

TAXONOMIC NOTES ON THE TRIBE DISSOCHAETAEAE (NAUD.) TRIANA (MELASTOMATACEAE)

J. F. MAXWELL

Botanic Gardens, Singapore

In a recent revision the tribe Dissochaeteae (Naud.) Triana has been found to include 54 species and 32 varieties which are in the following genera: *Diplectria* (Bl.) Reichb., *Dissochaeta* Bl., *Macrolenes* Naud., *Creochiton* Bl., and *Pseudodissochaeta* Nayar.* The first four genera are woody climbers, while the last genus has species which are mostly shrubs or trees up to 5 m tall. The entire tribe ranges from Assam, throughout SE Asia, Hainan, throughout the Malay Archipelago and the Philippines, to New Britain.

The Dissochaeteae has been divided into two subtribes based on the positions of the stamens and staminodes:

1. Subtribe Diplectrinae Maxw., *subtrib. nov.*

Stamina petalibus opposita maiora, semper fertilia; stamina petalibus alternatia staminodia reducta.

Stamens opposite the petals larger and fertile, those alternating with them reduced to staminodes.

2. Subtribe Dissochaetinae Naudin

Stamens opposite the petals smaller, sometimes reduced to staminodes, or absent; those alternating with the petals larger and always fertile.

Subtribe Diplectrinae Maxw. includes one genus, *Diplectria* (Bl.) Reichb., with 8 species and 4 varieties. The following changes have been made from the most recent revision of this genus by Veldkamp et al. in *Blumea* 24 (1978) 405:

1. *Diplectria anomala* (King) Veldk. l.c. 426 and fig. 5C has been reduced to a synonym of *Diplectria viminalis* (Jack) O. Ktz.
2. *Diplectria beccariana* (Cogn.) O. Ktz. was considered by most authors as *Dalenia beccariana* (Cogn.) Ridl. ex Nayar. *Dalenia beccariana* (Cogn.) Ridl. ex Nayar var. *matangensis* Nayar and *Dalenia furfuracea* Ridl. have been reduced to *syn. nov.* of *Diplectria beccariana* (Cogn.) O. Ktz.

* Ph. D. thesis, University of Singapore, June 1980.

3. *Diplectria glabra* (Merr.) Nayar var. *glabra*, stat. nov. *Diplectria glabra* (Merr.) Nayar ssp. *glabra*, Veldk. l.c. 421 and fig. 4B.
4. *Diplectria glabra* (Merr.) Nayar var. *kinabaluensis* (Veldk.) Maxw., stat. nov. *Diplectria glabra* (Merr.) Nayar ssp. *kinabaluensis* Veldk. l.c. 422 and figs. 1A, 4C.
5. *Diplectria glabra* (Merr.) Nayar var. *micrantha* (Veldk.) Maxw., stat. nov. *Diplectria micrantha* Veldk. l.c. 422 and fig. 5B.
6. *Diplectria glabra* (Merr.) Nayar var. *papuana* (Mansf.) Maxw., stat. nov. *Diplectria papuana* (Mansf.) Bakh. f., "Thesis" (1943) 202, Med. Mus. Bot. Utrecht 91 (1943) 202, Rec. Trav. Bot. Neerl. 40 (1943-45) 202.

Subtribe Dissochaetinae Naudin

7. *Dissochaeta* Bl. includes 21 species, 20 varieties, and has been divided into three sections: sect. *Dissochaeta*, sect. *Anoplodissochaeta* Baill., and sect. *Omphalopus* (Naud.) Baill.
8. *Neodissochaeta* Bakh. f., l.c. 24, 134; is reduced to a synonym of *Dissochaeta* Bl.
9. *Dissochaeta annulata* Hk. f. ex Triana var. *griffithii* (Nayar) Maxw., comb. et stat. nov. *Macrolenes griffithii* Nayar, J. Jap. Bot. 55:2 (1980) 47 (15).
10. *Dissochaeta annulata* Hk. f. ex Triana var. *johannis-winkleri* (Schwartz) Maxw., stat. nov. *Dissochaeta johannis-winkleri* Schwartz, Mitt. Inst. Bot. Hamburg 7 (1931) 251. Plate 1, holotype.
11. *Dissochaeta fallax* (Jack) Bl., more commonly known as *Omphalopus fallax* (Jack) Naud., is the only representative of *Dissochaeta* sect. *Omphalopus* (Naud.) Baill. *Omphalopus fallax* (Jack) Naud. var. *novoguineensis* Mansf. is a syn. nov. of *Dissochaeta fallax* (Jack) Bl.
12. *Dissochaeta glandiformis* Maxw., sp. nov.

Ramuli obtuse quadrangulares et quadrosulcati, stellato-furfuracei; cristae interpetiolares annulares, c. 2-3 mm latae. Inflorescentia terminalis, thyrsioidea multiflora, minime 15 cm longa. Calyx campanulatus, c. 5 mm longus, c. 2 mm latus, furfuraceo-stellatus, glabrescens; lobis in alabastro distincte connatis ad structuram tenui glandiformem vel tholiformem conspicue venatam, sine suturis, apice munita apertura termini 4 loba, difisa in patribus 4, saepe irregularibus, in maturitate c. 2 mm longis, apicem versus late rotundatis atque densique caducis vel maturis marcescentibus. Stamina 4, alternipetala, in alabastro c. 7 mm longa, apicem versus angustata, crista subtriangularis, c. 0.5 mm longa, appendicibus posterioribus applanatis tenuibus c. 3 mm longis.

