

Flora of Singapore precursors, 14. Notes on Apocynaceae

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ABSTRACT. Lectotypes are designated for 28 names of Apocynaceae, seven of which are second-step lectotypifications. Two names are neotypified, *Leptostemma hirsutum* Blume is designated as the type of the genus *Leptostemma* Blume, and a new combination in *Secamone* R.Br. is coined for *Genianthus maingayi* Hook.f.

Keywords. *Genianthus*, lectotype, neotype, *Secamone*

Introduction

During the preparation of the account of Apocynaceae for the *Flora of Singapore*, types of all taxa occurring in Singapore and their synonyms were verified. For those taxa in the informal groups known as the rauvolfioid and apocynoid Apocynaceae (corresponding to the family before the Asclepiadaceae was included), most of the typifications were already done in previous works (see Middleton, 2007, 2011). Some of these require refinement. In addition, numerous asclepiad Apocynaceae names require typification or corrections to earlier typifications.

The second part of the paper addresses the generic placement of *Genianthus maingayi* Hook.f. The status of the Asian genera *Genianthus* Hook.f. and *Toxocarpus* Wight & Arn. and their relationships with the widespread *Secamone* R.Br. (Old World tropics and subtropics) are still to be clarified. However, Klackenberg (2001, 2004) considered the three genera congeneric. His argument was based on the observation that even though the three genera can be separated morphologically in Asia, *Secamone* in Madagascar is extremely variable and Madagascan species include characters such as the dorsiventrally compressed corona lobes and the long style heads, also observed in *Genianthus* and *Toxocarpus*. Even though no extensive phylogeny has been published on Asian Secamonoideae, the phylogeny published in Surveswaran et al. (2014) includes one species of *Toxocarpus*, *T. wightianus* Hook. & Arn., that is included within a *Secamone* clade. Singapore has one species of *Toxocarpus*, *Toxocarpus griffithii* Decne. and one species of *Genianthus*, *Genianthus maingayi* Hook.f. These will be treated in the *Flora of Singapore* as species of *Secamone*. The combination *Secamone griffithii* (Decne.) Klack. is already published, while a new combination in *Secamone* is needed for *Genianthus maingayi*.

Materials and methods

The present paper is based on the examination of specimens at B, BM, E, G, K, KEP, L, P and SING as well as on JSTOR Global Plants (<https://plants.jstor.org/>, accessed on 19 Jan 2019). All names have been compared to the data in the International Plant Names Index (IPNI; <http://www.ipni.org/>, accessed on 19 Jan 2019) and TROPICOS (<http://www.tropicos.org/>, accessed on 19 Jan 2019). All protologues and type citations have been checked. Lectotypes are designated for names where the protologue did not clearly mention a single type specimen with a reference to the institution in which it was deposited, strictly applying Art 9.1 & 9.3 of the ICN (Turland et al., 2018). All names are listed in alphabetical order, with the accepted name indicated in bold.

Typifications

1. *Alstonia macrophylla* Wall. ex G.Don, Gen. Syst. 4: 87 (1837). – TYPE: India, Hort. Bot. Calcutta, *N. Wallich 1648* (lectotype K-W [K001113713], first step designated by Huber (1973), second step designated here by Middleton; isolectotypes K-W [K001113714], P [P00492394]).

In earlier literature, *Wallich 1648* in Kew was referred to incorrectly as a ‘holotype’, correctable to an effective lectotypification and cited as such in Middleton (2007, 2011). However, there are two specimens of *Wallich 1648* in K-W so a second step is required.

2. *Alyxia coriacea* Wall. in Roxb., Fl. Ind. 2: 541 (1824). – TYPE: Peninsular Malaysia, Penang, *N. Wallich 1610* (lectotype K-W [K001113585], first step designated by Leeuwenberg (2003), second step designated here by Middleton; isolectotypes BM [BM000508455], G [G00169666], K-W [K001113584]). = ***Melodinus orientalis*** Blume

A lectotype was designated by Leeuwenberg (2003) but he did not distinguish between the two specimens of *Wallich 1610* in K-W. Hence a second-step lectotypification is here required. Leeuwenberg (2003) placed this name in synonymy of *Melodinus coriaceus* Oliv. but both names were treated as synonyms of *Melodinus orientalis* Blume by Middleton (2007, 2011). *Alyxia coriacea* Wall. and *Melodinus coriaceus* Oliv. are not homotypic, despite sharing a specific epithet, which is why *Melodinus coriaceus* is not the correct name for the species even though *Alyxia coriacea* was published earlier than *Melodinus orientalis*.

