedunculatus, ovoideo-globosus, glaber, 5—6 cm diam.; seminibus 8-10, albumine valde ruminato; calice utrinque tomentello, 3—4 cm diam., tubo crasso, lobis late ovatis, marginibus coriaceis, inter lobos saccatim confluentibus, 1—1.5 cm longis.—Borneo (ENDERT 4017).

56. *D. eriantha* CHAMP. ex BENTH.
57. *D. eucalyptifolia* BAKH., spec. nov.—Arbuscula; ramulis glabris. Folia tenuiter coriacea, lanceolata, 9—25 cm longa, 1.5—4.5 cm lata, utrinque angustata, apice subcaudato-acuminata, utrinque glabra, nervis lateralibus utrinsecus 7-10, venis laxis, subinconspicuis; petiolo semitereti, glabro, 0.2—0.5 cm longo. Fructus solitarius, breviter pedunculatus, ovoides, apiculatus, nitidus, glaber, 8-locularis, loculis monospermis; calice profunde 4-lobato, tubo cruciatim incrassato, lobis ovatis, acutis, coriaceis, nervosis. Aff. *D. truncatae* ZOLL. et MOR.—Borneo (AMDJAH 255).
58. *D. euphlebia* MERR.
59. *D. Everettii* MERR.
60. *D. ferox* BAKH., spec. nov.—Ramuli juniores ferrugineo-pilos. Folia chartacea, elliptico-oblonga vel oblanceolata, 5—11 cm longa, 2—3.5 cm lata, basi subrotundata, apice acuminata vel acuta, subtus sparse pilosa, nervis lateralibus utrinsecus 15-20, supra inconspicuis, venis densis; petiolo tereti, rufo-piloso, 0.15—0.3 cm longo. Fructus solitarius, gracile pedunculatus, ovoideo-conicus, stylo rudimento apiculatus, rufo-setulosus, 4-locularis, 1.5—2 cm longus, 1—1.5 cm diam.; seminibus 4; calice 4-5-fido, extus rufo-setuloso, intus subglabro, lobis linearibus, 1.5—2 cm longis, ± 0.1 cm latis.—Borneo (Native Coll. 137).
61. *D. Forbesii* BAKH., spec. nov.—Arbuscula; ramulis verticillatis, rufo-puberulis. Folia chartacea, elliptico-oblonga, 4—12 cm longa, 2—4.5 cm lata, basi obtusa, apice breviter acuminata, subtus appresse

pubescentia, dense pellucido-punctata, nervis lateralis utrinsecus 6-10, supra impressis, venis inconspicuis; petiolo tereti, rufo-puberulo, 0.2—0.35 cm longo. Flores dioici; feminei solitarii, subsessiles, 4-5-meri; calice profunde lobato, extus pubescente, intus glabro, lobis linearis-oblongis; ovario ovoides, piloso, 4 loculare, loculis uniovulatis. Fructus ellipsoideus, sparse setulosus; seminibus albumine aequabile; calicis lobis 0.2—0.25 cm longis, 0.07—0.1 cm latis.—Borneo (Boschpr. bb. 12587; FORBES 3126).

62. **D. Foxworthyi** BAKH., spec. nov.—Arbor mediocris. Folia coriacea, lanceolato-oblonga, 7—25 cm longa, 2—8 cm lata, basi obtusa, apice acuminata, costa excepta utrinque glabra, nervis lateralibus utrinsecus 7-12, supra obscuris, impressis, venis inconspicuis; petiolo semitereti, glabrato, 1—1.5 cm longo. Flores dioici; masculi cymosi; calice profunde 4-lobato, intus pubescente, lobis anguste oblongis, acutis; corolla hypocrateiforme, lobis suborbicularibus, utrinque tomentellis. Fructus solitarius, breviter pedunculatus, globosus, maturitate glabratus, 3.5—4.5 cm diam., 8-locularis, loculis monospermis; seminibus albumine aequabile; calice crasso, intus tomentoso, ± 2 cm diam.—Perak (FOXWORTHY 10447; DEMALI 1220).
63. **D. frutescens** BL.
64. **D. Gambleana** BAKH., spec. nov.—Ramuli glabri. Folia coriacea, lanceolato-oblonga, 20—26 cm longa, 5—7.5 cm lata, basi cuneata, apice breviter obtuse acuminata, utrinque glabra, nervis lateralibus utrinsecus 10-15, supra leviter impressis, venis inconspicuis; petiolo subtereti, glabro, 1—1.25 cm longo. Fructus ovoides, apiculatus, glaber, 2—3 cm longus, 1.5—2.5 cm diam.; seminibus 4, albumine aequabile; calice profunde 4-fido, utrinque glabro, 0.5—0.7 cm diametro, lobis suborbicularibus, ciliatis, imbricatis, 0.3—0.35 cm diametro, Aff. *D. Kingii* BAKH. et *D. Hierniana* (K. et G.) BAKH.—Perak (Gunong Keledang—RIDLEY—X, 1898).
65. **D. glaucophylla** BAKH., spec. nov.—Arbor mediocris. Folia chartacea, oblonga vel oblanceolata, 5—15 cm longa, 2—6 cm lata, basi cuneata, apice breviter acuminata, subtus glauco-pruinosa; nervis lateralibus utrinsecus 7-12, supra inconspicuis,

prominulis; petiolo semitereti, glabrescente, 0.5—0.75 cm longo. Aff. *D. Havilandi* BAKH.—Sumatra (Boschpr. bb. 13016).

66. ***D. graciliflora* HIERN.**
67. ***D. Greshoffiana* KDS., msc.**—Arbor mediocris; ramulis glabrescentibus, in sicco griseis. Folia tenuiter coriacea, oblongo-elliptica, 7-17 cm longa, 3.5—5.5 cm lata, basi obtuse cuneata, apice obtusa, subtus appresse pubescentia, denique glabrescentia, basi glandulis orbicularibus, nervis lateralibus utrinsecus 7-10, tenuibus, venis inconspicuis; petiolo semitereti, glabrescente, 1—1.5 cm longo. Flores dioici, 4-5-meri. Fructus breviter pedunculatus vel subsessilis, depresso-globosus, cinereo-sericeus, 1.5—2.5 cm diametro; seminibus 8-10, albumine aequabile; calice patelliforme, leviter 4-5-lobato, intus sericeo, 1.5—2.5 cm diam.; tubo incrassato, 4-5-angulato, lobis late ovatis, marginibus anguste dilatatis.—Celebes (KOORDERS 16746 $\beta$ , 16750 $\beta$ , 16764 $\beta$  et 16767 $\beta$ ).
68. ***D. Hackenbergii* DIELS.**
69. ***D. Hallierii* BAKH., spec. nov.**—Arbor mediocris; ramulis crassis, mox glabris. Folia coriacea, obverse oblonga, 20—40 cm longa, 5—13 cm lata, basi obtusa, apice acuminata, subtus mox glabra, nervis lateralibus utrinsecus 12-25, supra sub-inconspicuis, leviter impressis; venis reticulatis densis, utrinque obscure prominulis; petiolo crasso, semitereti, 1—1.5 cm longo. Flores dioici, 4-5-meri, subcorymbosi; calice intus glabro; corolla urceolato-oblonga, extus pubescente;—masculi staminibus 16-20, inaequalibus, antheris dorso pubescentibus;—feminei ovario ovoideo, rufo-tomentoso, 8-10-loculare, loculis uniovulatis. Fructus depresso-globosus, maturitate glabrescens, 5—7 cm diam.; seminibus albumine ruminato; calice crasso, plano, 4-6-lobato, 3.5—5 cm diam.—Borneo (HALLIER fil. 2854).
70. ***D. Hasseltii* ZOLL.**
71. ***D. Havilandi* BAKH., spec. nov.**—Folia coriacea, oblongo-elliptica vel oblanceolata, 3—8 cm longa, 1.5—4 cm lata, basi cuneata, apice subobtusa, utrinque glaberrima, subtus in sicco glauca, nervis venisque utrinque inconspicuis; petiolo semitereti, subglabro, 0.5—0.7 cm longo. Flores dioici, pendunculati, 4-meri;—masculi subracemosi, nutantes,