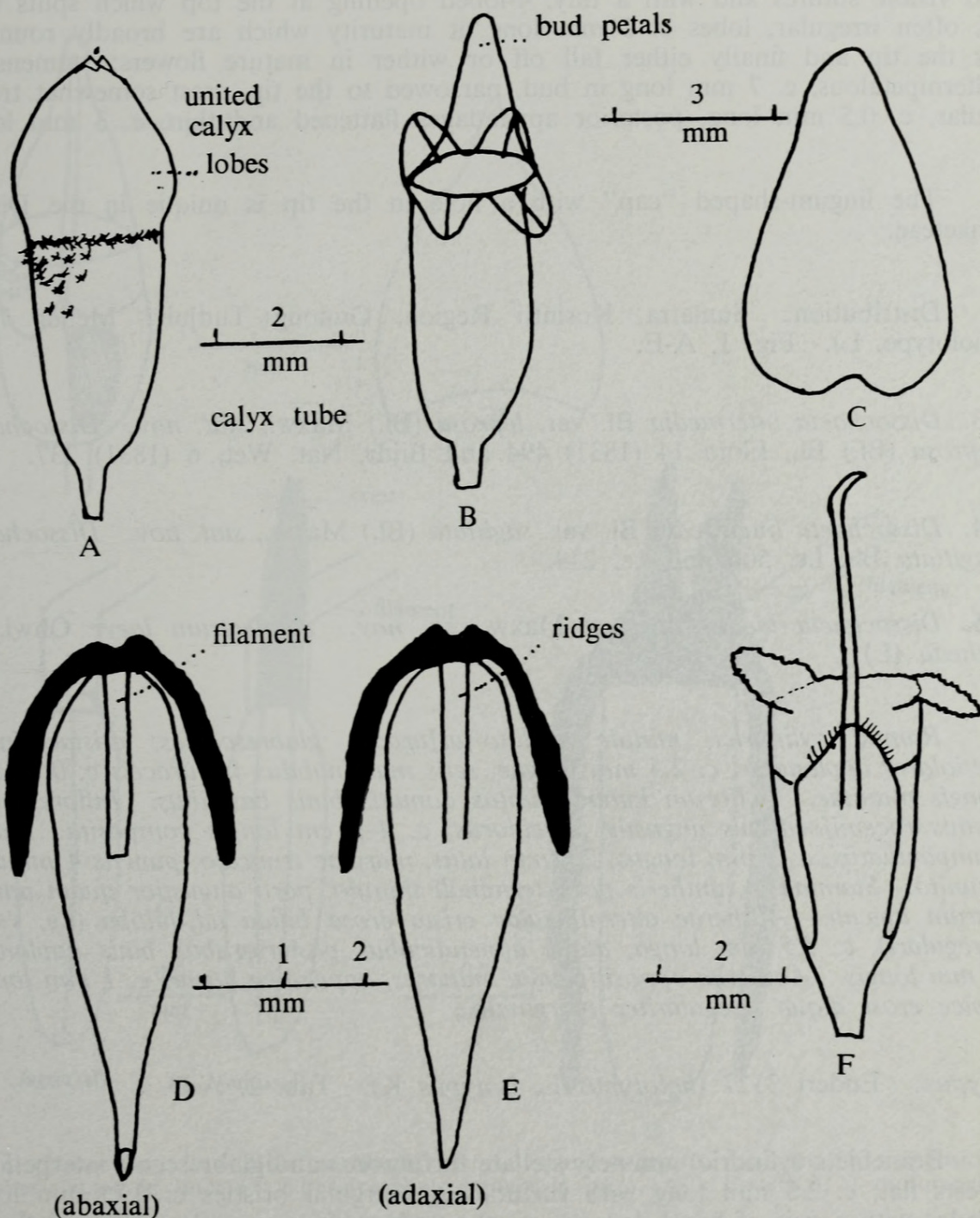


Fig. 1. *Dissochaeta glandiformis* Maxw. A: calyx with united calyx lobes; B: calyx split into four lobes; C: bud petals; D, E: alternipetalous stamens in bud; F: ovary. A-E Meijer 7282 (holotype).

Typus: Meijer 7282 (*holotypus* L). Tab. 1, A-E.

Branchlets bluntly 4-angled and 4-grooved, stellate furfuraceous; interpetiolar crests annular, 2–3 mm wide; inflorescence terminal, in a multiflowered panicle of cymes (thyrses) which is at least 15 cm long; calyx campanulate, c. 5 mm long, 2 mm wide, stellate furfuraceous and glabrescent, lobes in bud distinctly united

in a thin glandiform (lingum) or tholiform structure with distinct venation and no visible sutures and with a tiny, 4-lobed opening at the top which splits into 4, often irregular, lobes c. 2 mm long at maturity which are broadly rounded at the tip and finally either fall off or wither in mature flowers; stamens 4, alternipetalous, c. 7 mm long in bud, narrowed to the tip, crest somewhat triangular, c. 0.5 mm long, posterior appendages flattened and thin, c. 3 mm long.

The lingum-shaped "cap" with a hole in the tip is unique in the *Dissochaeteae*.

Distribution: Sumatra, Korintji Region, Gunong Tudjuh: Meijer 7282 (holotype, L). Fig. 1, A-E.

13. *Dissochaeta intermedia* Bl. var. *leprosa* (Bl.) Maxw., stat. nov. *Dissochaeta leprosa* (Bl.) Bl., Flora 14 (1831) 494 and Bijdr. Nat. Wet. 6 (1831) 237.