3. *Collyris major* Vahl, Skrift. Nat. Selsk. Kiobenh. 6: 460 (1810). – ***Dischidia major*** (Vahl) Merr., Interpr. Herb. Amboin. 437 (1917). – TYPE: Malaysia, Malacca or

Selangor, *J.G. Koenig s.n.* (lectotype C, first step designated by Panigrahi (1986), second step designated here by Rodda, excluding concave leaves belonging to a different species).

Dischidia major (Vahl) Merr. was typified by Panigrahi (1986) based on a *Koenig* collection in C. The specimen is, however, a mixed collection as it also includes concave leaves of a different species. The lectotypification is, therefore, refined here to exclude the elements not belonging to *Dischidia major*.

4. *Cynanchum pauciflorum* R.Br., Mem. Wern. Nat. Hist. Soc. 1: 45 (1810), nom. illeg. – *Cynoctonum pauciflorum* Decne. in A.DC., Prodr. 8: 528 (1844), nom. illeg. – *Periploca tunicata* Retz., Observ. Bot. (Retzius) 2: 15 (1781). – *Vincetoxicum tunicatum* (Retz.) Kuntze, Revis. Gen. Pl. 2: 423 (1891). – ***Cynanchum tunicatum*** (Retz.) Alston in Trimen, Hand-Book Fl. Ceylon vi. Suppl. 194 (1931). – TYPE: “E Tranquebaria misit optimus König” *s.d.*, *J.G. Koenig s.n.* (lectotype LD [LD1731246], designated by Fischer (1932)).

Brown (1810) included *Periploca tunicata* Retz. in synonymy of *Cynanchum pauciflorum* R.Br. making it illegitimate under ICN Art 52.1 (Turland et al., 2018). Likewise, Decaisne (1844) included *Periploca tunicata* in synonymy of *Cynoctonum pauciflorum* Decne. making it illegitimate. Both names are automatically typified with the type of *Periploca tunicata* Retz. However, for *Cynanchum pauciflorum* Brown (1810) also mentioned a specimen in the Banks herbarium that can be identified as *Societas Unitatis Fratrum s.n.* (BM) [BM001209604]. This specimen is *Cynanchum tunicatum*. Similarly, Decaisne (1844) indicated that he based *Cynoctonum pauciflorum* Decne. on material examined in the Paris herbarium (v.s.h. Mus. par). *Wight 1550* [P03872472] is identified as “*Cynoctonum pauciflorum* Dne!”, likely in Decaisne’s hand, which is likely to be the material indicated in the publication. In P there are also two further duplicates of *Wight 1550* [P03872473, P03872474]. These specimens are also *Cynanchum tunicatum*.

5. *Cynoctonum formosanum* Maxim., Bull. Acad. Imp. Sci. Saint-Pétersbourg 23: 370 (1877). – *Cynanchum formosanum* (Maxim.) Hemsl., J. Linn. Soc., Bot. 26: 106 (1889). – *Vincetoxicum formosanum* (Maxim.) Kuntze, Revis. Gen. Pl. 2: 424 (1891). – *Cyathella formosana* (Maxim.) C.Y.Wu & D.Z.Li, Acta Phytotax. Sin. 28: 464 (1990). – TYPE: Taiwan, Tamsuy, 1864, *R. Oldham 333* (lectotype LE [LE01036909], designated here by Rodda; isolectotypes K [K000872722], P [P032523], S [S-G-1845]). = ***Cynanchum ovalifolium*** Wight, fide Liede (1999)

The type of *Cynoctonum formosanum* Maxim. is *Oldham 333*. The LE duplicate is fertile and well preserved and bears manuscript notes likely by Maximowicz. It is therefore here selected as lectotype for *Cynoctonum formosanum*.

