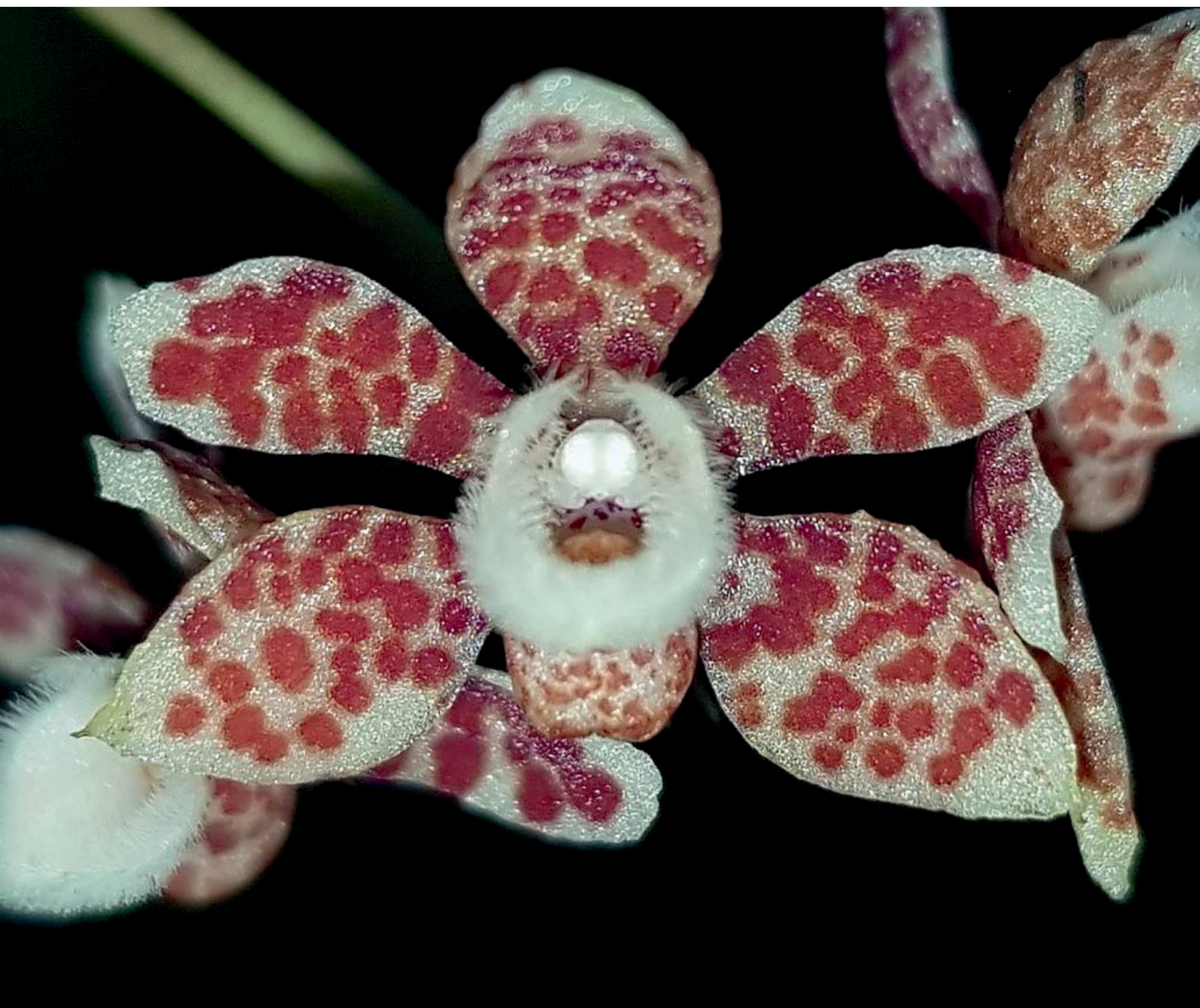


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*Thrixspermum bellamabantae*  
Benjamin MABANTA

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from northern Mindanao, Philippines**

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**Nineteen new orchid species from northern Mindanao, Philippines**

Derek D. CABACTULAN, Jim COOTES, Miguel David DE LEON,  
Reynold B. PIMENTEL, Fernando B. AURIGUE, and Neil K. BINAYAO III

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**Summary:** *Abdominea intricata* CABACTULAN, COOTES, M.D. DE LEON & PIMENTEL, *Ascidieria maculosa* CABACTULAN, COOTES, M.D. DE LEON & PIMENTEL, *Bulbophyllum alboaligerum* CABACTULAN, COOTES, M.D. DE LEON & PIMENTEL, *Bulb. crassiusculum* CABACTULAN, COOTES, M.D. DE LEON & PIMENTEL, *Bulb. prasinoglossum* CABACTULAN, COOTES, M.D. DE LEON, & PIMENTEL, *Bulb. puberulosum* Cabactulan, Cootes, M.D. De Leon, & PIMENTEL, *Bulb. vinicolor* CABACTULAN, COOTES, AURIGUE, PIMENTEL & M.D. DE LEON, *Cylindrolobus benmabantai* CABACTULAN, M.D. DE LEON & PIMENTEL, *Dendrobium deleonii* CABACTULAN, COOTES & PIMENTEL, *Dendrochilum charisae* CABACTULAN, COOTES, M.D. DE LEON & PIMENTEL, *Ddc. derekcabactulanii* COOTES, M.D. DE LEON & PIMENTEL, *Ddc. kennedyi* M.D. DE LEON, COOTES, CABACTULAN & PIMENTEL, *Ddc. perrineae* CABACTULAN, COOTES, M.D. DE LEON, PIMENTEL & BINAYAO, *Ddc. perrinei* Cabactulan, COOTES, M.D. DE LEON, PIMENTEL & BINAYAO, *Epicriantes charishampeliae* CABACTULAN, M.D. DE LEON, COOTES & PIMENTEL, *Epicr. jimcootesii* CABACTULAN, M.D. DE LEON & PIMENTEL, *Epicr. neilkonradii* CABACTULAN, COOTES, M.D. DE LEON & PIMENTEL, *Robiquetia micramphora* CABACTULAN, COOTES, PIMENTEL & M.D. DE LEON, and *Thrixspermum bellamabantaiae* CABACTULAN, COOTES & PIMENTEL, are all described as new to science.

**Key words:** *Abdominea intricata*, *Ascidieria maculosa*, *Bulbophyllum alboaligerum*, *Bulb. crassiusculum*, *Bulb. prasinoglossum*, *Bulb. puberulosum*, *Bulb. vinicolor*, *Cylindrolobus benmabantai*, *Dendrobium deleonii*, *Dendrochilum charisae*, *Ddc. derekcabactulanii*, *Ddc. kennedyi*, *Ddc. perrineae*, *Ddc. perrinei*, *Epicriantes charishampeliae*, *Epicr. jimcootesii*, *Epicr. neilkonradii*, *Robiquetia micramphora*, *Thrixspermum bellamabantaiae*, Philippines, Mindanao, Bukidnon, Orchidaceae, new species.

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# Nineteen new orchid species from northern Mindanao, Philippines

Derek D. CABACTULAN, Jim COOTES, Miguel David DE LEON, Reynold B. PIMENTEL, Fernando B. AURIGUE, and Neil K. BINAYAO III

**Introduction:** The Philippines is one of the most biodiverse countries in the world. With forests reduced to approximately 4% of its original cover, many plant and animal species yet unknown to science are likely to have gone the way of extinction. Despite the rapidly receding residual virgin and disturbed forest ecosystems, many more species continue to be discovered.

Taxonomy can be a pursuit and an end in itself. Yet, the role of taxonomy in biodiversity conservation has increasingly become important in a country with rapidly vanishing natural treasures. More than ever, taxonomic work and field data have become increasingly important in policy-making, drawing public support and identification of key species and habitats in a country with ecosystems distributed over more than 7,100 islands. "Taxonomy enables us to constantly celebrate the diversity of life, thereby earning stronger public support for biodiversity" (Jeffrey MCNEELY, Cornell University). Nigel MARVEN of National Geographic/BBC has succinctly and emphatically said, "how can we protect something we do not know?"

*Abdominea intricata* inflorescence



*Abdominea intricata* plant

It is our fervent hope that this paper will showcase once again the biodiversity of the Philippines and draw more support from all sectors for its conservation, preservation and restoration. After exhaustive review of literature from the Philippines and neighboring countries, the authors have determined these species to be new to science and hereby present them to you.

***Abdominea intricata*** CABACTULAN, COOTES, M.D. DE LEON, and PIMENTEL *sp. nov.*

**TYPE:** PHILIPPINES, Mindanao, Bukidnon, at 1,600 metres elevation above sea level. **HOLOTYPE:** MDL1803001 (January 20, 2018), CAHUP073541

## PLANT DESCRIPTION

**Growth Habit:** erect to pendent, monopodial, up to 2 cm long and 3.5 cm wide across the leaves; producing

several elongated roots, which produce root hairs. **Leaves:** three to four, lanceolate, oblong-elliptic, 2.1 to 2.3 cm long by 7 mm wide, thinly-textured, spreading, flattened, entirely glabrous, margins entire, sessile, three lateral veins on both sides of the leaf; midvein adaxially depressed and abaxially raised, unequally bilobed, falcate at the apex. **Inflorescences:** short, axillary, pendent, branching, rachis emerging from the base of the stem sheaths, few flowered, entirely glabrous, 5 cm long, bearing up to 15 flowers. **Peduncle:** short, terete, slender, glabrous, dark green, swollen in the upper portion, 3.5 cm long by 4 mm in diameter at lower rachis and 1.50 mm diameter at upper rachis with flowers. **Bracts:** lanceolate, 2.2 to 3.3 mm long and 0.35 to 0.50 mm wide at the base, persistent, glabrous, present on the lower and upper rachis, swollen at the base. **Pedicel and**

**Ovary:** cylindrical-conical, glabrous, grooved, grooves purple, 1.7 mm long and 0.30 mm in diameter. **Flowers:** small, membranous, fleshy, minutely papillose, not opening widely. **Flower color:** sepals and petals are purple with yellow markings at the apex; labellum is purple. **Dorsal sepal:** elliptic-oblong, 2.0 to 2.3 mm long by 0.90 mm wide, thin, glabrous, concave, apex slightly recurved. **Petals:** elliptic-ovate, 2 mm long by 1.1 mm wide, glabrous, thin, concave, apex slightly recurved upward. **Lateral sepals:** elliptic-oblong, 2.1 to 2.3 mm long by 0.80 mm wide, thin, glabrous, concave, apex slightly recurved upwards. **Labellum:** saccate, ovate, fleshy, three lobed, laterally compressed with a large irregular saccate portion without interior ornamentation, separated from the apical part by a fleshy transverse wall; **lateral lobes:** short, ovate, 0.90 mm long by 0.50 mm wide; **mid-lobe:** fleshy, reniform, deep, immobile, adnate to the column, 1 to 1.40 mm long by 1.20 to 1.25 mm wide, recurved. **Column:** green, short, truncate, foot absent, 0.50 mm long and 0.30 mm in diameter; rostellum projection longer, cordate, acuminate, lateral sides incurved downwards; stelia: flattened, short, square, about 0.03 mm long. **Anther cap:** white, cordate, cucullate, 0.87 mm long by 0.65 mm wide. **Pollinia:** two, unequally paired, rounded to ovate, 0.30 mm in diameter, caudicle rounded; stipes flattened lanceolate, 1 mm long by 0.30 mm wide; viscidium: oblong, 0.50 mm long by 0.30 mm wide. **Stigma:** rounded, concave, 0.90 mm in diameter.