14. *Dissochaeta intermedia* Bl. var. *sagittata* (Bl.) Maxw., stat. nov. *Dissochaeta sagittata* Bl., l.c. 500 and l.c. 214.

15. *Dissochaeta laeve* Ohwi ex Maxw., sp. nov. *Anplectrum laeve* Ohwi, in sched. (L).

Ramuli cylindrici, minute stellato-furfuracei, glabrescentes; cristae interpetiolares applanatae, c. 2.5 mm longae, setis marginabilis furfuraceis c. 0.75 mm longis munitae. Foliorum lamina subtus domatis binis basalibus. Inflorescentia cymis racemiformibus angustis paucifloris, c. 4-6 cm longis composita. Calyx campanulatus, c. 3 mm longus, 2.5 mm latus, margine truncato, punctis 4 minutis munito. Stamina, 8, antheris poro terminali minuto, poro angustior quam antherarum apiculi. Antherae alternipetales crista erosa bifida ad biloba (i.e. valde irregulari), c. 1.5 mm longa, atque appendicibus posterioribus binis applanatis 2 mm longis. Antherae oppositipetales minores, appendice lineari c. 1 mm longo, apice erosi atque irregulariter marginato.

Typus: Endert 3127 (holotypus L, isotypus K). Tab. 2, A-D.

Branchlets cylindric, minutely stellate furfuraceous and glabrescent; interpetiolar crests flat, c. 2.5 mm long with furfuraceous marginal bristles c. 0.75 mm long; blades with a pair of basal domatia on the undersurface near the petiole; inflorescence in narrow racemes of cymes, few-flowered, 4-6 cm long; calyx campanulate, c. 3 mm long, 2.5 mm wide, margin truncate with 4 minute points; stamens 8, anthers with a minute terminal pore which is smaller than the tip of the anther; alternipetalous anthers with an erose, bifid, to 2-lobed (i.e. very irregular) crest c. 1.5 mm long and a pair of flattened posterior appendages c. 2 mm long; oppositipetalous anthers smaller with a linear appendage which has an erose tip and irregular margins, c. 1 mm long.

Distribution: Borneo, central east part, W. Koetai near L. Petah: Endert 3127 (holotype L, isotype K). Fig. 2, A-D.

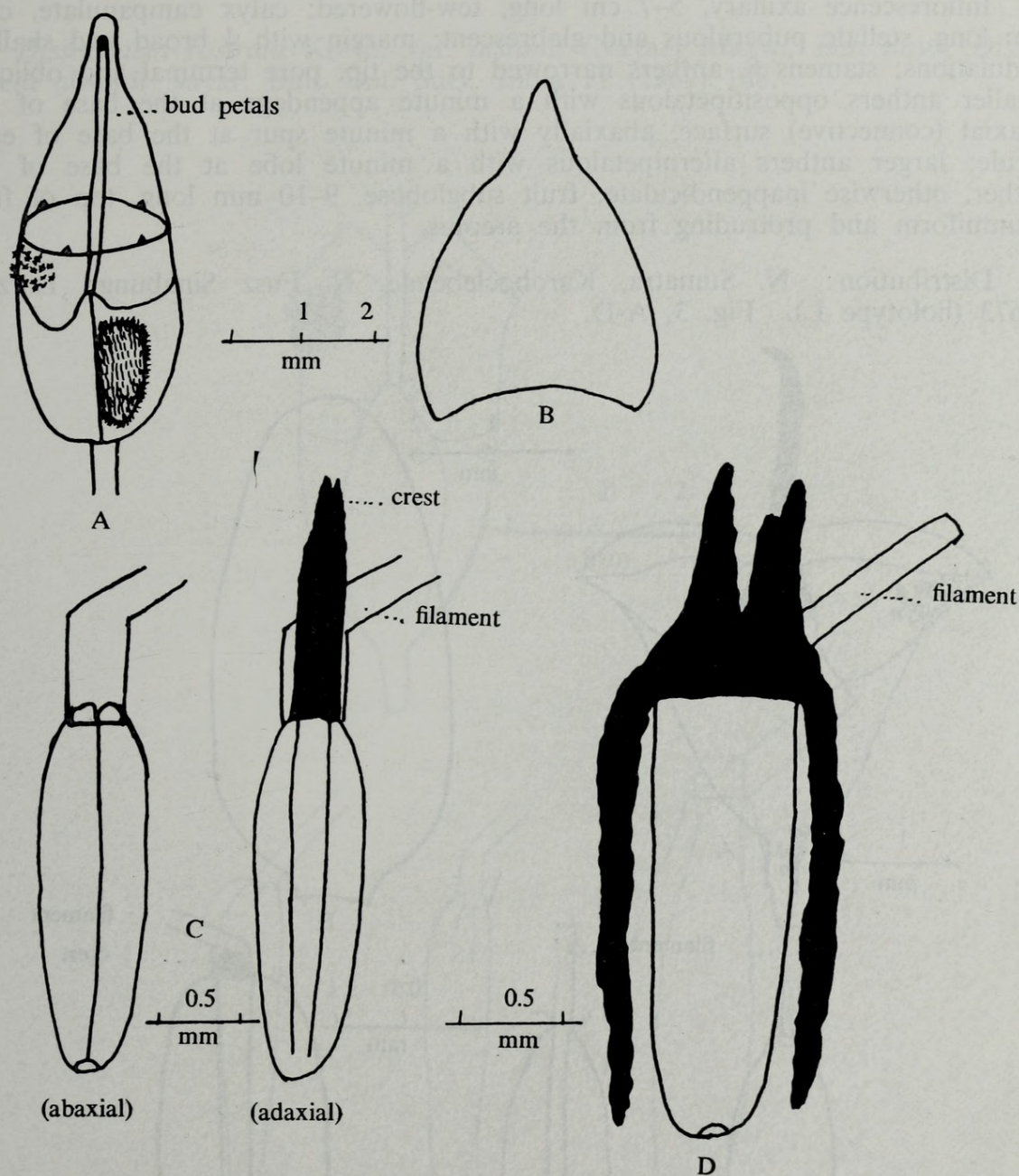


Fig. 2. *Dissochaeta laeve* Ohwi ex Maxw. A: calyx and ovary; B: bud petal; C: oppositipetalous stamen in bud; D: alternipetalous stamen in bud. A-D Endert 3127 (holotype).