6. *Cynoctonum zollingeri* Miq., Fl. Ned. Ind. 2: 479. (1857). – *Cynanchum zollingeri* (Miq.) Boerl., Handl. Fl. Ned. Ind. 2: 436 (1899). – TYPE: Indonesia, Java?, *H. Zollinger 2416* (lectotype P [P032525], designated here by Rodda; isolectotype BM [BM000053517]). = *Cynanchum ovalifolium* Wight, **syn. nov.**

Liede (1999), in her revision of Malesian *Cynanchum*, did not include *Cynanchum zollingeri* (Miq.) Boerl. The type collection *Zollinger 2416* (P) is identified by Liede as *Cynanchum ovalifolium*, a widespread and rather variable species. Her identification is also confirmed here. Although it was Zollinger's private set that was lent to Miquel and which is now in P, Zollinger's specimens are widely distributed (Van Steenis-Kruseman, 1950) and it cannot be ruled out that Miquel might have seen and based his description on other duplicates of this collection. The P duplicate of *Zollinger 2416* is therefore designated as lectotype for *Cynanchum zollingeri*.

7. *Dischidia bengalensis* Colebr., Trans. Linn. Soc. London 12: 357 (1818). – TYPE: Trans. Linn. Soc. London 12: 357, t.15 (1818) (lectotype designated here by Rodda)

No specimen is mentioned in the protologue of *Dischidia bengalensis* Colebr. and likely the description is based on a cultivated plant "Native of Silhet ... and thence introduced into the botanical garden at Calcutta by Mr M.R. Smith". The illustration published together with the protologue (t.15) is the only original material found and is therefore designated as lectotype.

8. *Dischidia borneensis* Becc., Malesia 2: 262 (1886). – TYPE: Malaysia, Sarawak, Kuching, Dec. 1865, *O. Beccari PB793* (lectotype FI ([FI008057] mounted over two sheets, designated here by Rodda; isolectotypes K [K000911025], M [M0031479]). = *Dischidia albiflora* Griff. fide Rintz (1980b).

Types of Beccari's taxa are generally considered to be in FI. However, *Dischidia borneensis* Becc. was published before Beccari's specimens were given to FI and duplicates were distributed. The only material indicated in the protologue of *Dischidia borneensis* Becc. is *Beccari PB793* and the FI duplicate is designated as lectotype. This specimen, mounted on two sheets (indicated as Collezioni Beccari 6963A and 6963B), is the most complete and best preserved duplicate.

9. *Dischidia borneensis* Becc. var. *pilosa* Becc., Malesia 2: 263 (1886). – TYPE: Malaysia, Sarawak, Undup, Batang-Lupar, *O. Beccari s.n.* (lectotype FI [FI013046], designated here by Rodda). = *Dischidia albiflora* Griff. fide Rintz (1980b).

As indicated above for *Dischidia borneensis*, a lectotype needs to be selected also for *Dischidia borneensis* Becc. var. *pilosa* Becc. Beccari did not indicate any collection

number for *Dischidia borneensis* var. *pilosa*, only “Undup nella Prov. del Batang-Lupar, in Sarawak, Borneo”. Specimen *Beccari s.n.* [FI013046] was collected in Undup and is identified in Beccari’s hand as *Dischidia borneensis* var. *pilosa* and is therefore selected as lectotype.

10. *Dischidia brunoniana* Griff., *Calcutta J. Nat. Hist.* 8(29): 85 (1847). – TYPE: Myanmar, Mergue, *W. Griffith s.n.*, *Kew distribution* 3872 (lectotype K [K000911063], designated here by Rodda). = ***Dischidia hirsuta*** (Blume) Decne, fide Rintz (1980b).

The type of *Dischidia brunoniana* Griff. was indicated as “Mergue. Inter Rhizophoreis. Ins. Madamacam Palor prope”. Specimen *Griffith s.n.*, *Kew distribution* 3782 [K000911063] bears a manuscript label “Mergue” and is therefore here designated as lectotype.

11. *Dischidia coccinea* Griff., *Not. Pl. Asiat.* 4: 45 (1854). – TYPE: Malaysia, Malacca, *W. Griffith s.n.*, *Kew distribution* 3780 (lectotype K [K000911056], designated here by Rodda). = ***Dischidia cochleata*** Blume, fide Rintz (1980b).

The type of *Dischidia coccinea* Griff. was indicated as “In arbor Terebinthae, Malacca”. Specimen *Griffith s.n.*, *Kew distribution* 3780 [K000911056] bears a manuscript label “Malacca” and is therefore here designated as lectotype.