**Comparison:** *Abdominea intricata* is most similar to *Abd. minimiflora* (Hook. f.) J.J. Smith, but it differs in having a short, clavate, few-flowered inflorescence; the inflorescence of *Abd. minimiflora* is long (to 10 cm.), bearing many flowers; the mentum of *Abd. intricata* is short and has a rounded apex, whereas the mentum of *Abd. minimiflora* is longer and tapered.

**Habitat and Distribution:** *Abdominea intricata* is so far, known only from the province of Bukidnon on the island of Mindanao. It grows as an epiphyte, clinging to branches covered with moss, at elevations of about 1,600 meters above sea level in cloud forest.

**Etymology:** The specific epithet refers to the intricate structure of the label-lum.

*Ascidieria maculosa* CABACTULAN, COOTES, M.D. DE LEON, and PIMENTEL sp. nov.

**TYPE:** PHILIPPINES, Mindanao, Bukidnon, at 1,200 metres elevation above sea level. **HOLOTYPE:** MDL1803002 (March 3, 2018), CAHUP073542

**PLANT DESCRIPTION**

**Growth Habit:** upright, sympodial. **Stems:** clustered, small, hidden by up to seven involute, lanceolate cataphylls about 10 cm long by 2 cm wide. **Leaves:** lanceolate, up to 14.5 cm long by 1.8 cm wide. **Inflorescences:** upright, apical, axillary, cylindrical, racemose, up to 5 cm long by 1.75 cm in diameter, bearing 17 flowers on the rachis, which are 6 mm in diameter when fully open. **Peduncle:** terete, pubescent, 4.2 cm long by 1.8 mm in diameter. **Bracts:** persistent; basal non-floral bracts broadly ovate, involute, abaxially pubescent, 1.5 to 6 mm long by 1.5 to 4 mm wide. **Pedicel and ovary:** terete, wooly, grooved, 4 mm long by 1 mm in diameter from the base of the sepals, and 0.5 mm in diameter from the base of rachis. **Flower colour:** sepals and petals base color yellow with big purplish spots all over the sepals, petals and under the labellum. **Dorsal sepal:** broadly ovate, 4 mm long by 2.5 mm wide, concave, abaxially pubescent. **Lateral sepals:** broadly ovate, 4 mm long by 3.5 mm wide, concave, abaxially pubescent. **Petals:** ovate, 3.9 mm long by 2.2 mm wide, concave, glabrous. **Column:** flattened,



*Ascidieria maculosa* inflorescence

trapezoid, slightly curved, 3 mm long by 1 mm in diameter from the column hood and 0.8 mm in diameter from the base of the sepals and petals; column foot trapezoid, 3 mm long by 1 mm wide, with distinct mid rib keel just below the column. **Labellum:** ovate, trilobed, sulcate, curved downwards, 5 mm long by 2.5 mm wide; sidelobes oblong, anteriorly auriculate, 3 mm long by 0.5 mm wide; midlobe triangular, 1.5 mm long by 2.2 mm wide, with 2 midline keels about 2 mm long. **Anther cap:** rounded, slightly cucullate, 0.5 mm in diameter. **Pollinia:** 4-paired, clavate, 0.6 mm long by 0.15 wide.



*Ascidieria maculosa* plant

**Stigma:** rounded, concave, 0.5 mm in diameter. **Fragrance:** unknown. **Infructescence:** not seen.

**Comparison:** *Ascidieria maculosa* is most similar to the Borneo species *Asc. maculiflora* J.J. WOOD, but differs in the fewer-flowered inflorescence, which in *Asc. maculosa* bears up to 17 blooms, whereas the inflorescence of *Asc. maculiflora* bears up to 50 flowers; the blooms of *Asc. maculosa* are larger at about 6 mm across the lateral sepals, whereas the blooms of *Asc. maculiflora* are only 4 mm across the lateral sepals; the blooms of *Asc. maculosa* are more widely opening.

**Habitat and Distribution:** *Ascidieria maculosa* is so far, known only from the province of Bukidnon on the island of Mindanao. It grows as an epiphyte, clinging to branches, at elevations of about 1,200 meters above sea level.

**Etymology:** The specific epithet refers to the purple spots and blotches on the floral segments and labellum.

*Bulbophyllum alboaligerum* COOTES, CABACTULAN, M.D. DE LEON and PIMENTEL sp. nov.

Section: **Macrocaulia** (BLUME) AVERY-ANOV

**TYPE: PHILIPPINES**, Mindanao, Bukidnon, at 1,600 metres elevation above sea level. **HOLOTYPE:** MDL1803003 (January 20, 2018), CAHUP073543



#### PLANT DESCRIPTION

**Growth Habit:** upright, sympodial, epiphyte. **Pseudobulbs:** globose, wrinkled, 4 mm long by 3 mm in diameter, covered with a papery sheath; unifoliate. **Leaves:** oblong, entirely glabrous, 1 to 1.2 cm long by 3 to 4.5 mm wide. **Inflorescence:** single-flowered, up to 5 cm long, arising from the base of the pseudobulb. **Flower colour:** sepals and petals are white, with pale yellow-green veining; labellum white. **Peduncle:** slender, 4.5 cm long, with bract about 2.5 mm long by 1.3 mm wide. **Pedicel:** cylindrical 1.3 cm long by 1 mm in diameter. **Dorsal Sepal:** ovate, 7 mm long by 2.4 mm wide, apex acuminate, 3-nerved, margins slightly erose. **Lateral sepals:** elliptic-ovate, 1 cm long by 4.5 mm wide, apiculate, 5-nerved, nerves green, margins slightly erose. **Petals:** ovate, 3.7 mm long by 1.5 mm wide, 3-nerved,

margins slightly erose. **Labellum:** cordate, 2 ridges running from the center of the labellum, apically thickened, apex papillose, recurved for approximately half of its length, 0.60 mm long by 0.70 mm wide. **Column:** cylindrical 0.70 mm long by 0.70 mm wide. **Stellidia:** subulate slightly incurved, about 1 mm long. **Column foot:** rectangular, with keel at the midline about 0.60 mm long. **Ovary:** bulbous, grooved, sparsely hispid, 1 mm long by 1 mm in diameter. **Anther Cap:** cordate, convex, 0.50 mm long by 0.40 mm wide. **Pollinia:** two, ovoid, 0.20 mm long and 0.05 mm diameter.

**Comparison:** *Bulbophyllum alboaligerum* is most similar to *Bulb. leproglossum* J.J. VERMEULEN and LAMB from Borneo. It differs in the edges of the dorsal sepal and the petals, which in *Bulb. alboaligerum* are slightly erose, whilst the dorsal sepal and petals of *Bulb. leproglossum* are entire; and the apices of the labellum which in *Bulb. alboaligerum* is papillose, whereas that of *Bulb. leproglossum* is glabrous. The lateral sepals are also occasionally adnate as in *Bulbophyllum pelicanopsis* J.J. VERM & LAMB.

**Habitat and distribution:** *Bulbophyllum alboaligerum* is so far, known only from the provinces of Bukidnon and Misamis Oriental on the island of Mindanao. It grows as an epiphyte, clinging to branches covered with moss, at elevations at about 1,600 meters elevation above sea level.

**Etymology:** The specific epithet refers to the white lateral sepals and their

*Bulbophyllum alboaligerum* flower



fanciful resemblance to the wings of an angel. “Angel Wings” was the working name for this species. In a dark forest, an array of the species’ contrastingly white flowers seemingly fluttering with the wind is a sight to behold.

**Bulbophyllum crassiusculum**  
CABACTULAN, COOTES, M.D. DE LEON, and PIMENTEL *sp. nov.*

**Section:** *Stachysanthes* (BLUME) J.J. VERM. and P. O’BYRNE

**TYPE:** PHILIPPINES, Mindanao, Bukidnon, at 1,200 metres elevation above sea level. **HOLOTYPE:** MDL1803001 (March 2, 2018), **CAHUP073545**

**PLANT DESCRIPTION**

**Growth habit:** upright, sympodial. **Pseudobulbs:** clustered, globose, 1.9 mm long by 2.2 mm in diameter, unifoliate, internodes cylindrical, covered with dried cataphylls, 0.30 mm long by 1.5 mm in diameter. **Leaves:** petiolate; petiole 3 mm long by 1.5 mm in diameter, glabrous, grooved; leaf blade linear-lanceolate, semi-terete, fleshy, 1.85 to 3.8 cm long by 4.5 to 8 mm wide, apex acute-acuminate, base acute, adaxially and abaxially glabrous, margins entire. **Inflorescence:** axillary, upright, racemose, up to 6 cm long by 0.60 mm in diameter, rachis erect; bearing up to 6 flowers, 6 mm across the lateral sepals; flowers resupinate and unscented. **Peduncle:** acicular, 4.5 mm long by 0.60 mm in diameter. **Flower color:** base color is pale yellow, column foot and column are yellow, labellum is yellow with two lateral and parallel purple lines interiorly. **Floral bracts:** triangular, persistent, glabrous, green, 2 mm long by 1 mm wide when flattened, 2 involute basal bracts. **Pedicel including ovary:** conical, grooved, glabrous, 2 mm long by 0.8 mm in diameter at the base and 1 mm diameter at the base of the sepals. **Dorsal sepal:** ovate, flattened, 5 mm long by 2 mm wide. **Lateral sepals:** ovate, flattened, 5.5 mm long by 3 mm wide, adnate to the column foot. **Petals:** lanceolate, flattened, 1.9 mm long by 0.90 mm wide. **Labellum:** broadly obtuse, curved down, 2 mm long by 1 mm wide, middle portion deeply channeled, apex recurved. **Column:** cylindrical, short, 1 mm long by 1.2 mm



*Bulbophyllum crassiusculum*

wide; stelia acute-acuminate, about 0.5 mm long; column foot rectangular, winged below the column, 1.3 mm long by 1 mm wide. **Anther cap:** triangular, cucullate, 0.45 mm long by 0.3 mm wide. **Pollinia:** oblate, two-unequally paired, 0.35 mm in diameter. **Stigma:** oblong, 0.2 mm wide, 0.3 mm long. **Infructescence:** not seen.