$\pm 1.5$  cm longi; calice 4-fido, intus glabro, lobis suborbicularibus, contortis, ciliatis, 0.25—0.3 cm diam.; corolla hypocrateriforme, extus sericea, intus glabra; staminibus 12, inaequalibus, glabris; antheris lanceolatis.—Borneo, Sarawak (HAVILAND 2315).

72. *D. hebecarpa* CUNN. ex BENTH.
73. *D. Helferi* CLARKE.
74. *D. Hendersoni* RIDL.
75. *D. Hierniana* (KING et GAMBLE) BAKH., comb. nov.—  
*Maba Hierniana* KING et GAMBLE.
76. *D. insidiosa* BAKH., spec. nov. Plate L.—Arbor medio-cris. Folia chartacea, ovato-oblonga, 5—17 cm longa, 2—7 cm lata, basi cuneata vel obtusa, apice breviter obtuse acuminata, costa excepta utrinque glabra, dense pellucido-punctata, nervis lateralibus utrinsecus 5-7, cum venis inconspicuis utrinque prominulis; petiolo subtereti, glabrescente, 0.5—0.7 cm longo. Fructus brevissime pedunculatus, subglobosus, basi contractus, apice rotundatus, laevis, glaber, 6—7 cm diam.; seminibus 8, albamine aequabile; calice parvo, inconspicuo, 0.3—0.5 cm diametro, lobis late triangularibus obtusis, extus pubescentibus, intus glabris.—Pahang (HENDERSON 21730).
77. *D. insularis* BAKH., spec. nov.—Folia tenuiter coriacea, oblonga-elliptica, 20—25 cm longa,  $\pm$  10 cm lata, basi cordata, subobliqua, apice angustata, in exemplum praemorsa, utrinque glabra; nervis lateralibus utrinsecus 10-12, utrinque prominentibus, venis laxis utrinque prominulis, basi glandulosa orbicularibus; petiolo crassiusculo, tereti, glabro, 0.5—0.7 cm longo. Flores dioici; masculi dense fasciculati, subsessiles, 1.25—1.5 cm longi; calice cupuliforme, undulato 4-dentato vel subtruncato, intus pubescente, 0.4—0.5 cm diam.; corolla tubulosa, medio 4-lobata, extus pubescente, intus glabra; lobis late ovatis, contortis; staminibus numerosis, inaequalibus; antheris linearibus, dorso pubescentibus. Aff. *D. novoguineensis* BAKH.—Nova Guinea, New Ireland (G. PEEKEL 4A—VI. 1921).
78. *D. Jaherii* BAKH., spec. nov.—Ramuli tomentosi. Folia membranacea, ovato-oblonga, 4—12.5 cm

longa, 2—5.5 cm lata, basi obtuse cuneata, apice breviter obtuse acuminata, utrinque costa excepta glabra, dense pellucido-punctata; nervis lateralibus 4-7, supra tenuibus impressis, venis inconspicuis; petiolo subtereti, tomentoso, 0.2—0.5 cm longo. Flores dioici 4-5-meri; masculi cymosi, subsessiles; calice profunde lobato, extus puberulo, intus glabro, lobis ovoideis, contortis, ciliatis, 0.3—0.35 cm longis, 0.2—0.25 cm latis; corolla hypocrateriforme, extus sericea, intus glabra, medio lobata; staminibus 16, inaequalibus; antheris oblongis, dorso pubescentibus.—Borneo (JAHERI 128).

79. *D. javanica* BAKH., spec. nov.—Arbor; ramulis mox glabris. Folia tenuiter coriacea, lanceolato-oblonga, 10—30 cm longa, 3—10 cm lata, basi obtusa vel rotundata, apice obtusa, utrinque mox glabra, basi glandulis 2 orbicularibus conspicuis; nervis lateralibus utrinsecus 7-10, cum venis tenuibus; petiolo semitereti, glabro, 0.5—1.5 cm longo. Flores dioici, subsessiles, 4-5-meri; calice intus sericeo; corolla ovoido-oblonga, extus pilis reversis sericea, intus glabra;—masculi cymosi; staminibus 18, filamentis brevissimis, hispidis, antheris linearibus, apiculatis, glabris;—feminei solitarii; calice campanulato, profunde lobato, tubo subquadrato, lobis late ovatis, marginibus dilatatis, coriaceis, subuplicatis; staminibus 8; ovario 8-10-loculare, loculis uniovulatis. Fructus depresso-globosus, primo sericeus, maturitate glabrescens, 2—2.5 cm diam.; seminibus albumine aequabile; calice subpatelliforme, 1.5—2 cm diam.—Java (BACKER 11807; KOORDERS 20026 $\beta$ , 22007 $\beta$ , 26878 $\beta$  et 39997 $\beta$ ).
80. *D. Kaki* LINN. fil.
81. *D. Kingii* BAKH., spec. nov.—Arbuscula; ramulis glaberrimis. Folia tenuiter coriacea, oblonga, 9—13 cm longa, 3—5 cm lata, basi cuneata, apice obtusiuscula acuminata, utrinque glabra; nervis lateralibus utrinsecus 7-10, supra obscure prominulis, venis inconspicuis; petiolo semitereti, glabro, 0.5—1 cm longo. Fructus solitarius, subsessilis, ovoides, apiculatus, glaberrimus, ± 1.5 cm diametro; calice profunde 4-fido, utrinque glabro, 0.5 cm diam.: lobis orbicularibus, imbricatis, ciliatis. Aff. *D. brevicalycis* BOERL. et KDS. ex KDS. et *D. Gambleanae* BAKH.—Perak (KING'S Coll. 3072).