12. ***Dischidia oiantha*** Schltr., *Fragm. Fl. Philipp.* 1: 127 (1904). – TYPE: Philippines, Busuanga, Sep 1910, *E.D. Merrill 7200* (neotype B [B100003245], designated here by Rodda; isolectotype K [K000911004]).

The type of *Dischidia oiantha* Schltr., *Warburg 12252*, was deposited in B (now destroyed). No duplicates have been located and therefore *Merrill 7200* (B), also lectotype of *Dischidia tonsa* Schltr., a synonym of *D. oiantha*, is chosen as neotype for *D. oiantha*.

13. *Dischidia orbicularis* Decne. in A.DC., *Prodr.* 8: 632 (1844). – TYPE: Timor (lectotype P [P00218805], designated here by Rodda; isolectotype P [P00218806]). = ***Dischidia nummularia*** R.Br., fide Rintz (1980b).

Decaisne indicated that he had examined *Dischidia orbicularis* Decne. at P “v.s. h. Mus. par.” Between the two syntypes of *Dischidia orbicularis* currently found at P [P00218805 & P00218806], [P00218805] is a better collection and is here selected as lectotype.

14. *Dischidia pseudobenghalensis* Costantin in Lecomte, Fl. Indo-Chine 4: 148 (1912). – TYPE: Vietnam, Tay Ninh Province, Deon ba mountain, 1866, *L. Pierre 4521* (lectotype P [P00639856], designated here by Rodda; isolectotype P [P00218978, P00639857]). = ***Dischidia bengalensis*** Colebr., fide Rintz (1980b).

The type of *Dischidia pseudobenghalensis* Costantin was indicated as “mont Deon-ba, province de Tay-ninh (Pierre)”. Among the three syntypes located in P, [P00639856] is a well-preserved fertile specimen and is selected as lectotype. Three further specimens of *Pierre 4521* [P00218979, P00639859, P00639859] are not isolectotypes as their collection locality is Baria, mount Dinh.

15. *Dischidia shelfordii* H.Pearson, Ann. Bot. 17: 617 (1903). – TYPE: Borneo, Sarawak, Kuching, 31 Dec 1902, *Shelford s.n.* (lectotype K [K000911021], first step designated by Rintz (1980b), second step designated here by Rodda; isolectotypes K [K000911022], one not barcoded). = ***Dischidia complex*** Griff., fide Rintz (1980b).

Rintz (1980b) indicated the type of *Dischidia shelfordii* H.Pearson as “Borneo, Sarawak. Kuching, *Shelford s.n.* (K)” without specifying which one of the three duplicates he intended. The K specimen [K000911021] is therefore designated as lectotype, second step.

16. *Dischidia spatulata* Blume, Bijdr. Fl. Ned. Ind. 16: 1060 (1826). – *Dischidia bengalensis* var. *spatulata* (Blume) Kuntze, Revis. Gen. Pl. 2: 419 (1891). – TYPE: Java, *Blume s.n.* (lectotype L [L. 2725227], designated here by Rodda). = ***Dischidia bengalensis*** Colebr., fide Rintz (1980b).

Blume indicated the locality of *Dischidia spatulata* Blume as “ad litora insulae Nusae Kambangae”. No specimens from L bear a collection label matching Blume’s description. However, one specimen [L.2725227] can be identified as original material of *Dischidia spatulata* as it was annotated by Blume “*Dischidia spatulata* Bl.” and is here selected as lectotype.

17. *Dischidia timorensis* Decne., Nouv. Ann. Mus. Par. 3: 377, t. 17 (1834). – TYPE: Timor-Leste, *Guichenot s.n.* (lectotype P [P00639926], designated here by Rodda). = ***Dischidia major*** (Vahl) Merr. fide Rintz (1980b).

No material seen was indicated in the protologue of *Dischidia timorensis* Decne. Three sheets from Timor annotated in Decaisne’s hand are available in P [P00639926, P00639928, P00639927]. Only [P00639926] (*Guichenot s.n.*) can be linked to the protologue as it is clearly the specimen used for Ann. Mus. Par. 3: 377, t. 17 and is annotated “tab”.