16. *Dissochaeta micropectrosa* Maxw., sp. nov.

Inflorescentia axillaris, 5–7 cm longa, pauciflora. *Calyx campanulatus*, c. 4 mm longus, stellato-puberulus glabrescens, margine late ac non-profunde undulato. *Stamina* 8, *antheris* apicem versus angustatis, poro terminalis atque obliquo; *stamina* minora oppositipetala, appendice minuta ad basin facis adaxialis (connectivum) ad basin utraeque loculi calcari minuto. *Antherae* majores alternipetae ad basin lobulo minuto munitae, ceterum inappendiculatae. *Fructus* subglobosi, 9–10 mm longi, apice mammiformi atque ex areolo protruso instructi.

Typus: Lörzing 13673 (*holotypus* L). Tab. 3, A-D.

Inflorescence axillary, 5–7 cm long, few-flowered; calyx campanulate, c. 4 mm long, stellate puberulous and glabrescent; margin with 4 broad and shallow undulations; stamens 8, anthers narrowed to the tip, pore terminal and oblique; smaller anthers oppositipetalous with a minute appendage at the base of the adaxial (connective) surface, abaxially with a minute spur at the base of each locule; larger anthers alternipetalous with a minute lobe at the base of the anther, otherwise inappendiculate; fruit subglobose, 9–10 mm long, top of fruit mammiform and protruding from the areolus.

Distribution: N. Sumatra, Karoboclebende, N. Fusz Sinabung: Lörzing 13673 (*holotype* L). Fig. 3, A-D.