82. *D. koeboeënsis* BAKH., spec. nov.—Arbor mediocris; ramulis glabrescentibus. Folia tenuiter coriacea, elliptica-oblonga, 7—20 cm longa, 2.5—6 cm lata, basi obtuso-cuneata, apice breviter obtuse acuminate, utrinque mox glabra; nervis lateralibus utrinsecus 5-9, cum venis reticulatis utrinque prominulis distinctis; petiolo semitereti, glabrescente, 1—1.75 cm longo. Flores dioici; masculi cymosi, pedunculati, terni; calice urceolato, leviter 4-dentato, utrinque pubescente, 0.4—0.5 cm longo; corolla carnosa, extus sericea, intus glabra; staminibus 12-16, filamentis cum antheris dorso pubescentibus. Aff. *D. malabaricae* (DESR.) KOSTEL.—Sumatra, Banjoeasin en Koeboestreken (Boschpr. T. 741).
83. *D. Korthalsiana* HIERN.
84. *D. Kurzii* HIERN.
85. *D. lanceifolia* ROXB.
86. *D. lateralis* HIERN.
87. *D. latisepala* RIDL.
88. *D. levigata* BAKH., spec. nov.—Arbor mediocris; ramulis rufo-tomentellis. Folia coriacea, elliptico-oblonga, 8—30 cm longa, 3—12 cm lata, basi obtuse cuneata vel subrotundata, apice obtuse acuminata, costa venisque excepta utrinque glabra; nervis lateralibus utrinsecus 10-15, supra obscuris, subimpressis, secus marginem curvatis, anastomosantibus, venis reticulatis laxis, supra inconspicuis; petiolo semitereti, rufo-tomentello, 1—2 cm longo. Aff. *D. rufae* K. et G. et *D. Foxworthyi* BAKH.—Borneo (Boschpr. bb. 8053, 11089, 11255).
89. *D. Lolin* BAKH., spec. nov.—Arbor mediocris; ramulis sericeis, denique glabrescentibus. Folia coriacea, oblongo-elliptica, 10—25 cm longa, 6—10 cm lata, basi subrotundata, apice obtusa, breviter apiculata, supra nitida, glabra, subtus primo strigosa, glabrescentia; nervis lateralibus subdensis, supra inconspicuis, cum venis utrinque prominulis; petiolo semitereti, glabrescente, 0.7—2 cm longo. Flores dioici; calice 4-5-fido, extus sericeo, intus glabro; lobis suborbicularibus, imbricatis, 0.3—0.5 cm diam.; corolla tubulosa, extus sericea, intus glabra;—masculi breviter cymosi, 3-5-ni, cernui; staminibus 16-24, per paria vel pluria fasciculatis,

glabris;—feminei ovario pubescente, 8-10-loculare, loculis uniovulatis. Fructus subsessilis, depresso-globosus, apice umbilicatus, maturitate glaber, 3.5—4 cm vel ultra diam.; seminibus albumine aequabile; calice non vix accrescente, 1—1.5 cm diam.—Moluccae (ATASRIP 46; BEGUIN).

90. *D. macrophylla* BL.
91. *D. malabarica* (DESR.) KOSTEL.
92. *D. malaccensis* BAKH., spec. nov.—Arbor mediocris; ramulis glabris. Folia tenuiter coriacea, oblonga vel oblanceolata, 3.5—13.5 cm longa, 2.5—6.5 cm lata; basi cuneata, apice abrupte breviter obtuse acuminata, costa excepta utrinque glabra; nervis lateralibus utrinsecus 5-7, supra cum venis inconspicuis, leviter prominulis; petiolo semitereti, glabrescente, 0.7—1.2 cm longo. Fructus breviter pedunculatus, globosus, styli rudimento apiculatus, maturitate glabrescens, 4-locularis, 4-spermus, 1—1.5 cm diam.; seminibus albumine aequabile; calice profunde 4-fido, utrinque glabro; lobis late ovatis vel suborbicularibus, ciliatis, patentibus, 0.2—0.3 cm diametro. Aff. *D. Hiernianae* (K. et G.) BAKH.—Malacca (RIDLEY 657); Dindings (HAMID C. F. 2322).
93. *D. Malam* BAKH., spec. nov.—Arbor mediocris; ramulis tomentosis, glabrescentibus. Folia coriacea, oblongo-elliptica, 5—17.5 cm longa, 3—7.5 cm lata, basi obtusa, apice obtuse acuminata, utrinque mox glabra; nervis lateralibus utrinsecus 7-15, supra cum venis obscuris, leviter prominulis; petiolo semitereti, tomentoso, glabrescente, 0.7—1.5 cm longo. Flores dioici, pedicellati; calice campanulato, profunde 4-lobato, basi angustato, utrinque tomentoso-subvelutino; corolla ovoidea, 4-lobata, extus tomentosa, intus glabra;—masculi staminibus 20, subsessilibus, antheris oblongis apiculatis, glabris;—feminei staminodiis + 8, glabris; ovario ovoides, rufo-velutino, 8-loculare, loculis uniovulatis.—Borneo (Boschpr. bb. 6335, 8037—nom. vulg.: Malam, Kajoe malam).
94. *D. maritima* BL.
95. *D. micromera* BAKH., spec. nov.—Ramuli nigrotomentosi. Folia coriacea, brevissime petiolata, lanceolato-oblonga, 3—6 cm longa, 0.7—1.7 cm lata, basi leviter cordata, apice acuminata, costa

excepta utrinque glabra, supra nitida; nervis lateralibus utrinsecus 6-9, cum venis obscuris utrinque prominulis; petiolo tereti, tomentoso, 0.15—0.3 cm longo. Flores 5-7-ni, in racemis dispositi. Aff. *D. apiculatae* HIERN.—Perak (CURTIS 3463).

96. ***D. Minahasae*** BAKH., spec. nov.—Arbor; ramulis primo tomentosis, denique glabratris. Folia tenuiter coriacea, oblonga, 5—25 cm longa, 2.5—10 cm lata, basi cuneata vel obtusa, apice breviter obtuse acuminata, subtus primo tomentosa, denique glabrescentia, dense pellucido-punctata; nervis lateralibus utrinsecus 7-12, statu sicco supra tenuibus, impressis, venis obscuris, utrinque prominulis; petiolo subtereti, tomentoso, 0.4—1.5 cm longo. Flores cymosi, dioici vel polygami, 4-meri; calice lobato, extus pubescente, intus glabro; corolla hypocrateriforme, extus pubescente, intus glabra;—masculi staminibus 16, inaequalibus, glabris;—feminei, calicis lobis late ovatis, acutis, striatis, 0.5—0.7 cm longis, 0.7—1 cm latis; ovario glabro, 8-loculare, loculis uniovulatis. Fructus subsessilis, subglobosus, 2—2.5 cm diam.; seminibus albumine aequabile.—Celebes (KOORDERS 16753 $\beta$ , 16766 $\beta$  et 16770 $\beta$ ).
97. ***D. mindanaënsis*** MERR.
98. ***D. minutiflora*** BAKH., spec. nov.—Arbor mediocris; ramulis virgatis, puberulis. Folia tenuiter coriacea, elliptico-oblonga, 2.5—11 cm longa, 1—4.5 cm lata, basi obtuse cuneata, apice breviter acuminata, subtus pilosa vel glabrescentia; nervis lateralibus utrinsecus 5-7, supra cum venis inconspicuis; petiolo tereti, puberulo, 0.15—0.5 cm longo. Flores dioici, 4-meri;—feminei breviter pedunculati; calice 4-fido, extus pubescente, intus glabro; lobis subreniformibus, contortis, ciliatis, 0.25—0.3 cm diam.; corolla ovoidea, utrinque glabra. Aff. *D. lateralis* HIERN. et *D. oligantha* MERR.—Sumatra (BEGUIN 265).
99. ***D. montana*** ROXB.
100. ***D. muricata*** BAKH., spec. nov.—Ramuli sparse pilosi. Folia coriacea, elliptico-oblonga, 10—25 cm longa, 3.5—8 cm lata, basi leviter cordata, apice acuminata, costa excepta utrinque glabra; nervis lateralibus utrinsecus 10-15, supra tenuibus, cum venis obscuris utrinque prominulis; petiolo tereti, sparse

