

## NOTES ON SOME MALESIAN ORCHIDACEAE VIII

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**Abstract.** Continuing herbarium and literature studies reveal the need for further transfers in three genera and the need to raise one taxon from subspecific status to species level. *Liparis brachystele* is found to be a synonym of *Cestichis pullei*. The new names are *Appendicula thymifolia*, *Cestichis affinis*, *C. carinatifolia*, *C. glaucescens*, *C. misoolensis*, *C. tunensis*, *Crepidium ventilabrum*, and *Dendrobium yudistirae*.

**Keywords:** *Appendicula*, *Cestichis*, *Crepidium*, *Dendrobium*, transfers, synonymy

This paper is a continuation of our research (e.g., Ormerod and Juswara, 2024) on Malesian orchids. Here we deal with four genera, making transfers in three, and raising one taxon to species status in another.

***Appendicula*** Blume, Bijdr. Fl. Ned. Ind. 7: 297. 1825.

Type species: *Appendicula alba* Blume.

A genus of about 160 species distributed from India, through Malesia to Samoa. About 82 species may be found in Indonesia. The plants are epiphytic herbs, with slender, leafy stems, bearing axillary to terminal inflorescences of small whitish to greenish flowers.

***Appendicula thymifolia*** (Ridl.) Ormerod & Juswara, *comb. nov.*

Basionym: *Podochilus thymifolius* Ridl., J. Fed. Mal. St. Mus. 8(4): 112. 1917.

TYPE: INDONESIA. Sumatra, Barong Bharu, Tapan, 1220 m, 5 June 1914, *leg. N. S. Jaggat, H. C. Robinson & C. B. Kloss* 72 (Syntype: BM [000509269], image seen); Barong Bharu, Tapan, 1220 m, 6 June 1914, *leg. N. S. Jaggat, H. C. Robinson & C. B. Kloss* 88 (Syntype: BM [001234408], image seen).

**Distribution:** Indonesia (Sumatra).

In the protologue, Ridley clearly mentioned this taxon had six pollinia, a feature of the genus *Appendicula*. *Podochilus* Blume has four pollinia. We believe that *Appendicula thymifolia* is closely related to *A. rubens* (Schltr.) Schltr. but differs in having much longer (3–4 times longer than vs. as long as) leaves, and mostly terminal (vs. mostly axillary, rarely terminal) inflorescences.

***Cestichis*** Thouars ex Pfitz., Entwurf Anordn. Orch.: 56. 1887.

Type species: *Malaxis cespitosa* (Lam.) Thouars.

A genus of about 100 species distributed from Africa, Madagascar to Sri Lanka and India, throughout southeast Asia and Malesia to Tahiti. The plants are mostly epiphytes

in warm to mildly temperate forests. The pseudobulbs may bear one to three leaves, inflorescences are terminal and usually have numerous small, often greenish flowers. The labellum is usually simple with one or two basal calli. We transfer here another five species to the genus while placing one from New Guinea into synonymy.

***Cestichis affinis*** (Blume) Ormerod & Juswara, *comb. nov.*

Basionym: *Malaxis affinis* Blume & Hasselt, Bijdr. Fl. Ned. Ind. 8: 392. 1825; Tabellen: fig. 54C. 1825.

TYPE: INDONESIA. Java, Bantam Prov., near Lebak, August [June in protologue], *J. C. van Hasselt s.n.* (Lectotype, here designated; L [0061482], image seen; Isolectotype: L [0061483], image seen).

Homotypic synonyms: *Liparis affinis* (Blume) Lindl., Gen. Sp. Orch. Pl.: 31. 1830.

*Leptorkis affinis* (Blume) O. Kuntze, Rev. Gen. Pl. 2: 671. 1891.

**Distribution:** Indonesia (Java).

Later collections of this species have not been made; it is known only from the type.

***Cestichis carinatisejala*** (J.J. Sm.) Ormerod & Juswara, *comb. nov.*

Basionym: *Liparis carinatisejala* J.J. Sm., Bull. Jard. Bot. Buitenz. ser. 3(9): 456. 1928.