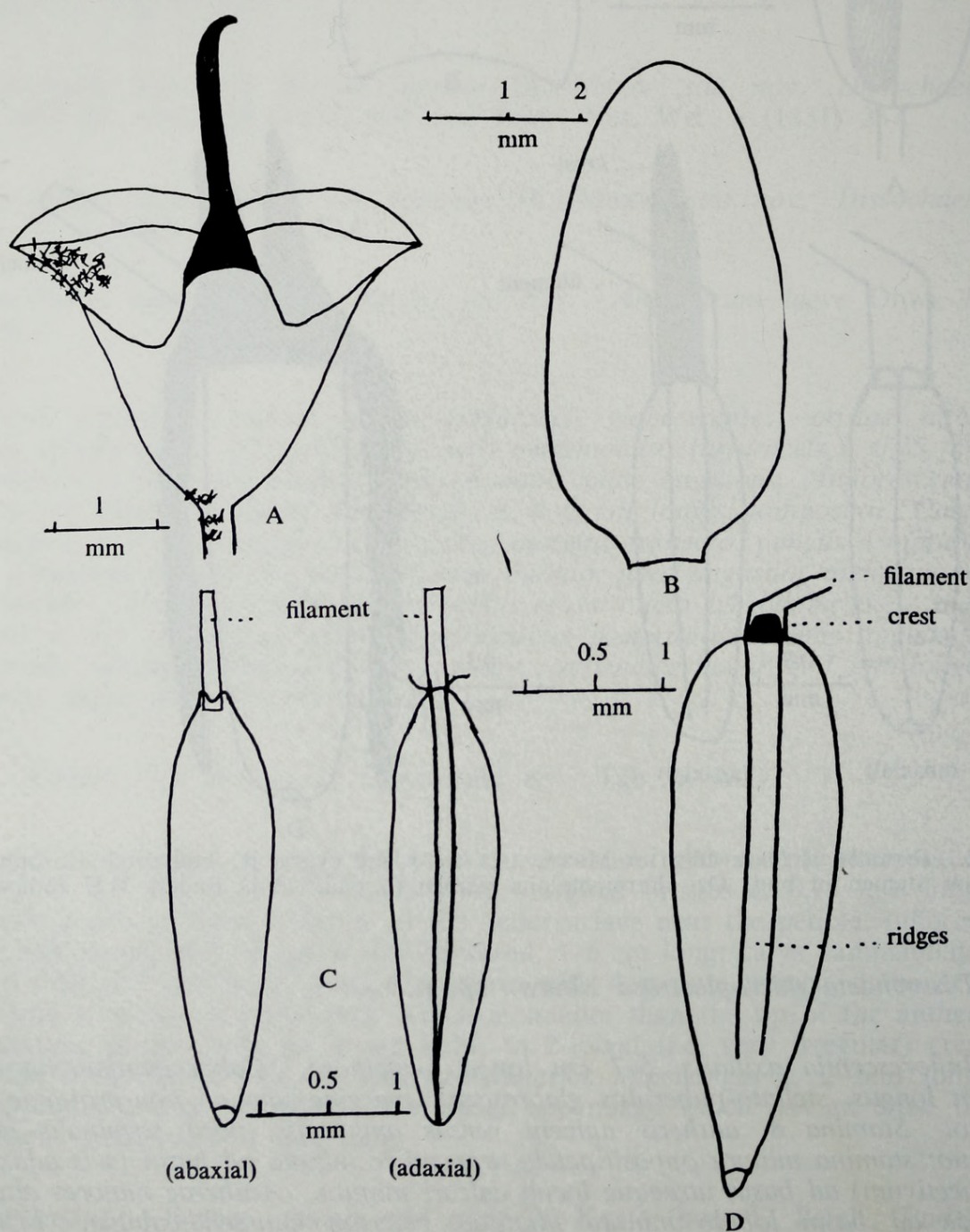


Fig. 3. *Dissochaeta microplectrosa* Maxw. A: calyx and ovary; B: mature petal; C: oppositipetalous stamen in bud; D: alternipetalous stamen in bud. A-D Lörzing 13673 (*holotype*).

17. *Dissochaeta pulchra* (Korth.) Maxw., *comb. nov.* *Dalenia pulchra* Korth. in Temm., Verh. Nat. Gesch. (1842) Bot. tab. 58.

18. *Dissochaeta rostrata* Korth. var. *alstonii* (Nayar) Maxw., *stat. nov.* *Dissochaeta alstonii* Nayar, Bull. Bot. Surv. India 11 (1969) 188.

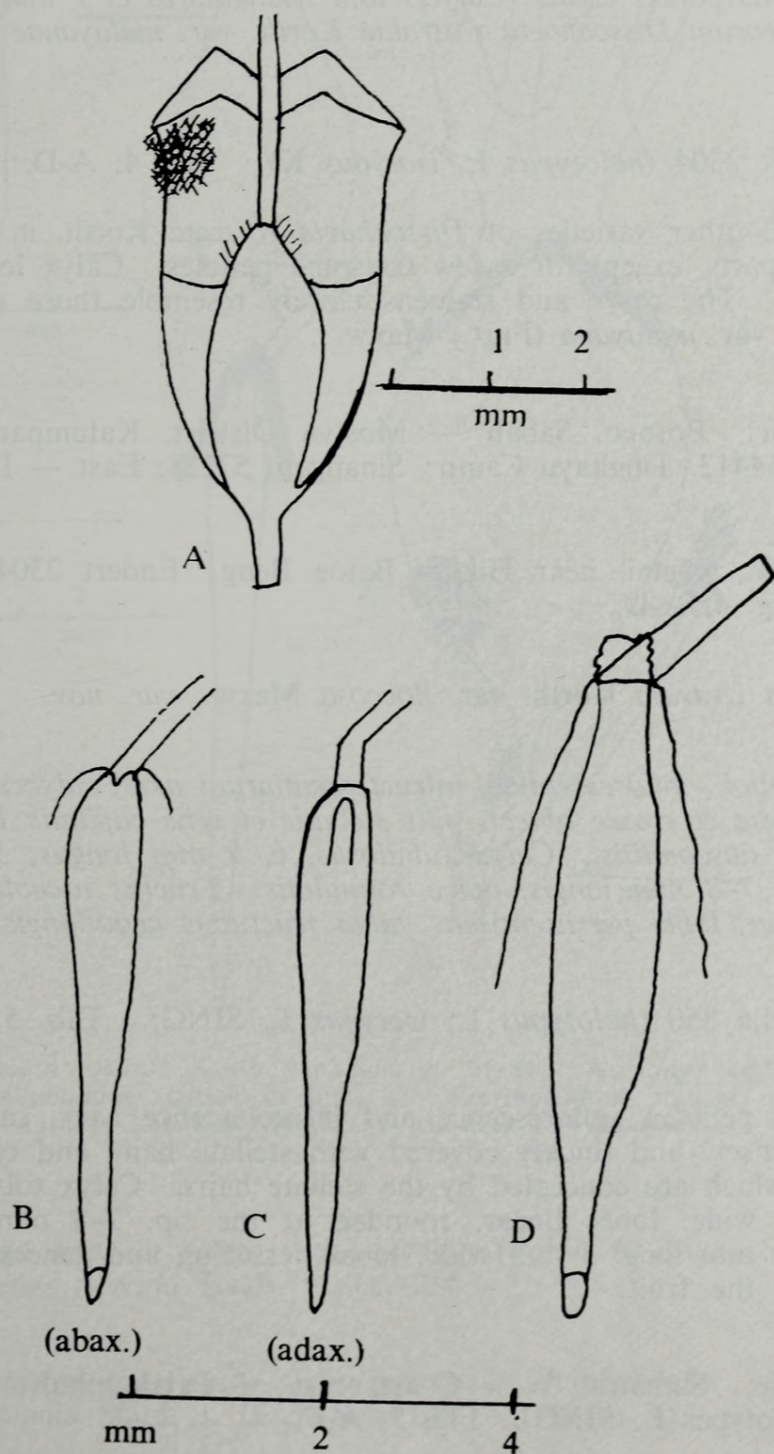


Fig. 4. *Dissochaeta rostrata* Korth. var. *esetosa* Maxw. A: calyx; B, C: oppositipetalous stamens in bud; D: alternipetalous stamen in bud. A-D Endert 2304 (holotype).

19. *Dissochaeta rostrata* Korth. var. *densiflora* (Ridl.) Maxw., stat. nov. *Dissochaeta densiflora* Ridl., Kew Bull. 1946, 32.

20. *Dissochaeta rostrata* Korth. var. *esetosa* Maxw., var. nov.