hispido, 0.3—1.25 cm longo. Flores dioici; feminei fasciculati, subsessiles; calice 4-5-fido, extus piloso, intus glabro, lobis ovato-oblongis, acuminatis, 0.25—0.35 cm longis, 0.15—0.2 cm latis; ovario rufo-hispido, 4-5-loculare, loculis uniovulatis. Fructus ovoideo-globosus, muricato-mamillatus, tomentosus et pilis longis hispidis, 2—2.5 cm diam.; seminibus albumine aequabile; calice non vix accrescente. Aff. *D. ferocis* BAKH.—Borneo (JAHERI 644; HAVILAND 3483).

101. ***D. myrmecocalyx*** (HIERN) BAKH., comb. nov.—*Maba myrmecocalyx* HIERN.
102. ***D. nana*** BAKH., spec. nov.—Frutex; ramulis tomentosis, glabrescentibus. Folia tenuiter coriacea, oblonga, 12—22 cm longa, 4.5—8 cm lata, basi subrotundata, apice longiter acuminata, costa excepta utrinque glabra; nervis lateralibus utrinsecus 8-10, supra impressis, venis inconspicuis; petiolo subtereti, tomentello vel glabrescente, 0.7—1 cm longo. Fructus solitarius, breviter pedunculatus, ovoideo-oblongus, acuminatus, appresse pilosus, 3—3.5 cm longus, 1.5—2 cm diam.; seminibus 4, albumine aequabile; calice parvo, 4-fido, 0.7—0.8 cm diametro, lobis suborbicularibus, ciliatis, extus pilosis, intus glabris, 0.3—0.4 cm diametro. Aff. *D. ellipoideae* K. et G.—Perak (WRAY 3214).
103. ***D. nemorosa*** BAKH., spec. nov.—Arbor, ramulis rufo-velutinis. Folia coriacea, elliptico-oblonga, 15—25 cm longa, 7—9 cm lata, basi rotundata, apice breviter obtuse acuminata, primo utrinque velutina, denique costa excepta supra glabra, nitida, subtus glabrescentia; nervis lateralibus utrinsecus 8-12, supra impressis, venis utrinque inconspicuis; petiolo subtereti, velutino, 1—1.5 cm longo. Fructus globosus, rufo-velutinus, (immature) 2.5—3 cm diam.; seminibus 8, albumine aequabile; calice profunde 4-lobato, crasso, utrinque rufo-velutino; lobis ovatis obtusis, 0.5—0.7 cm diam. Aff. *D. pauciflorae* K. et G.—Borneo (Boschpr. bb. 1603).
104. ***D. neurosepala*** BAKH., spec. nov.—Ramuli tomentosi, glabrescentes. Folia coriacea, oblongo-elliptica, 15—30 cm longa, 6—8 cm lata, basi subrotundata, apice abrupte breviter obtuse acuminata, vetustiora utrinque glaberrima; nervis lateralibus utrinsecus 5-10, supra sulcatis, subtus prominentibus, venis obscuris, supra impressis; petiolo

subtereti, rugoso, glabro, 1.5—2 cm longo. Fructus solitarius, longiter ( $\pm$  4 cm) pedunculatus, globosus, rufo-tomentosus, maturitate glabrescens, 2.5—3 cm diam.; calice valde accrescente, profunde 4-lobato, utrinque tomentoso, lobis foliaceis, late ovatis, chartaceis, palminerviis et laxe venosis,  $\pm$  3—3.5 cm diam. Aff. *D. latisepalae* RIDL.—Borneo (BECCARI 541).

105. *D. nigra* (J. F. GMEL.) PERROTT.
106. *D. nitida* MERR.
107. *D. novoguineensis* BAKH., spec. nov.—Frutex; ramulis glabrescentibus. Folia tenuiter coriacea, lanceo-lato-oblonga, 12—30 cm longa, 2—7.5 cm lata, basi obtuse cuneata, apice acuminata, utrinque glabra; nervis lateralibus utrinsecus 7-9, basalibus suboppositis, venis utrinque prominulis; petiolo semitereti, glabro, 0.5—1 cm longo. Flores dioici, sessiles; masculi fasciculati; calice eupuliforme, leviter 4-dentato, intus glabro; corolla hypocrateriforme, extus pubescente, intus glabra; staminibus 8-10, dorso pubescentibus; feminei solitarii; calice majore, profunde 4-lobato, utrinque pubescente, lobis oblongis, foliaceis, striatis, reflexis, 0.3—0.35 cm longis, 0.2—0.25 cm latis; staminodiis 8, glabris; ovario ovoideo, pubescente, 8-loculare, loculis uniovulatis. Fructus globosus, sericeus vel maturitate glabrescens, 2—2.5 cm diam.; seminibus albumine aequabile.—Nova Guinea (DOCTERS VAN LEEUWEN 9196; LAM 698).
108. *D. nutans* KING et GAMBLE.
109. *D. oblonga* WALL. ex G. DON.
110. *D. oligantha* MERR.
111. *D. pahangensis* BAKH., spec. nov.—Arbuscula; ramulis hispidis, deinde glabris. Folia chartacea, elliptico-oblonga, 6—12 cm longa, 1.5—2.75 cm lata, basi subrotundata, apice acuminata, subtus pilosohispida, dense pellucido-punctata; nervis lateralibus utrinsecus 10-15, supra impressis, venis supra obseuris; petiolo tereti, rufo-hispido, 0.2—0.4 cm longo. Fructus solitarius, subsessilis, ovoideglobosus, appresse pilosus, 4-loculare, 4-spermus, 1.5—2 cm diam.; seminibus albumine aequabile; calice 4-5-fido, extus appresse piloso, intus glabro;

lobis oblongo-lanceolatis, obtusis, ciliatis, 0.4—0.5 cm longis, 0.2—0.25 cm latis. Aff. *D. apiculatae* HIERN.—Pahang (HENDERSON 22296).