TYPE: INDONESIA. Maluku Prov., Buru, Wakollo, 700 m, 25 June 1921, *leg. Saprin, L. J. Toxopeus* 241 (Lectotype, here designated; L [0061446], image seen; Isolectotype: BO [1303031]); Buru, between Leksoela and Fakal, 1100 m, 27 August 1921, *leg. Saprin, L. J. Toxopeus* 415 (Syntype: L [0061447], image seen).

**Distribution:** Indonesia (Maluku).

We have chosen *Toxopeus* 241 (L) as lectotype because it bears good flowers; the other syntype (*Toxopeus* 415) bears developing capsules.

***Cestichis glaucescens*** (J.J. Sm.) Ormerod & Juswara, *comb. nov.*

The first author would like to thank herbarium and library staff at A, AMES, and GH for facilitating his research. Leiden (L) kindly loaned material for study. The second author would like to thank colleagues at the Directorate of Scientific Collection Management, National Research and Innovation Agency, BO, for their ongoing help and advice.

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Basionym: *Liparis glaucescens* J.J. Sm., Icon. Bogor. 2: 47. 1903.

TYPE: INDONESIA. Kalimantan, [treated with soda sublimate 20 May 1901], *leg. J. G. Hallier, cult. Hort. Bogor. s.n.* (Lectotype, here designated; L [0061554], image seen); Kalimantan, [treated with soda sublimate 19 November 1901], *leg. J. G. Hallier, cult. Hort. Bogor. s.n.* (Syntype: L [0061556], image seen); Kalimantan, [treated with soda sublimate 28 April 1902], *leg. J. G. Hallier, cult. Hort. Bogor. s.n.* (Syntype: L [0061555], image seen).

**Distribution:** Indonesia (Kalimantan).

No type material could be located in the spirit or dried collections at Bogor, so we have designated the sheet with the best flowering material in Leiden as lectotype. Vegetative parts of this species were not preserved, only inflorescences.

**Cestichis misoolensis** (Ormerod) Ormerod & Juswara, *comb. nov.*

Basionym: *Liparis misoolensis* Ormerod, Orchadian 16(11): 520. 2011.

TYPE: INDONESIA. Papua Prov., Misool Island, along road to Tip, 80 m, 23 September 1948, *D. R. Pleyte 994* (Holotype: L [0630118]).

**Distribution:** Indonesia (Papua).

*Cestichis pullei* (J.J. Sm.) M.A. Clem. & D.L. Jones, Orchadian 15(1): 39. 2005.

Basionym: *Liparis pullei* J.J. Sm., Bull. Jard. Bot. Buitenz. ser. 2(13): 56. 1914.

TYPE: INDONESIA. Papua Prov., Idenburg River, 400 m, 1 September 1914, *W. K. H. Feuilletau de Bruyn 80* (Neotype, designated by Margonska, 2017: 146; BO, not found). Beaufort River, 100 m, November 1912, *A. A. Pulle 272* (Lectotype [Lewis and Cribb, 1989: 66 as holotype]: BO, lost); Hellwig Range, December 1909, *L. S. A. M. von Roemer 1335* (Syntype: BO, lost).

Homotypic synonym: *Stichorkis pullei* (J.J. Sm.) Marg., Szlach., & Kulak, Acta Soc. Bot. Polon. 77(1): 39. 2008.

Heterotypic synonyms: *Liparis brachystele* Ridl., Trans. Linn. Soc. London ser. 2, Bot. 9: 162. 1916 *syn. nov.*

TYPE: INDONESIA. Papua Prov., Camp 3, 760 m, January 1913, *C. B. Kloss s.n.* (Holotype: BM [000088805]).

*Cestichis brachystele* (Ridl.) M.A. Clem. & D.L. Jones, Orchadian 15(1): 38. 2005.

*Stichorkis brachystele* (Ridl.) Marg., Szlach., & Kulak, Acta Soc. Bot. Polon. 77(1): 37. 2008.

**Distribution:** Indonesia (Papua).

Margonska (2017) neotypified this species because the original syntypes appear to be lost. We find *Liparis brachystele* to be a synonym of this species since it shares all critical characters such as elongate, unifoliate pseudobulbs, large (sepals ca. 14 mm long) brownish flowers, a transversely elliptical labellum, and a short, stout column with additional lateral wings.