18. *Dischidia tonsa* Schltr., Repert. Spec. Nov. Regni Veg. 13: 558. (1915). – TYPE: Philippines, Busuanga, Sep 1910, *E.D. Merrill 7200* (lectotype B [B100003245], designated here by Rodda; isolectotype K [K000911004]). = *Dischidia oiantha* Schltr.

Dischidia tonsa Schltr. was described based on *Merrill 7200*. The duplicate in B is the best preserved and is therefore selected as lectotype.

19. *Echites fragrans* Moon, Cat. Pl. Ceylon 20 (1824). – *Chonemorpha fragrans* (Moon) Alston, Ann. Roy. Bot. Gard. (Peradeniya) 11: 203 (1929). – TYPE: Illustration in Rheede, Hort. Malab. 9: t.5 (1689), lectotype designated here by Middleton.

In previous publications where the type was cited, two plates from the *Hortus Indicus Malabaricus* (Rheede, 1689) were given. Here, the name is lectotypified on one of them, an illustration of flowering material.

20. *Epigynum ridleyi* King & Gamble, J. Asiat. Soc. Bengal, Pt. 2, Nat. Hist. 74(2): 502 (1908). – TYPE: Peninsular Malaysia, Selangor, Rawang, *H.N. Ridley 7567* (lectotype SING [SING0040345], designated here by Middleton; isolectotype K [K000894489]).

In Middleton (2007, 2011) the specimen designated here as lectotype was incorrectly referred to as a holotype.

21. *Epigynum forbesii* King & Gamble, J. Asiat. Soc. Bengal, Pt. 2, Nat. Hist. 74(2): 503 (1908); Turner, Gard. Bull. Singapore 45 (1993) 35. – TYPE: Sumatra, near Bijin Telok, *H.O. Forbes 3236* (lectotype K [K000894487], designated here by Middleton). = *Epigynum ridleyi* King & Gamble

In Middleton (2007, 2011) the specimen designated here as lectotype was referred to as a holotype. It is uncertain as to whether there are any duplicates of this collection but a lectotypification of the K specimen is done here in the event that a duplicate is found.

22. *Ervatamia pauciflora* Ridl., J. Straits Branch Roy. Asiat. Soc. 86: 299 (1922); Ridley, Fl. Malay Penins. 2: 342 (1923). – TYPE: Peninsular Malaysia, Selangor, Ginting [Genting] Sempah, *H.N. Ridley, H.C. Robinson & C.B. Kloss s.n.* (lectotype K [K000857404], designated here by Middleton; isolectotypes BM [BM001014004], K [K000857403]). = *Tabernaemontana corymbosa* Roxb. ex Wall.

Leeuwenberg (1988) effectively lectotypified (corrected from ‘holotype’) the supposed SING duplicate of the type collection. However, this specimen cannot be found and may never have been in SING. Instead, a duplicate in K is designated here.

23. *Finlaysonia obovata* Wall., Pl. Asiat. Rar. 2: 48 t. 162 (1831); King & Gamble, J. Asiat. Soc. Bengal, Pt. 2, Nat. Hist. 74(2): 513 (1908); Ridley, Fl. Malay Penins. 2: 373 (1923) – TYPE: India, Sundarbans, 23 Sep 1800, *F. Buchanan-Hamilton 757* (lectotype E [E00174007], designated here by Rodda).

No type is clearly indicated in the protologue of *Finlaysonia obovata* Wall., but there is a direct reference to “*Gurua obovata* Herb. Hamilt.” (a nom. nud.) and “Crescit ad litora aestuariorum Gangis, Irawaddi et fluminum Martabaniae...”. Specimen *Buchanan-Hamilton 757* [E00174007], labelled *Gurua obovata*, is therefore selected as lectotype. Specimen K-W 4466B from Sundarbans (Ganges estuary), collected on 23 Sep 1800 and bearing Hamilton’s name *Gurua obovata* [K001039058] is very likely a duplicate of *Buchanan-Hamilton 757* as both were collected on the same day. Specimen K-W 4466A [K001039057] is from River Martabaniae and remains therefore a syntype.