Differt a varietatibus ceteris Dissochaeta rostrata Korth. omibus partibus sine setis, petiolis paucis escal. Calycis lobi triangulares c. 1 mm longi. Calyx atque stamina eorum *Dissochaeta rostratae* Korth. var. *malayanae* (Furt.) Maxw. valde similes.

Typus: Endert 2304 (*holotypus* L, *isotypus* K). Tab. 4, A-D.

Differs from all other varieties of *Dissochaeta rostrata* Korth. in being without bristles on all parts, except for a few on some petioles. Calyx lobes triangular, c. 1 mm long. The calyx and stamens closely resemble those of *Dissochaeta rostrata* Korth. var. *malayana* (Furt.) Maxw.

Distribution: Borneo, Sabah — Mostyn District, Kalumpang For. Res.: Nordin & Ali 54413, Tingkayu Camp: Sinanggul 57228; East — Liang Gagang:

Hallier 2665; W. Koetai, near Hikam Batoe Beng: Endert 2304 (*holotype* L, *isotype* K). Fig. 4, A-D.

21. *Dissochaeta rostrata* Korth. var. *floccosa* Maxw., var. nov.

Ramuli, petioli, inflorescentiae, infructescentiarum axes, calyces atque fructus floccosi, i.e. dense et crasse obtecti pilis stellatis et setis capitatis 1-2 mm longis a pilis stellatis absconditis. Calyx tubulosus, c. 9 mm longus, 3-4 mm latus, lobis linearibus 7-8 mm longis, apice rotundatis. Fructus urceolati, c. 10 mm longi, 5 mm lati, lobis persistentibus, vulgo fructibus aequilongis.

Typus: Maradja 350 (*holotypus* L; *isotypus* L, SING). Tab. 5, A-F.

Branchlets, petioles, inflorescence and infructescence axes, calyx, and fruit floccose, i.e. densely and thickly covered with stellate hairs and capitate bristles 1-2 mm long which are concealed by the stellate hairs. Calyx tubular, c. 9 mm long, 3-4 mm wide, lobes linear, rounded at the tip, 7-8 mm long. Fruit urceolate, c. 10 mm long, 5 mm wide, lobes persisting and generally as long as or longer than the fruit.

Distribution: Sumatra, West Coast, east of Pajakumbuh: Maradja 350 (*holotype* L; *isotypes* L, SING). Fig. 5, A-F.

22. *Dissochaeta rostrata* Korth. var. *hirsuta* (Hk. f. ex Triana) Maxw., stat. nov. *Dissochaeta hirsuta* Hk. f. ex Triana, Trans. Linn. Soc. 28 (1871) 83.