**Comparison:** *Bulbophyllum crassiusculum* is most similar to *Bulb. unguiculatum* RCHB. F., but differs in the shape of the labellum which in *Bulb. crassiusculum* is sharply curved downwards with a recurving apex, the labellum of *Bulb. unguiculatum* is evenly curved; the edge of the labellum of *Bulb. cras-*

*siusculum* is minutely ciliate, whereas the edge of the labellum of *Bulb. unguiculatum* is entire; the petals of *Bulb. crassiusculum* are lanceolate, whereas the petals of *Bulb. unguiculatum* are obovate to elliptic.

**Habitat and distribution:** *Bulbophyllum crassiusculum* is so far, known only from the province of Bukidnon on the island of Mindanao. It grows as an epiphyte, clinging to branches covered with moss, at elevations of about 1,200 meters above sea level.

**Etymology:** The specific epithet refers to the succulent leaves of this species.



*Bulbophyllum crassiusculum*  
inflorescence

**Bulbophyllum prasinoglossum**  
CABACTULAN, COOTES, M.D. DE LEON and PIMENTEL *sp. nov.*

**Section:** *Brachystachyae* BENTH. and HOOK. F.

**TYPE:** PHILIPPINES, Mindanao, Bukidnon, at 1,200 metres elevation above sea level. **HOLOTYPE:** MDL1803006 (February 17, 2018), **CAHUP073546**

**PLANT DESCRIPTION**

**Growth habit:** upright, sympodial, epiphyte. **Pseudobulbs:** ovoid, curved, clustered, 5 mm to 1 cm long by 4.8 to 6 mm in diameter, covered by old remains of persistent bristly cataphylls about 1 to 2 cm long; unifoliate. **Leaves:** spatulate, apex emarginate, entirely glabrous, 6 mm to 1.5 cm long by 1.5 to 2 mm wide. **Inflores-**



*Bulbophyllum prasinoglossum*  
inflorescence

**cence:** upright, arising from the base of the pseudobulb, cylindrical, racemose, horizontal curved; rachis cylindrical, slightly decurrent, 1.9 cm long by 1.18 mm in diameter; bearing about 13 flowers, opening first at the apex of the rachis, opening successively; flower 4.1 mm across lateral sepals; three non-floral bracts are tubular, about 6.6 mm long and floral bracts oblong, involute, 2.2 mm long by 1 mm wide when flattened, non-scented. **Flower colour:** sepals and petals are greenish yellow with purple lines, labellum bright emerald green. **Pedice and ovary:** short, conical, grooved, glabrous, about 1.5 mm long by 1 mm in diameter at the base of the sepals and petals and 0.5 mm in diameter at the base of the rachis. **Dorsal sepal:** broadly ovate, 3.5 mm long by 3.2 mm wide, concave, apex rounded, base obtuse, 5 nerved, adaxially densely papillate, abaxially glabrous. **Lateral sepals:** broadly obliquely ovate, 2.8 mm long by 2 mm wide, apex rounded,

5 nerved, adaxially densely papillate, abaxially glabrous, flattened below the labellum. **Petals:** ovate, concave, 1.6 mm long by 1 mm wide, apex obtuse, margins serrated, adaxially and abaxially densely papillate, single-nerved. **Labellum:** reniform, fleshy, deeply sulcate, margin erose, anteriorly vesicular papillose, 0.3 mm long by 0.2 mm wide and 0.1 mm thick, with two distinct blunt keels and concavity at the base 0.3 mm in diameter, laying flattened above the lateral sepals. **Column:** short, flattened rectangular, 1 mm long by 1 mm in diameter; steldia whorled tridentate about 0.4 mm long; column foot short trapezoid, 0.4 mm long by 0.6 mm wide, mentum about 0.1 mm long. **Anther cap:** ovate, slightly cucullate, 0.6 mm long by 0.35 mm wide. **Pollinia:** two, paired, ovoid, 0.3 mm long by 0.2 mm wide. **Stigma:** oblong, concave, about 0.3 mm in diameter.

**Comparison:** *Bulbophyllum prasino-*

*glossum* is most similar to *Bulb. submarmoratum* J.J. SM., but differs in the much shorter, upright inflorescence of *Bulb. prasinoglossum*; and the positioning of the ridges on the labellum, which in *Bulb. prasinoglossum* are in a central position, close together, the central ridges on the labellum of *Bulb. submarmoratum* are more widely spaced; the petals of *Bulb. prasinoglossum* are ovate, whereas those of *Bulb. submarmoratum* are triangular.

**Habitat and Distribution:** *Bulbophyllum prasinoglossum* is only known from Bukidnon and Misamis Oriental, on Mindanao. It grows as an epiphyte, in partial shade in mossy dipterocarp forest, at 1,200 metres above sea level.

**Etymology:** The specific epithet refers to the leek-green colour of the labellum.

*Bulbophyllum puberulosum* CABAC-TULAN, COOTES, M.D. DE LEON and PIMENTEL *sp. nov.*

Section: **Stachysanthes** (BLUME) J.J. VERM. and P. O'BYRNE 2008

**TYPE:** PHILIPPINES, Mindanao, Bukidnon, at 1,200 metres elevation above sea level. **HOLOTYPE:** MDL1803007 (March 2, 2018), CAHUP073547

#### PLANT DESCRIPTION

**Growth habit:** upright, sympodial. **Pseudobulbs:** clustered, globose, 1 mm long by 1 mm in diameter, unifoliate, internodes sessile. **Leaves:** petiolate; petiole glabrous, 0.5 mm long by 0.5 mm in diameter, grooved; leaf blade lanceolate, 1.4 to 4.3 cm long by 5 mm to 1.1 cm wide, flattened, apex emarginate, base cuneate, adaxially and abaxially glabrous, margins entire. **Inflorescence:** axillary, upright, racemose, up to 2.5 cm long by 0.60 mm diameter, rachis erect; bearing up to 6 flowers, 4.3 mm across the lateral sepals; flowers resupinate and unscented. **Peduncle:** acicular, 1.9 cm long by 0.50 mm in diameter. **Flower color:** base color is pale yellow, column foot and column are yellow, labellum is yellow with two lateral and opposite purple lines anteriorly. **Floral bracts:** triangular, persistent, gla-



*Bulbophyllum prasinoglossum*  
plant



*Bulbophyllum puberulosum* plant

brous, green, 1.8 mm long by 1.2 mm wide when flattened, 2 involute basal bracts. **Pedical including ovary:** conical, grooved, glabrous, 2 mm long by 0.8 mm in diameter at the base and 1 mm diameter at the base of the sepals. **Dorsal sepal:** ovate, flattened, 3.8 mm long by 1.5 mm wide. **Lateral sepals:** ovate, flattened, 3.5 mm long by 2.3 mm wide, adnate to the column foot. **Petals:** lanceolate, flattened, 1.9 mm long by 0.7 mm wide, puberulous adaxial surface distally. **Labelum:** oblong, curved down, 1.5 mm long by 0.50 mm wide, middle deeply channeled. **Column:** cylindrical, short, 0.3 mm long by 0.2 mm wide; stelia acute-acuminate, about 0.10 mm long;

column foot rectangular, 1 mm long by 0.20 mm wide. **Anther cap:** triangular, cucullate, 0.40 mm long by 0.4 mm wide. **Pollinia:** oblate, two, unequally paired, 0.20 mm in diameter. Stigma: oblong, 0.2 mm in diameter.

**Comparison:** *Bulbophyllum puberulosum* is most similar to *Bulb. crassiusculum* CABACTULAN, COOTES, M.D. DE LEON and PIMENTEL, but differs in the size of the flowers, 6 mm across the lateral sepals in *Bulb. crassiusculum* versus 4.3 mm across the lateral sepals in *Bulb. puberulosum*; the shape of the leaves in *Bulb. crassiusculum* are semi-terete, whereas the leaves of *Bulb. puberulosum* are flat-

tened (this feature has remained constant amongst the flowering plants examined from different localities); and the keel of *Bulb. crassiusculum*, at its column foot is low and bluntly, broadly triangular when viewed in profile, whereas the keel of *Bulb. puberulosum* is more prominent and runs from the centre of the column foot to the column; when viewed from the front it is triangular, raised, and well-demarcated from the column foot.

**Habitat and distribution:** *Bulbophyllum puberulosum* is so far, known only from the province of Bukidnon on the island of Mindanao. It grows as an epiphyte, clinging to branches covered with moss, at elevations of about 1,200 meters above sea level.

**Etymology:** The specific epithet refers to the puberulous adaxial surface of the distal petals.

*Bulbophyllum vinicolor* CABACTULAN, COOTES, AURIGUE, PIMENTEL and M.D. DE LEON sp. nov.

Section: Brachystachyae BENTH. and HOOK.F.