24. *Gymnanthera nitida* R.Br., Prodr. 464 (1810). – TYPE: Australia, Queensland, island a [Sweer’s Island], Gulf of Carpentaria, 17 Nov 1802, *R. Brown 2869* (lectotype BM [BM000020701], first step designated by Forster (1991), second step designated here by Rodda; isolectotypes BM [BM000020702], CANB [CANB278899], K [K000910016, K000910017]). = *Gymnanthera oblonga* (Burm.f.) P.S.Green

Forster (1991) mentioned two BM sheets as lectotype of *Gymnanthera nitida* R.Br and, therefore, a second-step lectotypification is necessary. The better specimen [BM000020701] is here designated as lectotype.

25. *Gymnema finlaysonii* Wight, Contr. Bot. Ind. 46 (1834); Rintz, Blumea 26: 65–79 (1980a). – *Gongronema finlaysonii* (Wight) Decne. in A.DC., Prodr. 8: 625 (1844). – TYPE: China or Singapore (or Thailand), *Finlayson s.n.*, *Wall. Asclep. 143* [= Wall. Cat. 8196] (lectotype K [K000872792] (ex herb. R. Wight Prop.), designated here by Rodda; isolectotype K [K001129203]). = *Sarcolobus globosus* Wall. subsp. *globosus*, fide Rintz (1980a).

Noltie (2005) clarified that *Gymnema finlaysonii* Wight was based on *Wall. Asclep. 143* [= Wall. Cat. 8196], a specimen collected by Finlayson. In Wight’s personal herbarium, now at K, there is a duplicate of *Wall. Asclep. 143* bearing a partial description and flowers sketches in Wight’s hand that is therefore selected as lectotype.

26. *Gymnema wallichii* Wight, Contr. Bot. India 46 (1834). – ***Gongronema wallichii*** (Wight) Decne. in A.DC., Prodr. 8: 624 (1844); King & Gamble, J. Asiat. Soc. Bengal, Pt. 2, Nat. Hist. 74(2): 542 (1908). – TYPE: Singapore, September 1822, *Wall. Asclep. 135a* [= Wall. Cat. 8195B] (lectotype K [K001129202], designated here by Rodda; isolectotype E [E00288666])

Noltie (2005) clarified that original materials for *Gymnema wallichii* Wight are *Wall. Asclep. 135a* [= Wall. Cat. 8195B] and *Wall. Asclep. 135b* [= Wall. Cat. 8195A]. No specimens belonging to Wight's private set of Wallich specimens have been found but one sheet of each of the two collections is present in K-W. *Wall. Asclep. 135a* [= Wall. Cat. 8195B] [K001129202] from Singapore is therefore selected as lectotype. One sheet of the syntype *Wall. Asclep. 135b* [= Wall. Cat. 8195A] is present at K [K001129201]).

27. *Leptostemma* Blume, Bijdr. Fl. Ned. Ind. 16: 1057 (1826). – TYPE: *Leptostemma hirsutum* Blume, designated here by Rodda = ***Dischidia*** R.Br.

Following Omlor (1998) and Hoffman et al. (2004) the type of *Leptostemma* Blume has not been designated. *Leptostemma hirsutum* Blume = ***Dischidia hirsuta*** (Blume) Decne. is therefore designated as the type of the genus.

28. *Leptostemma fasciculatum* Blume, Bijdr. Fl. Ned. Ind. 16: 1058 (1826). – ***Dischidia fasciculata*** (Blume) Decne. in A.DC., Prodr. 8: 623 (1844). – TYPE: “in montosis Pantjar Provinciae Buitenzorg” (lectotype P [P00218707], designated here by Rodda). = ***Dischidia hirsuta*** (Blume) Decne., fide Rintz (1980b).

Rintz (1980b) indicated the type of *Leptostemma fasciculatum* Blume as “Java, Blume (L)”. There is no specimen in L that can be identified as original material of *Leptostemma fasciculatum*. In P there is one specimen labelled in Blume's hand as *Leptostemma fasciculatum* sent from Blume to Decaisne in 1836 [P00218707] that is here designated as lectotype.

29. *Leptostemma hirsutum* Blume, Bijdr. Fl. Ned. Ind. 16: 1058 (1826). – ***Dischidia hirsuta*** (Blume) Decne. in A.DC., Prodr. 8: 632 (1844). – TYPE: Java, *C.L. Blume s.n.* (lectotype L [L.2725198], first step designated by Rintz (1980b), second step designated here by Rodda; isolectotypes L [L.2725194, L.2725195]).