**Cestichis tunensis** (J.J. Sm.) Ormerod & Juswara, *comb. nov.*

Basionym: *Liparis tunensis* J.J. Sm., Icon. Bogor. 2: 44. 1903.

TYPE: INDONESIA. Maluku Prov., Ambon, Tuna, *leg. J. J. Smith, cult. Hort. Bogor. s.n.* (Holotype: BO, not found).

**Distribution:** Indonesia (Maluku).

*Crepidium* Blume, Bijdr. Fl. Ned. Ind. 8: 387. 1825.

Type species: *Crepidium flavescens* Blume.

This genus of Malaxidinae contains about 270 species distributed from the Seychelles, Sri Lanka and India to Tahiti. The center of speciation is Indonesia, where 134 (87 endemic) species are found. The plants are primarily tender, terrestrial herbs bearing soft, pleated leaves, and with terminal racemes of small, often non-resupinate, greenish to purple flowers.

**Crepidium ventilabrum** (Rchb.f.) Ormerod & Juswara, *comb. nov.*

Basionym: *Microstylis ventilabrum* Rchb.f., Gard. Chron. n.s. 16: 717. 1881.

TYPE: SUNDA ISLANDS. *Cult. Messrs. H. Low s.n.* (Syntype: W-R [41020], not seen); *cult. H. Messrs. Low, icon F. C. Lehmann s.n.* (Syntype: W-R, not seen).

Homotypic synonym: *Malaxis ventilabrum* (Rchb.f.) O. Kuntze, Rev. Gen. Pl. 2: 673. 1891.

**Distribution:** "Sunda Islands" [Borneo?].

The origin of this species is unclear, but it may have originated from Borneo, a place where Low sourced a number of horticulturally attractive orchids (e.g., *Dendrobium lowii* Lindl.).

*Dendrobium* Swartz, Nova Acta Regiae Soc. Sci. Upsal. ser. 2(6): 82. 1799 *nom. cons.*

Type species: *Dendrobium moniliforme* (L.) Swartz *typ. cons.*

About 1530 species of this genus are distributed from Sri Lanka and India to Tahiti. The taxon treated below is a member of section *Pedilonum* Blume

**Dendrobium yudistirae** Ormerod & Juswara, *nom. et stat. nov.*

Basionym: *Dendrobium kruiense* J.J. Sm. subsp. *alboflavum* Yudistira, Romiyadi, & Cootes, Orchidee, Taxon. Mitt. 6(12): 96. 2020.

TYPE: INDONESIA. Sumatra, Aceh, Kute Panang Tropical Forest Range, 1400–2000 m, *cult. Y. R. Yudistira s.n.* (Holotype: BO, not found).

**Distribution:** Indonesia (Sumatra).

**Etymology:** Named after Yuda Rehata Yudistira, who cultivated and co-authored this taxon.

We believe this taxon should be treated as a species distinct from *D. kruiense* J.J. Sm. It differs from *D. kruiense* in its pure white sepals and petals, white lip with a strong

medial yellow patch, abbreviated retrorse basal spine of the lip, the main medial callus only shallowly sulcate on the lower half of the disc (but convex in its upper part), and the elliptic stigmatic cavity. In *D. kruiense* the sepals and petals are white with a pink blush (this sometimes restricted to the basal parts), the lip is white, sometimes with pink markings

near the apex or on the lower part of the medial callus (but never with a strong yellow patch), the basal retrorse spine of the lip is prominent and thorn-like, the main medial callus is strongly sulcate throughout its length, and the stigmatic cavity is subquadrate.

#### LITERATURE CITED

- LEWIS, B., AND P. CRIBB. 1989. Orchids of Vanuatu. Royal Botanic Gardens, Kew.
- MARGONSKA, H. B. 2017. *Liparis* subgenus *Menoneuron* (Orchidaceae, Liparidinae) materials for taxonomic revision. *Phytotaxa* 291(2): 141–148.
- ORMEROD, P., AND L. JUSWARA. 2024. Notes on Some Malesian Orchidaceae VII. *Harvard Pap. Bot.* 29(1): 141–145.