112. ***D. palembanica*** BAKH., spec. nov.—Arbor mediocris; ramulis rufo-tomentosis glabrescentibus. Folia coriacea, oblonga vel oblanceolata, 9—30 cm longa, 3—10 cm lata, basi subcuneata, apice breviter acuminata, subtus primo rufo-tomentosa, denique glabrescentia; nervis lateralibus utrinsecus 6-12, supra impressis, venis supra inconspicuis; petiolo subtereti, tomentoso, 0.7—1.5 cm longo. Fructus solitarius, sessilis, late ovoides vel depresso-globosus, rugosus, primo tomentosus, maturitate glabratus, 8-10-locularis, 6-8-spermus, 4—5.5 cm longus, 5—7.5 cm diam.; seminibus albumine aequabile; calice crasso, subquadrato 4-lobo, utrinque rufo-tomentoso, 3—3.5 cm diam.; lobis late ovatis. Aff. *D. pauciflorae* K. et G.—Sumatra, Palembang (DUMAS 1560).
113. ***D. papuana*** VAL. nom. nud.—Arbor mediocris, ramulis glabrescentibus. Folia tenuiter coriacea, lanceo-lato-elliptica, 15—40 cm longa, 4—14 cm lata, basi obtusa, apice breviter obtuse acuminata, utrinque glabra; nervis lateralibus utrinsecus 12-17, supra impressis, venis reticulatis densis, utrinque prominulis; petiolo semitereti, glabro, 0.7—1.5 cm longo. Flores dioici, 4-5-meri;—masculi cymosi; calice profunde lobato, intus glabro; corolla tubulosa, extus dense pubescente, intus glabro; staminibus 12-18, pubescentibus;—feminei solitarii vel terni; calice campanulato; staminodiis 8-13, puberulis; ovario ovoides, sericeo. Fructus depresso-globosus, maturitate glaber, 7—10 cm diam.; seminibus albumine aequabile; calice incrassato, leviter 4-5-lobato, utrinque glabrescente, 2—3 cm diam.—Moluecae, Nova Guinea.
114. ***D. Paraoesi*** BAKH., spec. nov.—Arbor mediocris; ramulis pilis biformibus pubescentibus, glabrescentibus. Folia chartacea, ovato-oblonga, 3—9 cm longa, 1.5—4 cm lata, basi obtuse cuneata, apice breviter acuminata, mox costa excepta utrinque glabra; nervis lateralibus utrinsecus 5-7, basalibus suboppositis, ceteris longioribus, cum venis venis inconspicuis utrinque prominulis; petiolo semitereti, puberulo, 0.3—0.5 cm longo. Aff. *D. Jahanii* BAKH.—Borneo (Boschpr. bb. 10162, nom. Daj.: Paraoesi).

115. *D. pauciflora* KING et GAMBLE.
116. *D. Peekelii* LAUTERB.
117. *D. penangiana* KING et GAMBLE.
118. *D. pendula* HASSELT ex HASSK.
119. *D. perakensis* BAKH., spec. nov.—Folia coriacea, lanceolato-oblonga, 12—25 cm longa, 3.5—10 cm lata, basi cuneata, apice acuminata, utrinque glaberrima, nervis lateralibus utrinsecus 9-12, cum venis utrinque prominulis distinctis; petiolo semitereti, glabro, 1.5—2.5 cm longo. Fructus breviter pedunculatus, ovoideo-globosus, primo tomentosus, maturitate glabratus, tuberculatus, 3.5—4 cm diam.; calice late campanulato, utrinque glabro, 2.5—3.5 cm diam., tubo incrassato, lobis marginibus dilatatis, inter lobos saccatim confluentibus. Aff. *D. rigidae* HIERN et *D. areolatae* K. et G.—Perak (WRAY 501).
120. *D. perfida* BAKH., spec. nov.—Arbor medioeris. Folia chartacea, oblonga, 7.5—25 cm longa, 2.5—8.5 cm lata, basi obtusa, apice acuminata, vetustiora utrinque glabra, dense pellucido-punctata; nervis lateralibus utrinsecus 8-12, supra leviter prominulis; petiolo semitereti, glabrescente, 0.5—1.5 cm longo. Flores dioici, 4-meri, cymosi, calice intus sericeo, lobis suborbicularibus, ciliatis, 0.2—0.3 cm diam.; corolla ovoideo-oblonga, utrinque glaberrima;—feminei staminodiis 8, glabris; ovario ovoideo, sericeo, 8-loculare, loculis uniovulatis. Fructus depresso-globosus, maturitate glabrescens, nitidus, 3—3.5 cm diam.; seminibus albumine ruminato; calice sublignoso, 3—3.5 cm diam.—Borneo (Boschw. 2327, ♀; ENDERT 2705, ♂; Boschpr. bb. 13221, ♀).
121. *D. philippinensis* A. DC.
122. *D. pilosanthera* BLANCO.
123. *D. piscicapa* RIDL.
124. *D. plectosepala* HIERN.
125. *D. poiënsis* BAKH., spec. nov.—Arbuscula; ramulis pilosis, mox glabris. Folia tenuiter coriacea, oblonga, 5—12 cm longa, 2—5 cm lata, basi cuneata, apice subcaudato-acuminata, costa excepta utrinque glabra, dense pellucido-punctata; nervis lateralibus utrinsecus 5-7, basalibus longioribus, cum

venis supra inconspicuis, leviter impressis; petiolo subtereti, rufo-hispido, mox glabro, 0.3—0.5 cm longo. Flores dioici;—feminei solitarii, subsessiles; calice 4-fido, extus puberulo, intus glabro, lobis ovato-ellipticis, ciliatis, contortis, 0.4—0.5 cm longis, 0.3—0.4 cm latis; corolla hypocrateiforme, medio 4-loba, extus puberula, intus glabra; staminodis 4; ovario ovoideo, sericeo, 4-loculare, loculis uniovulatis. Fructus ellipsoideus, maturitate glabrescens, 2—3 cm longus, 1—1.25 cm diam.; seminibus albumine aequabile; calice non vel vix aucto, ± 1 cm diam. Aff. *D. singaporense* BAKH.—Borneo, Mount Poi (J. et M. S. CLEMENS 20304).

126. *D. polyalthioides* KORTH. ex HIERN.
127. *D. Poncei* MERR.
128. *D. pseudo-malabarica* BAKH., spec. nov.—Arbuscula; ramulis tomentellis, denique glabrescentibus. Folia coriacea, lanceolato-oblonga, 7—17 cm longa, 2.5—6 cm lata, basi obtusa vel rotundata, apice obtuse acuminata, costa excepta utrinque glabra; nervis lateralibus utrinsecus 7-15, cum venis densis utrinque distinete prominulis; petiolo semitereti, tomentello, 1—1.25 cm longo. Fructus solitarius, brevissime pedunculatus, globosus, primo tomentellus, maturitate glabratus, nitidus, 3.5—5 cm diam.; 8-10-locularis, loculis monospermis; seminibus valde ruminato; calice profunde 4-5-lobato, intus tomentoso, lobis ovatis obtusis, coriaceis, reflexis, 1—1.5 cm diam. Aff. *D. malabaricae* (DESR.) KOSTEL.—Pulau Penang (HANIFF et MD. NUR 3496); Pahang (FOSTON 12865).
129. *D. pubicalix* BAKH., spec. nov.—Folia membranacea, elliptico-oblonga, 6—10 cm longa, 2—4 cm lata, basi rotundata vel subcordata, apice obtusa vel obtuse acuminata, nitida, subtus sparse puberula, glabrescentia; nervis lateralibus utrinsecus 6-8, basalibus ceteris longioribus suboppositis, cum venis subdensis utrinque prominulis; petiolo tereti, puberulo, 0.5—0.75 cm longo. Flores dioici, 4-meri;—masculi breviter cymosi, terni; calice medio lobato, utrinque appresse piloso; corolla hypocrateiforme, medio lobata, utrinque pubescente; staminibus 15, inaequalibus, filamentis subpuberulis, antheris lanceolatis, glabris. Aff. *D. Wrayi* K. et G.—Lower Siam (HAMID C. F. 3827).