**TYPE:** PHILIPPINES, Mindanao, Bukidnon, at 1,500 metres elevation above sea level. **HOLOTYPE:** MDL1803008 (February 17, 2018), CAHUP073548

#### PLANT DESCRIPTION

**Growth Habit:** upright, sympodial, epiphyte. **Pseudobulbs:** cylindrical, curved, 6 mm high by 3 mm in diameter; internodes sessile, covered by old remains of persistent bristly cataphylls; unifoliate. **Leaves:** petiolate; petiole grooved, up to 1.8 cm long by 0.15 mm in diameter; leaf blade oblong, apex slightly curved, entirely glabrous, up to 3.7 cm long by 1.4 cm wide. **Inflorescences:** cylindrical, racemose, rachis up to 0.5 mm long by 0.2 mm in diameter, arising from the base of the pseudobulb, up to 6 half-opened flowers. **Peduncle:** slender, lenticellate, 1.5 cm long by 0.09 mm in diameter, with 2 conical-tubular non-floral bracts about 4.5 mm long and 1.5 mm in diameter, floral bracts ovate, concave, 3.5 mm long by 1.9 mm wide when flattened. **Flower colour:** sepals, petals, and labellum are



*Bulbophyllum vinicolor* plant

wine red, anther cap white. **Pedicele and ovary:** short, conical, grooved, glabrous, about 1 mm long by 1 mm in diameter at the base of the sepals and petals and 0.2 mm in diameter at the base of the rachis. **Dorsal Sepal:** elliptic-ovate, concave, 5 mm long by 2 mm wide, apex acuminate, 3-nerved, nerves dark wine red, prominently raised abaxially, margins sparsely and minutely papillose, adaxially sparsely minutely papillose, abaxially lenticellate. **Lateral Sepals:** elliptic-ovate, apex acuminate, fused at the base, 4 mm long by 2 mm wide, 5-nerved, nerves purplish, prominently raised abaxially, margin sparsely minutely papillose, adaxially sparsely minutely papillose, abaxially lenticellate. **Petals:** elliptic; up to 1.8 mm long by 0.6 mm wide. single-nerved, slightly raised abaxially; margins sparsely and minutely papillose, adaxially sparsely and minutely papillose and abaxially lenticellate. **Labellum:** ovate, inner surface densely papillose, fleshy,

basally thickened, lower surface glabrous, deeply channeled at the middle with a pair of rectangular ridges on both sides about 1 mm long by 0.3 mm high. **Column:** short, stout, 0.30 mm long by 0.20 mm; stelidia tridentate, about 0.3 mm long. Column foot: rectangular, adnate to the lateral sepals, about 0.4 mm long and 0.5 mm wide. **Anther Cap:** ovate, near flattened, papillose, 0.5 mm long by 0.30 mm wide; mentum: short, about 0.01 mm long. **Pollinia:** two, paired, ovate, around 0.20 mm long by 0.13 mm in diameter. **Fragrance:** unknown. **Infructescence:** not seen.

**Comparison:** *Bulbophyllum vinicolor* is most similar to *Bulb. hyposiphon* from Borneo but differs in the shape of the labellum, which in *Bulb. vinicolor* is distinctly recurved, with a deep channel lengthwise, whereas the labellum of *Bulb. hyposiphon* is gently curved; the shape of the stelidia of *Bulb. vinicolor* are three-toothed at the apex,

whereas the stelidia of *Bulb. hyposiphon* have a single, minute tooth centrally.

**Habitat and Distribution:** *Bulbophyllum vinicolor* is only known from Bukidnon, on Mindanao. It grows as an epiphyte, in partial shade in mossy dipterocarp forest, at 2,000 metres above sea level.

**Etymology:** The specific epithet refers to the wine-red colouration of the blooms.

*Cylindrolobus benmabantai* CABAC-TULAN, COOTES, M.D. De Leon and PIMENTEL sp. nov.

**TYPE:** PHILIPPINES, Mindanao, Bukidnon, at 1,200 metres elevation above sea level. **HOLOTYPE:** MDL1803009 (March 2, 2018), CAHUP073549

#### PLANT DESCRIPTION

**Growth habit:** upright, sympodial. **Pseudobulbs:** cylindrical, up to 1 metre long by 6 mm in diameter. **Leaves:** lanceolate, linear-lanceolate, base acute, apex acute-acuminate, glabrous, entire, fleshy, 11 cm long by 1.5 cm wide. **Inflorescence:** short, axillary, single-flowered, bearing 3 to 5 cucullate flowers in cavities on the pseudobulb, opening at the same time, flowers not opening widely, 1.95 cm wide across the lateral sepals. **Flower color:** petals and sepals are white, sometimes with few purple spots near the base of

*Bulbophyllum vinicolor**Bulbophyllum vinicolor*



*Cylindrilobus benmabantai*

column, labellum white with brownish yellow apical margins and callus is yellow, bracts are yellow, pedicel yellow green but turns purple as it ages. **Pedicel:** short, stout, terete, glabrous, 2 mm long by 1.5 mm in diameter. **Bracts:** 4, narrowly ovate, oblong, flattened, glabrous, fleshy, 1.2 cm long by 5 to 6 mm wide with 1.2 mm intervals between each bract. **Pedicel and ovary:** cylindrical, grooved, glabrous, 1.5 cm long by 1.5 mm in diameter. **Dorsal sepal:** elliptic-ovate, concave, glabrous, 1.3 cm long by 6.3 mm wide. **Lateral sepals:** triangular falcate, slightly concave, glabrous, 1.18 cm long by 8 mm wide. **Petals:** oblong, apex slightly concave, 1.2 cm long by 4.5 mm wide. **Labellum:** trilobed, fleshy, recurved, 5.2 mm long; lateral lobes ovate, 2 mm long by 2.8 mm wide, interiorly densely villose; midlobe obtuse, apically undulate, densely villose, with a single mid rib between the lateral lobes about 1.2 mm long. **Column:** cylindrical, concave and curved, 6.2 mm long by 3.5 mm in diameter; stolidia acuminate, about 1 mm long; column foot trapezoid, densely pubescent, 6 mm long by 3.7 mm wide from the column and 1.5 mm wide from the labellum, with two-ridges in the center about 2.1 mm long. **Stigma:** oblong, concave, 2.1 mm long by 2 mm wide. **Anther cap:** cucullate, obtuse, 1.5 mm long by 1.3 mm wide. **Pollinia:** four, paired, clavate, 1 mm long by 0.3 mm wide. **Infructescence:** not seen.



*Dendrobium deleonii* inflorescence

**Comparison:** *Cylindrolobus benmabantai* is most similar to *Cyl. longissimus* (AMES & QUIS.) W. SUAREZ, but differs in the number of flowers per inflorescence, which in *Cyl. benmabantai* is single-flowered, whereas *Cyl. longissimus* is from two to four-flowered. The lateral lobes of the labellum of *Cyl. benmabantai* are broadly falcate, midlobe ovate, undulate, base contracted in the center of the labellum between the base of the lateral lobes with single triangular flattened keel between the lateral lobes running below the base of the labellum, whereas *Cyl. longissimus* has ovate lateral lobes, midlobe broadly ovate with three ridges run the majority of the length of the labellum.

**Habitat and Distribution:** *Cylindrolobus benmabantai* is so far, known only from the province of Bukidnon on the island of Mindanao. It grows as an epiphyte, clinging to branches covered with moss, at elevations of about 1,200 meters above sea level.

**Etymology:** The specific epithet honors Benjamin MABANTA, in whose collection it was first noted as an undescribed species.

*Dendrobium deleonii* CABACTULAN, COOTES and PIMENTEL **sp. nov.**

Section **Formosae** (BENTHAM and HOOKER F.) HOOKER F.

**TYPE:** PHILIPPINES, Mindanao, Bukidnon, at 1,300 metres elevation above sea level. **HOLOTYPE:** MDL1803010 (March 2, 2018), CAHUP073550

#### PLANT DESCRIPTION

**Growth Habit:** upright, sympodial, forming clumps. **Stems:** cylindrical, conical, grooved, stiff, can reach over 60 cm in height by 2 cm in diameter, roots are white. **Leaves:** are leathery, oblong-lanceolate to linear-lanceolate, 3.5-6.5 cm long and 1-1.9 cm wide, base truncate, apex acute, alternate, overlapping each other, present on the upper half of the stems, bearing



*Dendrobium deleonii* in situ

5 to 40 leaves, internode distance of 1 to 2.5 cm, adaxially and abaxially glabrous, veins flattened, stem turns dark brown as it ages, old leaf sheaths present on the lower portion of stem. **Inflorescence:** short, apical-axillary, entirely glabrous, bearing up to 3 peduncles per stem, carrying up to 3 flowers per raceme, (previously, a specimen with 21 flowers in one cane had been documented by the authors) flower 6 to 8 cm across the lateral sepals. **Flower color:** petals and sepals white. **Peduncle:** terete, white, 3 mm long 3 mm wide. **Pedicel and ovary:** terete, triangular at the base of the sepals, slightly winged, white, 3.5 cm long by 2.5 to 6 mm wide. **Bracts:** short, persistent, acute-acuminate, 1 cm long by 3 mm wide. **DORSAL SEPAL:** fleshy, flattened, slightly revolute, narrowly oblong-ovate, margins entire, base oblong, apex acute-acuminate, revolute, 3.3 to 4.5 cm long by 8 mm wide at the base of the column, 1.18 to 2 cm wide at the center, mid rib present from the base. **Lateral sepals:** fleshy, flattened, slightly revolute, lanceolate falcate, margins entire, 5 to 5.8 cm long from spur to apex, 4.56 to 4.6 cm long from column base, 2.2 to 2.5 cm wide from column to spur, 1.2 to 1.5 cm wide, at the widest point, mid rib present from the base. **Petals:** fleshy, flattened, slightly revolute, broadly obovate, margins entire, base rounded, sparsely papillate at the base, apex abruptly acute-acuminate, 3.5 to 5 cm long by 6.7 mm wide at the base of the column, 2 to 2.9 cm wide at the center. **Labelum:** three lobed, with the lateral lobes upright-curved to curved, surrounding the column; lateral lobes are short, triangular, basally green with purple markings spreading towards the exterior margins, 2.5 to 3.4 cm long by 5 to 9 mm wide, anteriorly minutely papillate, margins entire; midlobe is triangular-ovate when flattened, bilobed and abruptly mucronate at the center at about 1 mm long, sparsely papillose towards the junction of the mid lobe and lateral lobes, purplish lines running towards the greenish base of the column, interior mid lobe slightly raised with ridges where pigmented veins are located, 4.7 to 5.82 cm long from mentum to bilobed center, 1.19 cm wide from the base of the lateral lobes, 2.7 to 5.1 cm wide at the center,

margins undulate and slightly dentate. **Spur:** short, acute, horizontally oriented, 1.7 cm long, apex of the spur fused at distal 3 mm. **Column:** flattened, tridentate, oblongate, 4 mm long by 6 mm wide, two 2 mm stelia that are acute-acuminate, pointing forwards. **COLUMN FOOT:** green, oblongate, concave, from mentum to column it is 2 to 2.2 cm long and 7 to 9 mm wide. **Anther cap:** squarish, concave, minutely papillose, anther margins below the stigma are fimbriate, 3.2 mm long by 3.2 mm wide. **Stigma:** ovate, concave, about 2.5 to 4.5 mm long by 3.9 mm wide. **Pollinia:** paired, linear-lanceolate, falcate, 2.3 mm long by 0.6 mm wide. **Infructescence:** roughly ovoid, somewhat flattened on three sides, winged, 4.5 cm long by 2.0 cm wide.