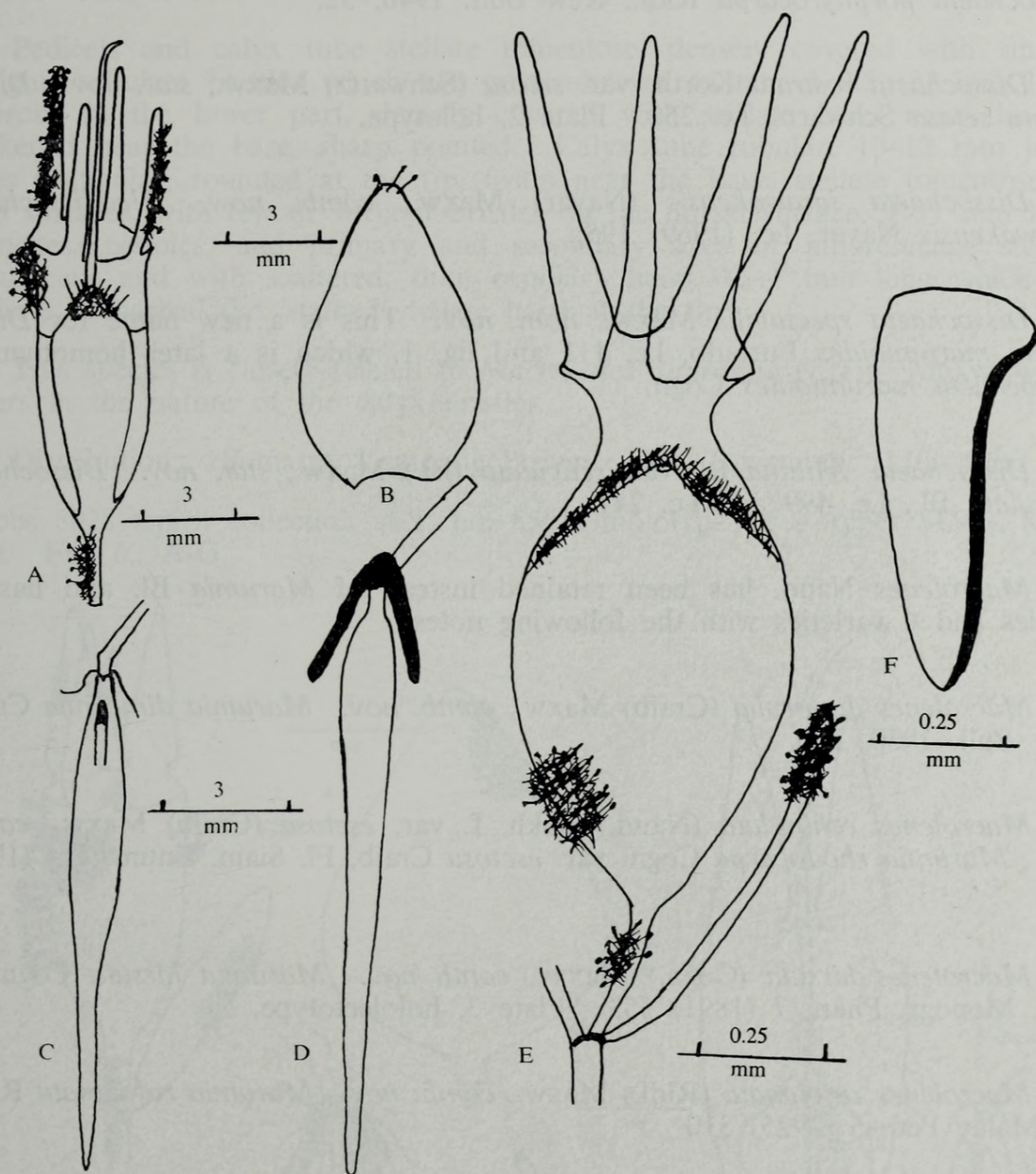


Fig. 5. *Dissochaeta rostrata* Korth var. *floccosa* Maxw. A: calyx and ovary; B: petal bud; C: oppositipetalous stamen in bud; D: alternipetalous stamen in bud; E: fruit; F: seed. A-D Maradja 350 (holotype), E, F Maradja 350 (isotype).

23. *Dissochaeta rostrata* Korth. var. *horrida* (Bakh. f.) Maxw., *comb. et stat. nov.* *Macrolenes horrida* Bakh. f., l.c. 208.

24. *Dissochaeta rostrata* Korth. var. *macrosepala* (Stapf) Maxw., *stat. nov.* *Dissochaeta macrosepala* Stapf, J. Linn. Soc. Bot. 42 (1914) 80.

25. *Dissochaeta rostrata* Korth. var. *malayan* (Furtado) Maxw., *stat. nov.* *Dissochaeta malayana* Furtado, Gard. Bull. Sing. 20 (1963) 110.

26. *Dissochaeta rostrata* Korth. var. *porphyrocarpa* (Ridl.) Maxw., stat. nov. *Dissochaeta porphyrocarpa* Ridl., Kew Bull. 1946, 32.

27. *Dissochaeta rostrata* Korth. var. *setosa* (Schwartz) Maxw., stat. nov. *Dissochaeta setosa* Schwartz, l.c. 250. Plate 2, holotype.

28. *Dissochaeta sarawakensis* (Nayar) Maxw., comb. nov. *Neodissochaeta sarawakensis* Nayar, l.c. (1969) 195.

29. *Dissochaeta spectabilis* Maxw., nom. nov. This is a new name for *Dissochaeta marumioides* Furtado, l.c. 111 and fig. 1, which is a later homonym of *Dissochaeta marumioides* Cogn.

30. *Dissochaeta velutina* Bl. var. *reticulata* (Bl.) Maxw., stat. nov. *Dissochaeta reticulata* Bl., l.c. 499 and l.c. 241.

Macrolenes Naud. has been retained instead of *Marumia* Bl. and has 11 species and 6 varieties with the following notes:

31. *Macrolenes dimorpha* (Craib) Maxw., comb. nov. *Marumia dimorpha* Craib, Kew Bull. 1930, 320.

32. *Macrolenes echinulata* (Naud.) Bakh. f. var. *esetosa* (Craib) Maxw., comb. nov. *Marumia rhodocarpa* Cogn. var. *esetosa* Craib, Fl. Siam. Enum. I:4 (1931) 697.

33. *Macrolenes hirsuta* (Cogn.) Maxw., comb. nov. *Marumia hirsuta* Cogn. in DC., Monogr. Phan. 7 (1891) 553. Plate 3, holotype.

34. *Macrolenes rufolanata* (Ridl.) Maxw., comb. nov. *Marumia rufolanata* Ridl., Fl. Malay Pen. 5 (1925) 310.

35. *Macrolenes stellulata* (Jack) Bakh. f. var. *ciliatiloba* (Baker f.) Maxw., stat. nov. *Macrolenes ciliatiloba* (Baker f.) Bakh. f., l.c. 215.

36. *Macrolenes subulata* Maxw., sp. nov.

Pedicilli et tubus calyxis stellato-tomentosi, setis simplicibus, stritus, subulatis, aureo-brunneis ad fulvis, 1–2.5 (3) mm longis, basi glabris, apicem versus pilis stellatis dense obtectis, basi incrassata, apice acri dense obtecti. Tubus calycis tubularis, 10–12 mm longus, lobis triangularibus e basi ovata, apice rotundato, ambobus stellato-tomentosis, extra setis sparsis vel nullis, 9–11 mm longis. Ramuli, petioli, axes primarii secundariique inflorescentiae stellato-furfuracei, atque pilis dispersis, tenuibus, 0.5–1 mm longis, apice capitato stellatiforme stellato-furfuracei.

Typus: Jacobs 8028 (*holotypus* L; *isotypus* SING, KEP, etc.) Tab. 6, A-G.

Pedicels and calyx tube stellate tomentose, densely covered with simple, straight, subulate bristles which are golden-brown to tan, 1–2.5 (3) mm long, glabrous in the lower part, densely covered with stellate hairs near the tip, thickened near the base, sharp pointed. Calyx tube tubular, 10–12 mm long; lobes triangular, rounded at the tip, ovate near the base, stellate tomentose on both surfaces, with few or without bristles on the dorsal surface, 9–11 mm long. Branches, petioles, and primary and secondary axes of inflorescence stellate furfuraceous and with scattered, thin, capillary hairs 0.5–1 mm long which are capitate or barbed (i.e. stalked stellate hair) at the tip.