130. *D. pubicarpa* RIDL.

131. *D. pulchra* BAKH., spec. nov.—Arbuscula vel frutex; ramulis tomentosis. Folia chartacea, oblong-lanceolata, 15—35 cm longa, 4—15 cm lata, basi angustata, rotundata vel leviter cordata, apice acuminata, subtus sparse pilosa, dense pellucido-punctata, penninervia; costa leviter prominula; nervis lateralibus utrinsecus 15-17, cum venis utrinque prominulis; petiolo tereti, tomentoso, 0.5—0.7 cm longo. Fructus solitarius, subsessilis, oblongus vel obovoideus, acuminatis, rufo-pilosus, maturitate glabrescens, 4-locularis, 4-spermus, 3.5—6 cm longus, 2.5—3 cm diam.; seminibus albumine aequabile; calice conspicuo, 4-fido, utrinque pubescente, lobis foliaceis, lanceolato-oblongis, basi contractis, apice longiter acute acuminatis, plicatis, nervosis 3.5—8.5 cm longis, 2.5—4 cm latis.—Nova Guinea (MAYR 408).

132. *D. pyrrhocarpa* MIQ.

133. *D. retrofracta* BAKH., spec. nov.—Arbuscula; ramulis glabris. Folia coriacea, oblonga, basi cuneata, apice obtuse acuminata, subtus sparse pilosa glabrescentia; nervis lateralibus utrinsecus 10-15, cum venis densis utrinque prominulis; petiolo semitereti, primo piloso, denique glabrescente, 0.5—1.2 cm longo. Flores dioici, 4-meri;—feminei solitarii, subsessiles; calice utrinque rufo-pilosus, 0.5 cm diametro; ovario sericeo, 8-loculare, loculis uniovulatis. Fructus depresso-globosus, maturitate glabrescens, 2.5—3 cm diam.; seminibus albumine ruminato; calice tubo lignoso, lobis reflexis.—Lower Siam (MD. HANIFF et MD. NUR 3984); Perlis (HENDERSON 23013).

134. *D. Ridleyi* BAKH., spec. nov.—Folia coriacea, elliptico-oblonga, 9—20 cm longa, 3—8 cm lata, basi obtusa, apice acuminata, utrinque glabra; nervis lateralibus utrinsecus 6-10, cum venis utrinque prominulis distinctis; petiolo semitereti, glabro, 1—2 cm longo. Fructus sessilis, ovoideo-globosus, nitidus, glaber, 5—8 cm diam.; 8-10-locularis, loculis monospermis; seminibus albumine ruminato; calice lignoso, 4-5-gono, extus tomentoso, intus sericeo, 3—3.5 cm diam. Aff. *D. Whitfordii* MERR.—Johore (RIDLEY).

135. *D. rigida* HIERN.

136. **D. rufa** KING et GAMBLE.
137. **D. Rumphii** BAKH., nom. nov.—*Diospyros utilis* KDS. et VAL.
138. **D. samoënsis** A. GRAY.
139. **D. sarawakana** BAKH., spec. nov.—Folia chartacea, oblonga, 7—17 cm longa, 3.5—7 cm lata, basi cuneata, apice breviter acuminata, utrinque glabra, basi biglandulosa; nervis lateralibus utrinsecus 5-8, supra indistinctis; petiolo semitereti, glabrescente, 1—1.5 cm longo. Flores dioici, 4-meri;—masculi cymosi vel subracemosi; calice profunde lobato, utrinque tomentoso; corolla tubulosa, extus tomentosa, intus glabra; staminibus 14-16, pubescentibus. Aff. *D. styraciformis* K. et G.—Sarawak (HAVILAND 2316).
140. **D. Scortechinii** KING et GAMBLE.
141. **D. selangorensis** BAKH., spec. nov.—Ramuli tomentosi. Folia coriacea, ovato-oblonga, 5—10 cm longa, 1.5—3.5 cm lata, basi subrotundata, apice acuminata, supra nitida, subtus sparse pubescentia; nervis lateralibus utrinsecus 8-10, supra impressis. venis inconspicuis; petiolo tereti, pubescente, 0.3—0.5 cm longo. Fructus solitaribus, subsessilis, ovoideus, rufo-pilosus, maturitate glabrescens, 2—2.5 cm diam.; seminibus 4, albumine aequabile; calice 4-fido, utrinque pubescente; lobis linearioriblongis, acutis, ciliatis, 0.75—1 cm longis, 0.2 cm latis. Aff. *D. apiculatae* HIERN.—Selangor (BURKILL et HOLTTUM 8883).
142. **D. setosa** BAKH., spec. nov.—Arbuscula; ramulis mox glabris. Folia tenuiter coriacea, oblonga, 7—15 cm longa, 2.5—4.5 cm lata, basi obtusa, apice acuminata, utrinque glabra; nervis lateralibus utrinsecus 5-7, cum venis supra obscuris; petiolo semitereti, mox glabro, 0.5—1.25 cm longo. Fructus subsessilis, ovoideus, pubescens, 1.25—1.5 cm diam.; tomento cum setis appressis intermixto; calice 4-fido, extus piloso, intus glabro, 0.3—0.35 cm diam., lobis late ovatis obtusis reflexis. Aff. *D. singaporensis* BAKH.—Sarawak (HAVILAND 2324).
143. **D. Siamang** BAKH., spec. nov.—Arbor speciosa. Folia coriacea, elliptico-oblonga, 7—17 cm longa, 3.5—9 cm lata, basi subrotundata, apice acuta vel obtusa, subtus glabrescentia; nervis lateralibus utrinsecus

7-15, supra tenuibus, venis inconspicuis; petiolo semitereti, tomentello, 0.75—1.25 cm longo. Flores dioici, 4-5-meri;—feminei cymosi, 3-5-ni; calice profunde lobato, utrinque tomentoso, lobis ovatis; corolla tubulosa, extus tomentosa, intus glabra; staminodiis 8-10, antheris dorso pubescentibus; ovario subgloboso, sericeo, 8-10-loculare, loculis uniovulatis. Fructus subsessilis, depresso-globosus, apice concavus subtruncatus, sericeus, 3—4 cm diam.; seminibus albumine aequabile; calice tubo incrassato, lobis marginibus dilatatis, inter lobos saccatim confluentibus. Aff. *D. Wallichii* K. et G.—Sumatra (Boschpr. F. 198).