**Comparison:** *Dendrobium deleonii* is most similar to *Den. sanderae* var. *major* HORT., but differs in the proportionately shorter sidelobes, the shorter and proportionately wider midlobe. The mid lobe of *Den. sanderae* var. *major* is angled downwards at the junction of the sidelobes and midlobe whereas the midlobe of *Den. deleonii* is straight or slightly curved. When similar-sized flowers are viewed ventrally, the throat of *Den. deleonii* is narrower. The leaves of *Den. deleonii* are also proportionately smaller and less curved than those of *Den. sanderae* var. *major*.

**Habitat and Distribution:** *Dendrobium deleonii* is only known from the mossy, cloud rainforest of Bukidnon on Mindanao. It grows as an epiphyte in full sunlight, at elevations of between 1,000 and 1,300 meters above sea level.

**Etymology:** The specific epithet honors Dr. Miguel David De Leon who first photographed the species in situ, thereby and finally establishing, after many years, the provenance of plants sold in Bukidnon markets.

*Dendrochilum charisae* CABACTULAN, COOTES, M.D. DE LEON, and PIMENTEL **sp. nov.**

Subgenus: **Platyclinis** (BENTH.) PFITZER, Section: **Eurybrachium** CARR ex J.J. WOOD, H.A. PEDERSEN, and J.B. COMBER

**TYPE: PHILIPPINES:** Mindanao: Bukidnon, at 1,400 metres elevation above sea level. **HOLOTYPE:** MDL1803011 (March 2, 2018), **CAHUP073551**

#### PLANT DESCRIPTION

**Growth habit:** upright, sympodial. **Pseudobulbs:** clustered, conical oblong, wrinkled, 1.5 to 4 cm long by 4 to 7 mm in diameter, unifoliate, covered with cataphylls extending to petiole base, internodes sessile. **Leaves:** petiolate; petiole 1.5 to 4 cm long by 1 to 2 mm in diameter, grooved; leaf blade lanceolate, leathery, 7 to 11 cm long by 1 to 2 cm wide, apex rounded, base cuneate, adaxially and abaxially glabrous, margins entire, lateral veins parallel, adaxially absent, abaxially flattened, 3-nerved on both sides of the leaf. **Inflorescence:** synanthous, racemose, upright, pendent, up to 13.5 cm long by 1 cm in diameter, rachis semi-arcuate, slightly decurrent, bearing up to 100 flowers, 5 mm across the lateral sepals, flowers first open from the base of the rachis, flowers mildly fragrant like crushed leaves of the fragrant screw pine (*Pandanus* sp.) **Peduncle:** acicular, 6.3 to 9.5 cm long by 0.5 to 0.7 mm in diameter. **Flower colour:** petals and sepals are greenish yellow, and the labellum is greenish yellow with yellow keels. **Bracts:** elliptic-ovate, 11-nerved, 4.5 mm by 2.3 mm wide, persistent, involute, floral bracts about 3.5 mm long by 1.7 mm wide, basal bracts one. **Pedicel and ovary:** cylindrical, grooved, glabrous, 2 mm long by 0.40 mm in diameter at the base and 0.45 mm in diameter at the base of sepals. **Dorsal sepal:** lanceolate, 4 mm long by 1.3 mm wide, apex apiculate, slightly revolute, single-nerved. **Lateral sepals:** broadly falcate, 4.5 mm long by 1.3 mm wide, apex apiculate, flattened parallel to the labellum, single-nerved. **Petals:** spatulate, slightly revolute, 3.3 mm long by 1.3 mm wide, 3-nerved. **Labellum:** broadly ovate, outer half bent downwards, 2.5 mm long by 1.6 mm wide, 2 basal keels about 0.15 mm long by 0.09 mm high. **Column:** short, unguiculate, 1.3 mm long by 0.65 mm in wide, column hood, flattened dentate, stelia broadly falcate, about 0.5 mm long. **Anther cap:** cordate, cucullate, about 0.3 mm in diameter. **Stigma:** oblong, concave, about 0.3 mm in



*Dendrochilum charisae* flowers



*Dendrochilum charisae*

diameter. **Pollinia:** two, paired, about 0.15 mm long by 0.1 mm wide, clavate.

**Comparison:** *Dendrochilum charisae* is most similar to *Ddc. mearnsii* AMES, but differs in the shape of the labellum, which in *Ddc. charisae* is broadly ovate, whereas the labellum of *Ddc. mearnsii* is cordate; the petals of *Ddc. charisae* are slightly revolute, whereas the petals of *Ddc. mearnsii* are flat; the flowers on the rachis of *Ddc. charisae* are less noticeably spirally arranged, whereas those of *Ddc. mearnsii* are distinctly spiralling.

**Habitat and Distribution:** *Dendrochilum charisae* is found in shady, mossy dipterocarp forests in Bukidnon Province, at 1,300 metres above sea level.

**Etymology:** The specific epithet honors Charisma A. HAMPEL, orchid collector, enthusiast and nurserywoman.

***Dendrochilum derekcabactulanii***  
M.D. DE LEON, COOTES and PIMENTEL *sp. nov.*

Subgenus: **Platyclinis** (BENTH.) PFITZER, Section: **Eurybrachium** CARR ex J.J. WOOD, H.A. PEDERSEN, and J.B. COMBER

**TYPE: PHILIPPINES:** Mindanao: Bukidnon, at 1,400 metres elevation above sea level. **HOLOTYPE:** MDL1803012 (March 2, 2018), **CAHUP073552**

**PLANT DESCRIPTION**

**Growth habit:** upright, sympodial. **Pseudobulbs:** clustered, conical to ovate, wrinkled, 1.8 to 3 cm long by 7.2 mm to 1.1 cm in diameter, unifoliate, covered with cataphylls extending to the petiole base, internodes sessile. **Leaves:** petiolate; petiole green, 3.8 cm long by 1.5 mm in diameter, grooved; leaf blade lanceolate, 14.5 to 25 cm long by 2.1 to 2.9 cm wide, apex emarginated, base cuneate, adaxially and abaxially glabrous, margins entire, lateral veins parallel, adaxially absent, abaxially flattened, 2-nerved on both sides of the leaf, leathery. **Inflorescence:** synanthous, cylindrical, racemose, upright, pendent, up to 11 cm



*Dendrochilum derekcabactulanii*

long by 2 mm in diameter, rachis spiral, decurrent, bearing up to 42 non-resupinate flowers, 6 mm across the lateral sepals, flowers first open from the base of the rachis, flowers mildly fragrant. **Peduncle:** acicular, 27 cm long by 1 mm in diameter. **Flower colour:** petals, sepals and labellum are orange. **Bracts:** ovate, 13-nerved, persistent, involute, floral bracts about 4 mm long by 2.7 mm wide, basal bracts one, 4 mm by 3 mm wide. **Pedicel and ovary:** cylindrical, grooved, glabrous, 4.5 mm long by 0.90 mm in diameter. **Dorsal sepal:** broadly ovate, 6 mm long by 2 mm wide, apex acuminate, revolute, 3-nerved. **Lateral sepals:** narrowly ovate, 5.3 mm long by 3.8 mm wide, apex acuminate, revolute, single-nerved. **Petals:** broadly ovate, apex acuminate, 5 mm long by 2.8 mm wide, 3-nerved. **Labellum:** broadly ovate, outer half bent upwards, 3.7 mm long by 2.8 mm wide, adaxially and abaxially grooved, 2 basal keels about 1 mm long. **Column:** short, rounded, concave, 1 mm long by 1 mm in width, stolidia oblong, about 0.5 mm long by 0.3 mm wide. **Anther cap:** narrowly ovate, slightly cucullate, 0.8 mm long by 0.4 mm in diameter. **Stigma:** lunate, concave, about 0.8 mm in diameter. **Pollinia:** two, paired, clavate, about 0.85 mm long by 0.09 mm wide. **Infructescence:** not seen.

**Comparison:** *Dendrochilum derekcabactulanii* is most similar to *Ddc. hampelii* SULISTYO, GRAVENDEEL, R. BOOS, and COOTES but differs in the shape of the apices of the floral segments, which in *Ddc. derekcabactulanii* are acute, whereas those of *Ddc. hampelii* are rounded; the flowers of *Ddc. derekcabactulanii* are considerably smaller at 6 mm across the lateral sepals, whereas those of *Ddc. hampelii* are more than 1.3 cm across the lateral sepals.

**Habitat and Distribution:** *Dendrochilum derekcabactulanii* is found in shady, mossy dipterocarp forests in Bukidnon province on Mindanao, at 1,300 metres above sea level.