Blume only indicated under *Leptostemma hirsutum* Blume “circa Kuripan Provinciae Buitenzorg”. Rintz (1980b) indicated its type as “Java, Blume s.n. (L)” which should be considered an effective lectotypification under Art 7.11 and 9.10 of the ICN (Turland et al., 2018). No specimens can be located in L with the locality “Kuripan”

and no single specimen can be identified as Rintz's chosen lectotype "Java, Blume s.n. (L)". Three specimens are extant in L identified in Blume's hand as *Leptostemma hirsuta* [L.2725198, L.2725194, L.2725195] but these are from Salak. They are, however, to be considered as Blume's original material for *Leptostemma hirsutum* and likely the materials mentioned by Rintz with an erroneous locality. The duplicate [L.2725198] is fertile and well preserved and therefore here designated as lectotype. There is also a specimen at P [P00218706] labelled in Decisne's hand as sent by Blume in 1836 but it only bears Java as the locality and may not be a duplicate of the sheets collected from Salak.

30. *Leuconotis maingayi* Dyer ex Hook.f., Fl. Brit. India 3: 628 (1882). – TYPE: Singapore, A.C. Maingay 3359 (Kew distribution 935) (lectotype K [K000832858], designated here by Middleton; isolectotype K [K000832859]). = *Leuconotis griffithii* Hook.f.

In Middleton (2007, 2011) 'Maingay KD 935' was cited as a 'holotype' of the name. A second specimen of this collection has now been seen in Kew and the better specimen is selected here as lectotype.

31. *Sarcolobus banksii* Schult. in Roemer & Schultes, Syst. Veg. 6: 58 (1820). – TYPE: Indonesia, Java, Prinses island, J. Banks & D. Solander s.n (lectotype BM [BM001014184], first step designated by Rintz (1980a), second step designated here by Rodda; isolectotype BM [BM001014185]). = *Sarcolobus globosus* Wall. subsp. ***globosus*** fide Rintz (1980a).

Rintz (1980a) indicated Banks & Solander s.n (BM) as "type" of *Sarcolobus banksii* Schult. effecting a lectotypification under Art 7.11 and 9.10 of the ICN (Turland et al., 2018). However, two duplicates are present at BM and the better one [BM001014184] is here selected as lectotype.

32. *Tabernaemontana cirrhosa* Blanco, Fl. Filip. 115 (1837). – TYPE: Philippines, Capiz Province, Panay, May-June 1918, M. Ramos & G. Edano 31503 (neotype K, designated here by Rodda; isoneotype P [P04241003]). = *Finlaysonia obovata* Wall., fide Merrill (1918).

Lacking an "illustrative specimen" for *Tabernaemontana cirrhosa* Blanco that would otherwise be a preferred choice for a neotype (Nicolson & Arculus, 2001), Ramos & Edano 31503 (K) is designated as the neotype for *Tabernaemontana cirrhosa*.

33. *Tylophora tenuis* Blume var. *ovata* Miq., Fl. Ned. Ind. 2: 489 (1856). – TYPE: Indonesia, Java, Blambangan, *T. Horsfield* s.n. (lectotype BM, designated here by Rodda). = *Vincetoxicum flexuosum* (R.Br.) Kuntze var. *tenuis* (Blume) Schneidt, Meve & Liede, fide Liede-Schumann & Meve (2018).

Tylophora tenuis Blume var. *ovata* Miq. was described from a Horsfield collection from Blambangan. Liede-Schumann & Meve (2018) did not trace it. A suitable lectotype has now been located at BM.

New combination in *Secamone*

***Secamone maingayi* (Hook.f.) Rodda comb. nov.**

Genianthus maingayi Hook.f., Fl. Brit. India 4(10): 16 (1883); King & Gamble, J. Asiat. Soc. Bengal, Pt. 2, Nat. Hist. 74(2): 525 (1908); Ridley, Fl. Malay Penins. 2: 378 (1923). – TYPE: Singapore, Sep 1867, *A.C. Maingay 2678* (*Kew Distribution 1106*) (lectotype K [K000910088], designated by Klackenberg (1995); isolectotypes K [K000910090], L [L0004301]).

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