144. *D. siamensis* HOCHR.
145. *D. simaloerensis* BAKH., spec. nov.—Arbor mediocris; ramulis glabrescentibus. Folia tenuiter coriacea, oblonga, 4—15 cm longa, 1.5—4 cm lata, basi obtuse cuneata, apice acuminata, costa excepta utrinque glabra; nervis lateralibus utrinsecus 5-10, venis inconspicuis; petiolo semitereti, glabrescente, 0.2—0.5 cm longo. Flores dioici, 4-meri;—feminei gracile pedunculati; calice 4-fido, intus glabro; lobis orbicularibus, imbricatis, ciliatis, 0.2—0.3 cm diam.; ovario ovoideo, glabro, 4-loculare, loculis uniovulatis. Fructus ovoides 2—2.5 cm diam.; seminibus albumine aequabile; calice non vel vix accrescente, 0.5 cm diam.—Sumatra, Simaloer (ACHMAD 580, 1343 et 1391).
146. *D. singaporense* BAKH., spec. nov.—Folia tenuiter coriacea, ovato-oblonga, 6—10 cm longa, 2.5—4 cm lata, basi obtuse cuneata, apice acuminata, costa excepta utrinque glabra, nervis lateralibus utrinsecus 5-10 cum venis utrinque obscure prominulis; petiolo semitereti, glabrescente, 0.5—1 cm longo. Flores dioici, 4-meri;—feminei solitarii, pedunculati, calice 4-fido, extus pubescente, intus glabro; lobis suborbicularibus, ciliatis, 0.2—0.3 cm diam.; corolla tubulosa, extus sericea, intus glabra; staminodiis 4, pubescentibus; ovario ovoideo, subglabro, 4-loculare, loculis uniovulatis.—Singapore (Cult. Bot. Gard.).
147. *D. sopheriensis* BAKH., spec. nov.—Folia tenuiter coriacea, linearis elliptica, 7—20 cm longa, 1.5—6 cm lata, basi obtusa, apice breviter acuminata, supra glabra, subtus primo sericea, denique glabrescentia; nervis lateralibus densis, cum venis utrinque inconspicuis; petiolo semitereti, glabrescente,

0.5—0.7 cm longo. Fructus globosus, maturitate glaber, 4—4.5 cm diam.; seminibus 8, albumine aequabile. Aff. *D. celebicum* BAKH.—Nova Guinea (FORBES 276).

148. ***D. soporifera*** BAKH., spec. nov.—Arbor mediocris. Folia coriacea, elliptico-oblonga, 30—45 cm longa, 7.5—12.5 cm lata, basi obtusa vel rotundata, apice obtusiuscule acuminata, utrinque glabra; nervis lateralibus utrinsecus 15-20, utrinque conspicuis, supra plano-depressis; venis reticulatis laxis, utrinque prominulis; petiolo semitereti, glabro, 1.25—2.5 cm longo. Fructus solitarius vel binus, submagnus, ovoido-globosus, apice depresso, concavus, nitidus, glaber, immaturus 4—5 cm longus, 5—5.5 cm diam., 8-locularis, loculis monospermis; pedunculo 3.5—4.5 cm longo; calice fructifero conspicuo, reflexo, 4-lobo, utrinque glaberrimo, tubo valde incrassato, lignoso, cubiforme, 3.5—5 cm diam., 1—2 cm crasso, lobis crasse coriaceis, basi confluentibus, inter lobos subsaccatis, 1—1.5 cm longis, 2.5—3 cm latis; seminibus elliptico-oblongis, compressis. Aff. *D. mindanaensis* MERR.—Borneo (BOSCHPR. bb. 17221, ♀).
149. ***D. styraciformis*** KING et GAMBLE.
150. ***D. subrhomboidea*** KING et GAMBLE.
151. ***D. subtruncata*** SCHEFF. ex HOCHR.
152. ***D. sumatrana*** MIQ.
153. ***D. sundaica*** BAKH., nom. nov.—*D. pseudo-Ebenum* KDS. et VAL.
154. ***D. Toposia*** HAM.
155. ***D. toposioides*** KING et GAMBLE.
156. ***D. transitoria*** BAKH., spec. nov.—Arbuscula; ramulis glabrescentibus. Folia firmiter coriacea, ovato-oblonga, 4.5—12 cm longa, 1.5—4.5 cm lata, basi obtusa, apice breviter obtuse acuminata, utrinque glabrescentia; nervis lateralibus utrinsecus 7-10, cum venis densis supra inconspicuis; petiolo semitereti, glabrescente, 0.5—1.5 cm longo. Flores dioici;—feminei solitarii, longiter pedunculati; calice profunde 4-5-lobato, intus pubescente, lobis ovatis, acutis, subplicatis; ovario sericeo, 8-10-loculare, loculis uniovulatis. Fructus depresso-globosus, subsericeus, maturitate glabrescens,

2.5—3 cm diam.; seminibus albumine ruminato; calice accrescente, tubo incrassato, 4-5-angulato; lobis marginibus dilatatis, coriaceis, inter lobos saccatim confluentibus, 1.5—2 cm diametro.—Lower Siam (HANIFF et MD. NUR. 4060); Kedah (CURTIS 2626).

157. *D. tristis* KING et GAMBLE.
158. *D. truncata* ZOLL. et MOR.
159. *D. tuberculata* BAKH., spec. nov.—Arbor mediocris; ramulis glabrescentibus, vetustioribus dense vermiculoso-lenticellatis. Folia tenuiter coriacea, oblonga, 5—20 cm longa, 2.5—7.5 cm lata, basi cuneata, apice anguste obtuse acuminata, utrinque subglabra; nervis lateralibus utrinsecus 5-8, supra tenuiter impressis, venis supra obscuris; petiolo semitereti, glabrescente, 0.7—2 cm longo. Fructus pedunculatus, ovoideus, glabrescens, 2.5—3 cm diam.; seminibus 1-4, albumine aequabile; calice profunde 4-lobato, intus sericeo, 2—3 cm diametro, lobis ovatis, marginibus dilatatis, coriaceis.—Borneo (AMDJAH 498; CASTRO et MELEGRITO 1409).
160. *D. Ulo* MERR.
161. *D. undulata* WALL. ex G. DON.
162. *D. venenosa* BAKH., spec. nov.—Arbor mediocris; ramulis glabris. Folia tenuiter coriacea, oblongolanceolata, 10—30 cm longa, 3—7 cm lata, basi obtuse cuneata, apice acuminata, utrinque glabra; nervis lateralibus utrinsecus 10—15, supra tenuiter prominulis petiolo semitereti, glabro, 1—1.5 cm longo. Fructus solitarius, brevissime pedunculatus, depresso-globosus, pallide sericeus, 8-locularis, 2—3 cm diam.; seminibus 4—8, albumine aequabile; calice plano, 4-5-angulato, utrinque sericeo, 1—2 cm diam., lobis late triangularibus obtusis. Aff. *D. Greshoffiana* KDS.—Celebes (TEYSMANN 12603, 12668).
163. *D. vestita* BAKH., spec. nov.—Arbuscula; ramulis rufo-velutinis. Folia chartacea, elliptico-oblonga, 7—22 cm longa, 2.5—8 cm lata, basi subrotundata, apice breviter obtuse acuminata, subtus rufo-subvelutina, nervis lateralibus utrinsecus 7-15, supra obscuris, impressis, venis inconspicuis; petiolo tereti, velutino, 0.5—0.7 cm longo. Fructus solitarius, subsessilis, ellipsoideus, rufo-hispidus glabrescens,

4-locularis, 1-4-spermus, immaturus 1.5—2 cm diam.; seminibus albumine aequabile; calice 4-lobato, utrinque velutino, 2—2.5 cm diam., tubo incrassato, lobis ovatis, marginibus dilatatis, inter lobos confluentibus. Aff. *D. sumatranae* MIQ.—Pahang (HENDERSON 22290).