**Etymology:** The specific epithet honours Derek D. CABACTULAN, Philippine native flora enthusiast and researcher.

***Dendrochilum kennedyi*** M.D. DE LEON, COOTES, CABACTULAN and PIMENTEL **sp. nov.**

Subgenus: **Platyclinis** Section: **Platyclinis** (BENTH.) PFITZER

**TYPE:** PHILIPPINES, Mindanao, Bukidnon, 1,200 metres elevation above sea level. **HOLOTYPE:** MDL1803015 (March 2, 2018), CAHUP073555

#### PLANT DESCRIPTION

**Growth habit:** upright; sympodial. **Pseudobulbs:** clustered, conical oblong, 1.5–3.22 cm long by 4 to 7.5 mm in diameter, unifoliate, covered with 3 cataphylls about 5 cm long, extending to the petiole base, internodes 2.5 mm long by 2 mm in diameter covered with old bristled sheaths. **Leaves:** petiolate; petiole brown, glabrous, 5 to 6 cm long by 1.5 mm in diameter; leaf blade linear, 20 to 24 cm long by 5 mm wide, apex acute-acuminate, base acute, adaxially and abaxially glabrous, margins thickened, 2-nerved on both sides of the leaf, slightly

*Dendrochilum kennedyi*  
in situ



raised from each side of the leaf, middle is sulcate, convex, leathery. **Inflorescence:** synanthous, upright to semi-pendulous, up to 30 cm long by 3 cm diameter, rachis erect; bearing up to 7 flowers, 1.2 cm across the lateral sepals; flowers resupinate; unscented. **Peduncle:** acicular, 27 cm long by 1 mm in diameter. **Flower color:** base color is white with maroon markings on each side of petals and sepals, labellum is entirely maroon, column foot is saffron yellow, and column is white. **Floral bracts:** lanceolate, 9-nerved, persistent, glabrous, dull red, 5 mm long by 1.8 mm wide when flattened, 6 involute basal bracts. **Pedicel including ovary:** conical, grooved, glabrous, 4 mm long by 0.5 mm in diameter at the base and 1 mm diameter at the base of the sepals. **Dorsal sepal:** elliptic-ovate, 6 mm long by 2.5 mm wide, slightly involute, single-nerved. **Lateral sepals:** ovate, 6.5 mm long by 3 mm wide, slightly involute, single-nerved. **Petals:** lanceolate, 4.5 mm long by 2.2 mm wide, slightly involute, single-nerved. **Labellum:** hastate-cordate, curved downwards, 5.4 mm long by 2.5 mm wide, bilaterally, 2 raised keels in the middle, 0.50 mm long by 0.30 mm high, middle deeply channeled; sidelobes rounded flattened laterally, 1 mm long by 1 mm wide. **Column:** rectangular curved, 4.5 mm long by 0.5 mm wide basally and 1 mm apically; column hood rounded; stielidia falcate, about 2.3 mm long; column foot rectangular, 2.5 mm long by 0.50 mm wide; rostellum oblong, about 0.60 mm long by 0.3 mm wide. **Anther cap:** cucullate-cordate, 0.75 mm long by 1 mm wide, minutely carunculate at the center. **Pollinia:** two, paired, clavate, 0.40 mm long by 0.25 mm wide, stipe 0.3 mm long. **Stigma:** oblong, 0.6 mm long by 0.3 mm wide. **Infructescence:** not seen.

**Comparison:** A thorough search of the relevant literature regarding the genus *Dendrochilum*, from the Philippines and neighbouring countries, has not revealed any close relative to this amazing species. The large flowers, with the few-flowered inflorescence are an unusual combination for members of this genus. Several images of this species were sent to Henrik . PEDERSEN, a specialist in the genus

*Dendrochilum*, and his response was "What a marvelous thing - and, no, I have definitely never seen anything like it before!"

**Habitat and Distribution:** *Dendrochilum kennedyi* was first recorded from Surigao del Norte, at 300 metres above sea level, growing on somewhat dry substrate in humid and windy conditions close to a river, in bright sun as an epiphyte 0.5 to 2 meters above ground at the point of branching of tree limbs and as a lithophyte in rock crevices or depressions; in both cases, the surroundings are somewhat dry, but the roots are covered with leaf litter. Recently, the species has also been found in Bukidnon.

**Etymology:** The authors are delighted to name this outstanding and unique species in honour of ornithologist, book author and conservationist Robert S. KENNEDY. His many authoritative works on Philippine birds, including the Birds of the Philippines, remain useful resources for researchers and naturalists. To this day, he continues to raise funds to support various conservation efforts in the Philippines and the United States.

*Dendrochilum perrineae* CABACTULAN, COOTES, M.D. DE LEON, PIMENTEL and BINAYAO sp. nov.

Subgenus: **Platyclinis** Section: **Eurybrachium** CARR ex J.J. WOOD, H.A. PEDERSEN, and J.B. COMBER

**TYPE:** PHILIPPINES, Mindanao, Bukidnon, 1,500 metres elevation above sea level. **HOLOTYPE:** MDL1803014 (March 2, 2018), CAHUP073554

## PLANT DESCRIPTION

**Growth habit:** upright, sympodial. **Pseudobulbs:** clustered, conical, oblong, wrinkled, 8 to 9.5 mm long by 5 to 9 mm in diameter, unifoliate, covered with 3 cataphylls about 13 cm long, extending to the petiole base, internodes sessile. **Leaves:** petiolate, petiole green, glabrous, 3 to 3.5 mm long by 1 to 1.3 mm in diameter, grooved; leaf blade lanceolate, 1.85 to 3.8 cm long by 4.5 to 8 mm wide, apex emarginate, base acute, adaxially and abaxially glabrous, margins entire, single nerved on both sides of the leaf, slightly plicate, leathery. **Inflorescence:** synanthous, upright, racemose, up to 2 cm long by 7.5 mm in diameter, rachis erect, grooved; bearing up to 17 flowers, 5 mm wide across the lateral sepals; flowers non-resupinate; flowers unscented. **Peduncle:** acicular, 3 to 5 cm long by 0.30 mm in diameter. **Flower color:** base color is red orange, labellum, column foot and column are entirely dark red. **Floral bracts:** lunate, 18-nerved, persistent, glabrous, green, 2.2 mm long by 3 mm wide when flattened, 2 involute basal bracts. **Pedicel including ovary:** conical, grooved, glabrous, 0.5 mm long by 0.2 mm in diameter at the base and 0.5 mm diameter at the base of the sepals. **Dorsal sepal:** ovate, 2.2 mm long by 1.2 mm wide, slightly curved inwards, single-nerved. **Lateral sepals:** ovate, 2.3 mm long by 1.3 mm wide, slightly undulate, single-nerved. **Petals:** ovate, 4.5 mm long by 2.2 mm wide, flattened, single-nerved. **Labellum:** broadly ovate, curved down, 1.7 mm long by 1 mm wide, middle deeply channeled; sidelobes ovate flattened laterally, 0.85 mm long by 0.3 mm wide. **Column:** cylindrical, 0.9 mm long



*Dendrochilum perrineae*

Subgenus: **Platyclinis** (BENTH.) PFITZER, Section: **Eurybrachium** CARR ex J.J. WOOD, H.A. PEDERSEN, and J.B. COMBER

**TYPE: PHILIPPINES:** Mindanao: Bukidnon, 1,300 metres elevation above sea level. **HOLOTYPE:** MDL1803013 (March 2, 2018), CAHUPo73553

#### PLANT DESCRIPTION

**Growth habit:** upright sympodial. **Pseudobulbs:** clustered, conical oblong, 1.66 cm long by 2.2 mm in diameter, unifoliate, covered with 3 cataphylls extending to the petiole base, about 25 mm long, internodes sessile. **Leaves:** sessile, leathery, leaf blade linear, 6.4 to 10.2 cm long by 1.5 to 2 mm wide, apex acute-acuminate, base acute, slightly plicate, adaxially and abaxially glabrous, margins thickened, 2-nerved on both sides of the leaf. **Inflorescence:** synanthous, upright, slightly arching, up to 2.8 cm long by 0.5 mm diameter, rachis slightly decurrent; bearing up to 6 flowers,

*Dendrochilum perrineae*  
inflorescence

by 0.7 mm wide; stelidia acute-acuminate, about 0.15 mm long; column foot rectangular, 0.20 mm long by 0.20 mm wide. **Anther cap:** triangular, cucullate, 0.3 mm long by 0.2 mm wide. Pollinia: two, paired, 0.20 mm long by 0.1 mm wide, clavate. Stigma: oblong, 0.2 mm in diameter. **Infructescence:** ovoid, slightly grooved, glabrous, 6 mm long by 5 mm in diameter.

**Comparison:** *Dendrochilum perrineae* is most similar to *Ddc. apoense* T. HASHIMOTO but differs in the shape of the petals which in *Ddc. apoense* are narrowly oblong, whereas the petals of *Ddc. perrineae* are ovate; the shape of the apex of the column differs considerably, in *Ddc. apoense* there are two outer stelidia with the middle portion being much shorter and distinctly toothed, whereas the shape of the apex of the column of *Ddc. perrineae* has two distinct outer stelidia but the middle portion is a single semi-circular structure.

**Habitat and distribution:** *Dendrochilum perrineae* is so far, known only from the province of Bukidnon on the island of Mindanao. It grows as an epiphyte, clinging to branches covered with moss, at elevations of about 1,500 meters above sea level.

**Etymology:** The specific epithet honours Renee ARANETA-PERRINE, an advocate for the welfare of the indigenous tribes of Bukidnon and the pres-

ervation of their culture and natural resources.

*Dendrochilum perrinei* CABACTULAN, COOTES, M.D. DE LEON, PIMENTEL and BINAYAO **sp. nov.**



*Dendrochilum perrinei*

1.3 cm across the lateral sepals; flowers resupinate; flower fragrance unknown. **Peduncle:** acicular, 7 cm long by 0.1 mm in diameter. **Flower color:** petals and sepals are yellow, labellum is entirely maroon with yellow midline, saffron yellow markings in the base of column foot, stelidia and column hood. **Bracts:** lanceolate, involute, dull red, three non-floral bracts, lanceolate, 9-nerved, persistent, glabrous, 3 mm long by 2 mm wide when flattened, floral bracts 6 mm long by 0.15 mm wide when flattened. **Pedicel including ovary:** cylindrical, grooved, glabrous, 2.2 mm long by 1 mm in diameter. **Dorsal sepal:** narrowly ovate, 9 mm long by 2.9 mm wide, curved inwards, single-nerved. **Lateral sepals:** narrowly ovate, 8 mm long by 3 mm wide, curved inwards, single-nerved. **Petals:** ovate, 7.3 mm long by 2.8 mm wide, curved inwards, single-nerved. **Labellum:** panduriform, slightly curved down, 5 mm long by 3.9 mm wide, 2 raised keels in the middle, 2 mm long by 0.20 mm high, middle deeply channeled; sidelobes ovate flattened laterally, 1 mm long by 1 mm wide. **Column:** rectangular curved, 3 mm long by 0.3 mm wide basally and 0.4 mm apically; column hood rounded; stelidia above the column foot, narrowly falcate, about 1.3 mm long; column foot rectangular, 0.4 mm by 0.40 mm. **Anther cap:** ovate, slightly cucullate, 0.4 mm long by 0.4 mm wide. **Pollinia:** two, paired, 0.35 mm long by 0.1 mm wide, clavate. **Stigma:** oblong, 0.5 mm long by 0.3 mm wide. **Infructescence:** not seen.