164. *D. Wallichii* KING et GAMBLE ex KING.
  165. *D. Wrayi* KING et GAMBLE.
  166. *D. Yeobi* BAKH., spec. nov.—Folia subdensa, subcoriacea, oblongo-elliptica, 4—9 cm longa, 2—4 cm lata, basi cuneata vel obtusa, apice breviter acuminata, utrinque glabra, nervis venisque utrinque inconspicuis; petiolo semitereti, glabrescente, 0.7—1.25 cm longo. Fructus solitarius, sessilis, globosus, rufo-tomentosus, maturitate glabrescens. 8-10-locularis, 8-10-spermus, 2—3 cm diam.; seminibus albumine aequabile; calice plano, 4-angulato, utrinque tomentoso, 1—1.5 cm diam., lobis late ovatis obtusis, marginibus confluentibus. Aff. *D. rufae* KING et GAMBLE.—Pahang (YEOB 3229).
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## EXPLANATION OF PLATES.

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**PLATE XLVIII.** *Diospyros Holttumii*, BAKH. (type HOLTTUM 15122)—

A. Fruiting branch ( $\times \frac{1}{2}$ )—B. Leaf base, seen from above and from below (nat. size)—C. Flower buds, the left one with the calyx lobes removed ( $\times 3$ )—D. Fruit ( $\times 1\frac{1}{2}$ )—E. Fruiting calyx, outside and inside view ( $\times 1\frac{1}{2}$ )—F. Calyx lobe from the outside ( $\times 4$ ).

**PLATE XLIX.** *Diospyros elegantissima*, BAKH. (type RIDLEY 16349)—

A. Flowering branch ( $\times \frac{1}{2}$ )—B. Leaf branch ( $\times 2$ )—C. Leaf base seen from above and from below ( $\times 4$ )—D. Leaf bud ( $\times 5$ )—E-L. Flower with details; E. Flower bud ( $\times 4$ ); F. Calyx, seen from the inner side ( $\times 5$ ); G. Calyx lobes, seen from the inner and outer sides ( $\times 10$ ); H. Corolla bud, slit lengthwise, seen from the inner side ( $\times 5$ ); I. Staminode ( $\times 15$ ); K. Ovary ( $\times 10$ ); L. Ovary in transverse section ( $\times 15$ ).

**PLATE L.** *Diospyros insidiosa*, BAKH. (type HENDERSON 21730)—

A. Leaf branch ( $\times \frac{1}{2}$ )—B. Bark ( $\times \frac{1}{2}$ )—C. Leaf base, seen from lower and upper sides (nat. size)—D. Flowering branches (flowers fallen) ( $\times \frac{1}{2}$ )—E. Fruiting branch ( $\times \frac{1}{2}$ )—F. Fruiting calyx from outer and inner sides ( $\times 1\frac{1}{2}$ )—G. Fruit cut lengthwise ( $\times \frac{1}{2}$ )—H. Half of fruit in transverse section ( $\times \frac{1}{2}$ )—I. Seeds ( $\times \frac{1}{2}$ )—K. and L. Seeds in transverse section (nat. size).

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Plate 48.

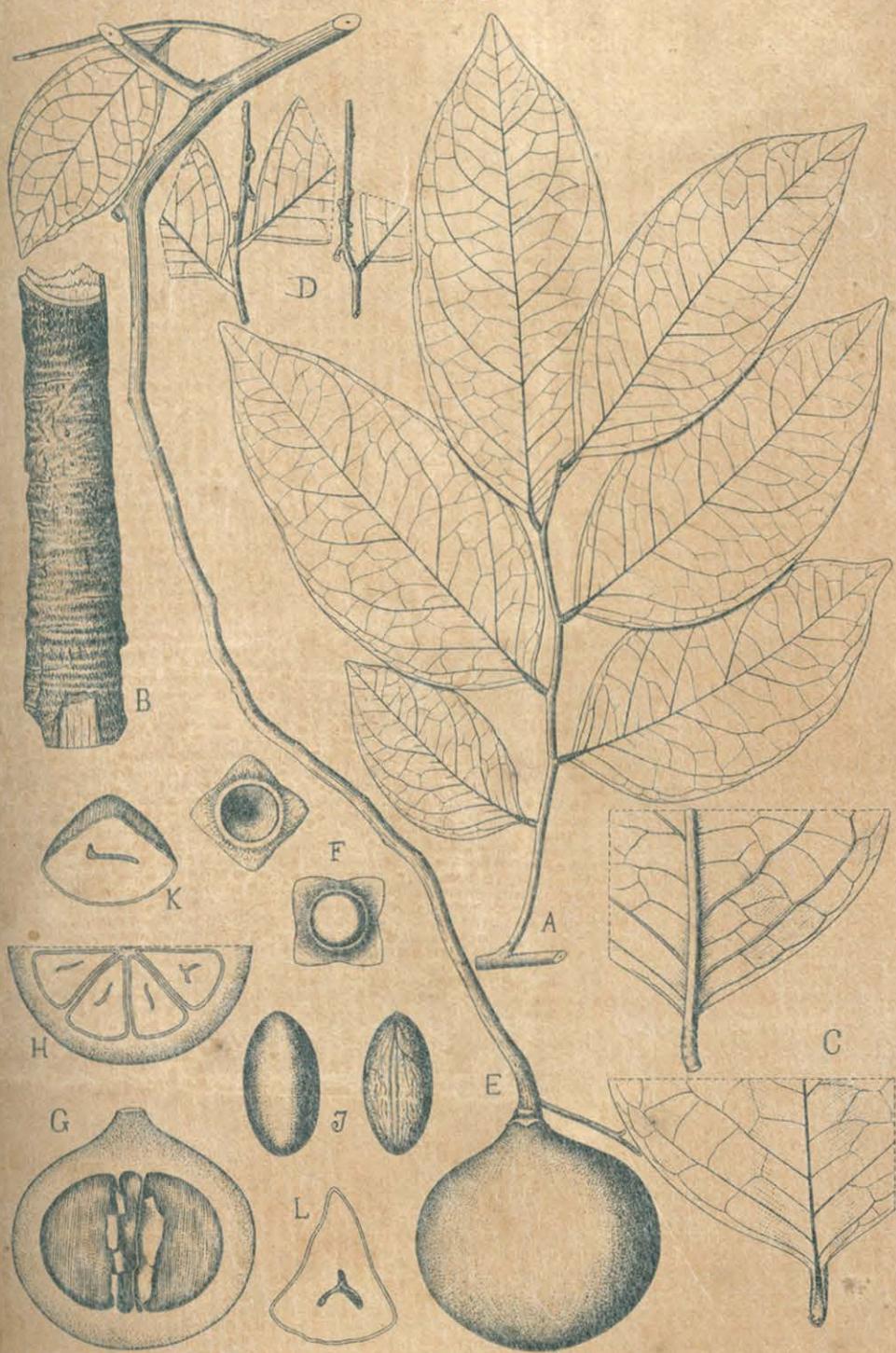


Gard. Bull. S.S. Vol. VII.

Plate 49



Plate 50.



Gard. Bull. S.S. Vol. VII.