**Comparison:** *Dendrochilum perrinei*, florally, is most similar to *Ddc. pangasinanense* AMES, but differs in the shape of the labellum, which in *Ddc. perrinei* is panduriform, whereas the labellum of *Ddc. pangasinanense* is elliptic, with obliquely sub-triangular side lobes; the leaves of *Ddc. perrinei* are linear to about 10 cm long, whereas the leaves of *Ddc. pangasinanense* are lanceolate to oblong and about 20 cm long.

**Habitat and Distribution:** Found in shady, mossy dipterocarp forests in Bukidnon Province, at 1,300 metres above sea level.

**Etymology:** The specific epithet honours John Paul PERRINE, agriculturist and biodiversity conservation advocate on whose landholdings the species was found.

*Epicrianthes charishampeliae* CABAC-TULAN, M.D. DE LEON, COOTES, and PIMENTEL sp. nov.

**TYPE:** PHILIPPINES, Mindanao, Bukidnon, 1,400 metres elevation above sea level. **HOLOTYPE:** MDL1803016 (February 17, 2018), CAHUP073556

**PLANT DESCRIPTION**

**Rhizomes:** cylindrical, 7.5 mm to 1.1 cm long, pendent, branching, completely covered with dried cataphylls, carrying the pseudobulbs at 1.5 cm intervals. **Pseudobulbs:** clustered, oblong, four angled, slightly compressed, 7.5 mm to 1.3 cm long by 4 to 8 mm in diameter. **Leaves:** elliptic-ovate, concave, sessile, leathery green, 1.8 to 4 cm long by 1.3 to 2 cm wide. **Inflorescences:** axillary, one to two flowers opening at a time. **Peduncle:** short terete, 6.0 mm long by 0.8 mm in diameter, covered by two tubular sheaths about 3 mm long. **Floral bracts:** short, about 1 mm long by 0.80 mm wide. **Pedicel and ovary:** cylindrically grooved, 6 mm long by 0.8 mm in diameter from the rachis and 1 mm in diameter from the base of sepals. **Flower colour:** yellow with barred or spotted markings of reddish-purple; petal appendages dark green; labellum deep purple. **Sepals:** triangular-ovate, revolute, 10 mm long by 3.7 mm wide, **Petals:** narrow, crescentic, with equally 5-paired, dark green mobile appendages attached by a fila-



*Epicrianthes charishampeliae* flower

ment to the base; appendages linear, minutely papillate, about 6 mm long by 0.3 mm wide. **Labellum:** mobile, conical, apically barbate, basally and laterally papillose, ellipsoid to ovoid vesicles, 4.2 mm long by 2 mm wide, adaxially with two low keels that run half the length. **Column:** cylindrical, short, 1.5 mm long by 0.80 mm in diameter, stelidia acuminate, 3 mm long, column foot rectangular, 1 mm long by 0.50 mm wide. **Anther cap:** unguiculate, concave, 0.80 mm in diameter. **Stigma:** oblong, concave, c. 0.5 in diameter. **Pollinia:** unequally paired, oblong, 0.60 mm long by 0.40 mm in diameter. **Fruit:** ovoid, grooved, 22 mm long by 9 mm in diameter.

**Comparison:** *Epicrianthes charishampeliae* is most similar to *Bulbophyllum stenomeris* J.J. Verm. and O'Byrne, from section *Epicrianthes*, but differs in the ornamentation of the labellum, which in *Epicr. charishampeliae* is vesiculate, whereas the labellum of *Bulb. stenomeris* is almost glabrous; and the column of *Epicr. char-*



*Epicrianthes charishampeliae*



ishampeliae which bears a single, downward-pointing tooth, whereas the column of *Bulb. stenomeris* bears two, downward-pointing teeth.

**Habitat and distribution:** *Epicriantes charishampeliae* is so far, known only from the province of Bukidnon on the island of Mindanao. It grows as an epiphyte, clinging to branches covered with moss, at elevations of about 1,400 meters above sea level.

**Etymology:** The specific epithet honors Charis A. HAMPEL, orchid collector, enthusiast, and nurserywoman.

*Epicriantes jimcootesii* CABACTULAN, M.D. DE LEON and PIMENTEL sp. nov.

**TYPE:** PHILIPPINES, Mindanao, Bukidnon, 1,300 metres elevation above sea level. **HOLOTYPE:** MDL1803017 (February 17, 2018), **CAHUP073557**

#### PLANT DESCRIPTION

**Growth habit:** pendulous, sympodial, up to 80 cm long, branching, roots mainly at the base; rhizomes covered with persistent papery sheaths, rhizomes up to 2.5 mm in diameter; carrying pseudobulbs at 1.2 cm intervals. **Pseudobulbs:** four angled, slightly flattened, oblong-ovate, 1.5 cm long by 8 mm wide, unifoliate, desiccated, brown with purplish tinge, upper surface grooved basally. **Leaves:** ovate to oblong; 5.1 cm long by 2.4 cm wide when flattened, edges involute, making the appearance of being tubular; distinctly grooved on the upper surface; apices obtuse, leathery, underside dark green, upper surface purplish brown. **Inflorescence:** appearing from the base of the pseudobulbs, bearing 2 blooms at intervals, 1 cm in diameter. **Pedicel and ovary:** 8 mm long by 1.3 mm in diameter, grooved. Only a single flower appears. **Flower colour:** sepals yellow with minute red maculations, petals yellow, appendages yellow, column base dark red with yellow, labellum yellow with reddish blush along the base with black papillose edges. **Sepals:** ovate becoming acute, edges involute at the apices, 9 mm long by 4.5 mm wide; surface glabrous. **Petals:** minute, oblong, 1 mm long, bearing 9 highly mobile append-



*Epicriantes jimcootesii*

ages; appendages 5.5 mm long by 2 mm wide, surface papillose. **Labelum:** sagittate, 2.7 mm long by 2 mm wide; midlobe oblong, anterior edges densely papillose, surface minutely papillose, two basal ridges; underside of the labellum grooved. **Column:** cylindrical, 2 mm long by 1 mm in diameter, edges minutely dentate; steldia paired, triangular; column foot rectangular, 1 mm long by 0.7 mm wide; mentum about 0.2 mm long by 0.7 mm wide. **Anther cap:** cordate-truncate, concave, anterior edges involute, 1.2 mm long by 0.7 mm wide. **Stigma:** oblong, about 0.2 mm by 0.7 mm wide. **Pollinia:** rounded ovate, two unequally paired, 0.70 mm in diameter. **Fruit:** ovoid, deeply grooved, 4 cm long by 10 mm in diameter.

**Comparison:** *Epicriantes jimcootesii* is most similar to *Epicriantes davidii*, but differs in the number of appendages on the petals, which in *Epicriantes jimcootesii* number up to 10 on each side, whereas the petal appendages of *Epi-*

*cr. davidii* number up to 6 only on each side; the labellum of *Epicriantes jimcootesii* is heavily papillose on its sides and underside, whereas the labellum of *Epicriantes davidii* is glabrous.

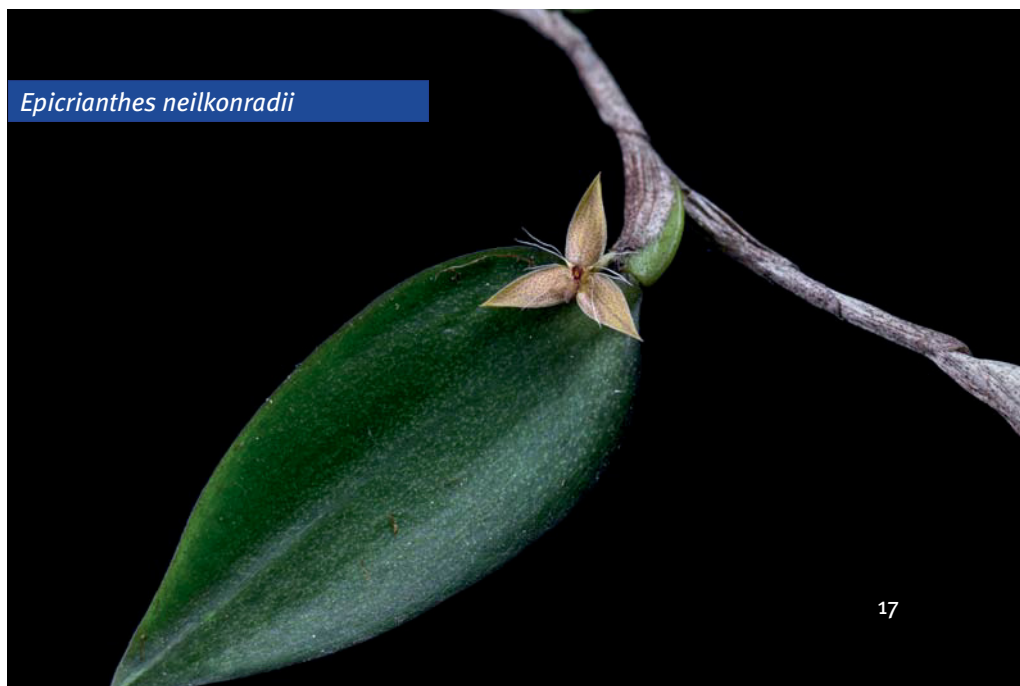
**Habitat and distribution:** *Epicriantes jimcootesii* is so far, known only from the province of Bukidnon on the island of Mindanao. It grows as an epiphyte, clinging to branches covered with moss, at elevations of about 1,300 meters above sea level.

**Etymology:** The specific epithet honors Jim Cootes, author, expert and lover of Philippine orchid species.

*Epicriantes neilkonradii* CABACTULAN, COOTES, M.D. DE LEON and PIMENTEL sp. nov.

**TYPE:** PHILIPPINES, Mindanao, Bukidnon, 1,300 metres elevation above sea level. **HOLOTYPE:** MDL1803018 (February 17, 2018), **CAHUP073558**

*Epicriantes neilkonradii*



**PLANT DESCRIPTION**

**Growth Habit:** Pendulous, sympodial, glabrous, 80 cm long, branching, roots mainly at the base; rhizomes covered with persistent papery cataphylls, carrying pseudobulbs at 2 to 2.6 cm intervals. **Rhizome:** 1.8 to 2 mm in diameter. **Pseudobulbs:** ellipsoid to obovoid, four angled, slightly flattened, curved, 8 mm to 1.1 cm long by 4 to 5 mm in diameter, unifoliate, appearing desiccated. **Leaves:** ovate-lanceolate, 4.1 to 5.3 cm long by 1.9 to 2.3 cm wide, concave, leathery, sessile, glabrous, median adaxially grooved, apex acute, base obtuse, adaxially purplish green, abaxially green. **Inflorescence:** appearing from the base of the pseudobulbs, sessile, bearing 1 to 3 blooms at intervals, with only 1 flower opening at a time. **Pedicel and ovary:** cylindrically longitudinally grooved, 5 to 6 mm long by 0.80 mm in diameter from the base of the rachis and 1 mm diameter from the base of sepals. **Flower color:** sepals and labellum yellow with spreading minute purple spots, petals and its appendages yellow, column base purple. **Sepals:** ovate-lanceolate, 8 mm long by 3.5 mm wide, spreading, glabrous, 5 to 7 veined, margins become involute as it ages. **Petals:** lyriform, stout, with 3 long central appendages about 5.8 to 6 mm long by 0.15 to 0.2 mm wide, and 2 short lateral appendages about 0.45 to 0.5 mm long by 0.1 mm wide, spreading at the sepals, mobile. **Labellum:** panduriform, 2.5 mm long by 1.2 mm wide, slightly recurved, two basal rounded wings in the basal half, abaxially grooved, lateral margins and median abaxial papillose-papillate. **Column:** short, stout, bearing short triangular stelia about 1.5 by 1.3 mm, column foot short c. 0.8 by 0.4 mm, mentum about 0.2 mm; anther cap panduriform, cucullate, 7.8 to 8 by 6.8 to 7 mm. **Stigma:** oblong, about 0.7 by 0.5 mm, concave. **Pollinia:** unequally paired, oblate-ovate, 6.9 to 7 by 3.8 to 4 mm.

**Comparison:** *Epicriantes neilkonradii* is most similar to *Epicr. aquinoi* COOTES, M.D. DE LEON and NAIVE, but differs in surface structure of the labellum which in *Epicr. neilkonradii* is vesicular to papillose, whereas the labellum surface of *Epicr. aquinoi* is glabrous; the petal appendages of *Epicr.*

*neilkonradii* vary from three to five in number (the outer two can be vestigial), whereas the petal appendages of *Epicr. aquinoi* are always three in number; and the leaves of *Epicr. neilkonradii* are lanceolate and purplish dark green, whilst those of *Epicr. aquinoi* are ovate to ovate-cordate and plain green to bright green.

**Habitat and distribution:** *Epicriantes neilkonradii* is so far, known only from the province of Bukidnon on the island of Mindanao. It grows as an epiphyte, clinging to branches covered with moss, at elevations of about 1,300 meters above sea level.

**Etymology:** The specific epithet honors Neil Konrad BINAYAO III, a conservationist, wildlife photographer, and a native of Bukidnon.

*Robiquetia micramphora* CABACTULAN, COOTES, PIMENTEL and M.D. DE LEON sp. nov.

**TYPE:** PHILIPPINES, Mindanao, Bukidnon, 900 to 1,000 metres elevation above sea level. **HOLOTYPE:** MDL1803020 (January 20, 2018), CAHUP073560

**PLANT DESCRIPTION**

**Growth habit:** upright to semi-pendulous, monopodial. **Stems:** up to 60 cm long by 1.3 cm wide, flattened, towards the apex. **Leaves:** sessile, up to 25 cm long by 3.5 cm wide leathery, linear-lanceolate, and unequally bilobed at the apex, blunt, occasionally minutely dentate, margins flattened to undulate, sparsely stellate

at young age and glabrescent as it ages, midvein adaxially depressed and abaxially raised. **Inflorescences:** axillary, branching, pendulous, up to 30 cm long, bearing up to 150 small flowers with sparsely stellate hairs from the outer surface, flowers 7 mm in diameter. **Peduncle:** terete at the base, grooved towards the flowers, 4 to 9 cm long by 2 mm in diameter, sparsely stellate at young age and glabrescent as it matures. **Bracts:** three non-floral bracts, ovate, persistent, compressed to the rachis, 3 to 6 mm long by 3 mm wide; and floral bracts erect, persistent, acute-acuminate, 0.7 mm long by 0.4 mm wide. **Flower colour:** yellow with uneven rounded purplish spots on the petals and sepals. **Dorsal Sepal:** ovate, concave, up to 3.4 mm long by 2 mm wide. **Petals:** broadly ovate, 3 mm long by 2 mm wide. **Lateral Sepals:** elliptic-ovate, concave, 4.1 mm long by 2.3 mm wide. **Labellum:** three lobed; side lobes erect, short, squarish 0.7 mm long by 0.7 mm wide; mid lobes triangular, fleshy, 0.5 mm long by 0.5 mm wide; spur ventricose, cylindrical, up to 6 mm long by 1.5 mm in diameter. **Pedicel with ovary:** cylindrical, grooved, 8 mm long by 1 mm in diameter. **Column:** squarish, 1.8 mm long by 1.5 mm in diameter; rostellum linear, 0.7 mm long by 0.3 mm wide. **Stigma:** oblong, about 1 mm in diameter. **Anther Cap:** ovate, concave, acuminate at the apex, 0.7 mm long by 1 mm in diameter. **Pollinia:** 2 unequally paired, discoid, 0.4 mm in diameter; stipe linear-lanceolate, 1.5 mm long by 0.3 mm wide; viscidium oblong, 0.15 long by 0.25 wide.



*Robiquetia micramphora*

**Comparison:** *Robiquetia micramphora* is most similar to *Rob. compressa* (LINDLEY) SCHLECHTER, but they can be separated by characters of the spur, which in *Rob. micramphora* is almost straight and shorter (6 mm long); the spur of *Rob. compressa* is longer (1 cm long) and curves forward. The side lobes of *Rob. micramphora* are equilaterally triangular (.7 mm high by .7 mm wide) with a rounded apex, whereas the side lobes of *Rob. compressa* are also triangular, they are much more prominent, and considerably larger (1.1 mm long by 1.1 mm wide).

**Habitat and distribution:** *Robiquetia micramphora* is found in the province of Bukidnon where it grows as an epiphyte, leaves, stem and roots are often covered by moss or in cloud mossy rainforest at altitudes of 900 to 1,000 meters above sea level.

**Etymology:** The specific epithet refers to the shape of the whole labellum including the spur which resembles a small jar or bottle.

*Thrixspermum bellamabantaiae* CABACTULAN, COOTES and PIMENTEL sp. nov.

Section: *Dendrocolla* (BLUME) J.J. SM.

**TYPE:** PHILIPPINES, Mindanao, Bukidnon, at about 1,200 metres eleva-

*Thrixspermum bellamabantaiae*  
Benjamin MABANTA



*Thrixspermum bellamabantaiae*  
Benjamin MABANTA



tion above sea level. **HOLOTYPE:** MDL1803021 (March 3, 2018), CAHUP073561

**PLANT DESCRIPTION**

**Growth Habit:** upright to semi-pendulous, monopodial, epiphyte. **Stem:** flattened, glabrous, 3 mm wide. **Leaves:** lanceolate, 3 to 8 cm long by 1 to 1.6 cm wide; sessile, apex emarginated, cataphylls are 7 mm long by 3 mm wide, covering the stem. **Inflorescence:** cylindrical, upright, axillary, bearing at each internode successive short-lived blooms, with up to 4 flowers open on any one occasion; rachis up to 1.5 cm long by 4 mm in diameter; flowers up to 18 mm across the lateral sepals. **Bracts:** floral bracts are aristate, whorled, stout, glabrous, 6 mm long by 0.50 mm wide; non-floral bracts three, triangular, about 0.50 mm long by 0.10 mm wide. **Flower col-**

**our:** petals and sepals are white with large prominent rounded red spots interiorly except near the apex; labellum is white with large prominent rounded red spots interiorly; midlobe is white.

**Peduncle:** terete, erect, glabrous, 11.7 cm long by 1 mm in diameter. **Pedicele and ovary:** cylindrical, glabrous, grooved, 7 mm long by 0.68 mm in diameter. **Dorsal Sepal:** broadly ovate, 7.5 mm long by 3 mm wide, glabrous, concave, margins entire. **Lateral Sepals:** broadly ovate, 7.5 mm long by 3.7 mm wide, glabrous, concave, margins entire. **Petals:** spatulate, 6.5 mm long by 2.3 mm wide, glabrous, concave, margins entire. **Labellum:** three lobed, saccate; side lobes are triangular-ovate, upright, facing inwards, 4.5 mm long by 1 mm wide, densely pubescent, at the anterior margins; midlobe rounded, 2 mm long by 4 mm wide, densely pubescent at the apical margins, paired rounded callus from the center of the base of the midlobe. **Column:** slightly flattened, oblong, 2.3 mm long by 1 mm in diameter. **Column foot:** rectangular, glabrous, 2 mm long by 1.5 mm wide. **Anther Cap:** subcordate, cucullate, 1 mm in diameter. **Stigma:** oblong, 0.40 mm long by 0.20 mm wide. **Pollinia:** oblong, unequally paired, 0.7 mm long by 0.30 mm wide. **Infructescence:** not seen.

**Comparison:** *Thrixspermum bellamabantaiae* is most similar to *Thrix. pulchrum* CARR, from Peninsular Malaysia and Borneo, but differs in the more angular side lobes of the labellum of *Thrix. bellamabantaiae* versus the rounded side lobes of *Thrix. pulchrum*; and the densely pubescent side lobes and mid lobe of the labellum of *Thrix. bellamabantaiae*, whereas the side lobes and mid lobe of the labellum of *Thrix. pulchrum* are much more sparsely pubescent. The trichomes of *Thrix. bellamabantaiae* are parallel for their whole length, whereas the trichomes of *Thrix. pulchrum* are club-shaped.

**Habitat and distribution:** *Thrixspermum bellamabantaiae* is so far, known only from the province of Bukidnon on the island of Mindanao. It grows as an epiphyte, clinging to branches covered with moss, at elevations of about 1,200 meters above sea level.

**Etymology:** The specific epithet honours Bella MABANTA, the mother of Benjamin MABANTA, in whose collection the species was first noted to be an undescribed species.

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