This species is closely related to *Macrolenes dimorpha* (Craib) Maxw. which differs in the nature of the calyx bristles.

Distribution: Sumatra, Lampung Province, Mt. Tanggamus (1100–1200 m):

Jacobs 8028 (spirit collection at L no. 6561) (*holotype* L; *isotypes* SING, KEP, etc.). Fig. 6., A-G.

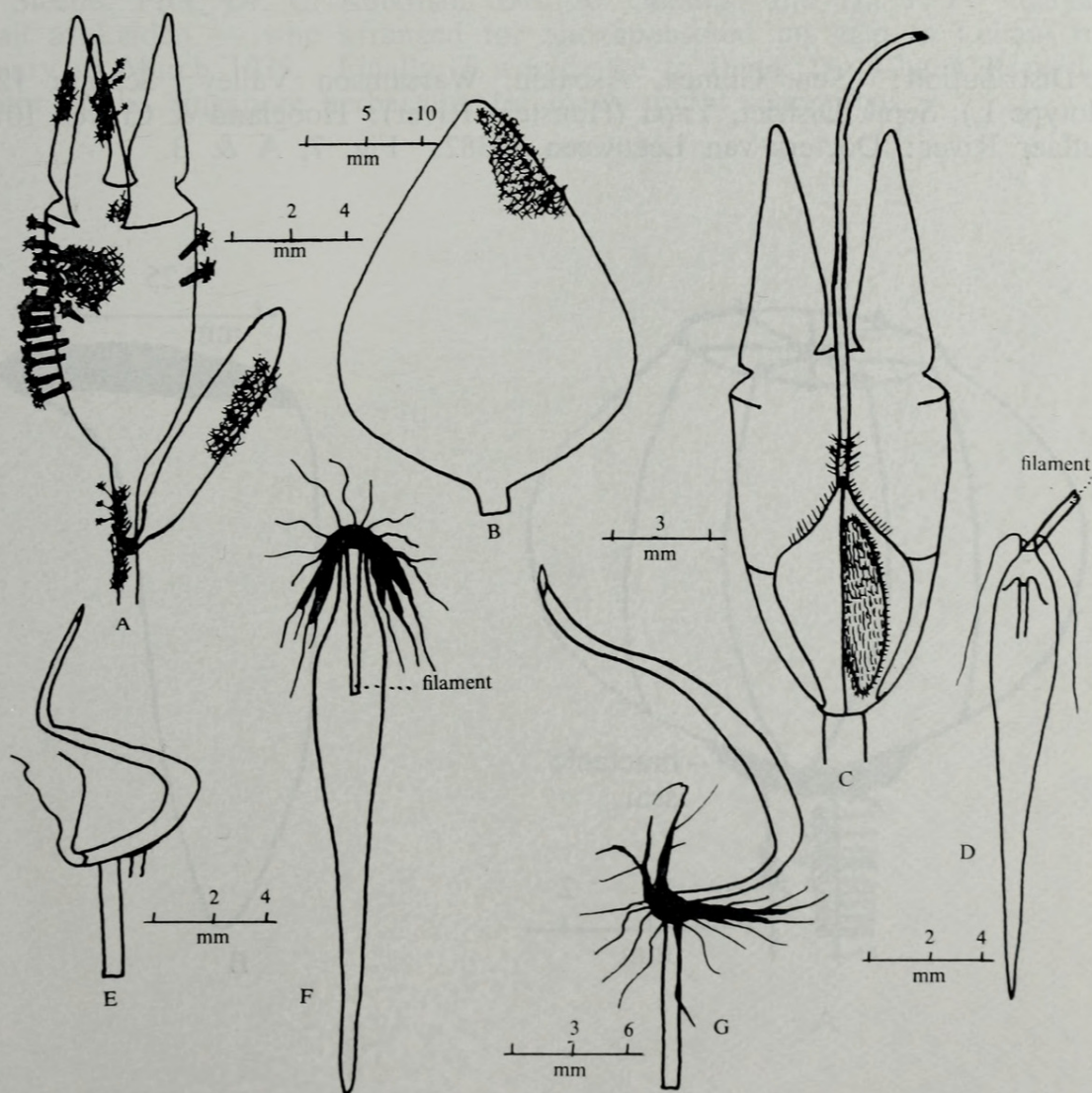


Fig. 6. *Macrolenes subulata* Maxw. A: calyx and bracteole; B: mature petal; C: ovary; D: oppositipetalous stamen in bud; E: mature oppositipetalous stamen; F: alternipetalous stamen in bud;; G: mature alternipetalous stamen. A-G Jacobs 8028 (*holotype*).

Creochiton Bl. includes 9 species and 2 varieties. *Enchosanthera* Guill. (Bull. Soc. Bot. France 60 (1913) 314), *Eisocreochiton* Quis. & Merr. Phil. J. Sci. 37 (1928) 177), and *Anplectrella* Furtado (l.c. 106) are all based on *Creochiton anomala* (King & Stapf ex King) Veldk. and are syn. nov. of *Creochiton* Bl.

37. *Creochiton ledermannii* Mansf. var. *turbinata* Maxw., var. nov.

Differt a var. ledermannii indumento minus denso ramules, petiolos atque axes inflorescentiarum obtegenti, bracteolis glabris, calyxis patribus connatis turbinatus, fructubus extus lines verticalibus 8 munitis, atque collo brevi.
Typus: Schram 12260 (holotypus L). Tab. 7, A et B.

Differs from var. *ledermannii* in having less dense indumentum on the branchlets, petioles, and inflorescence axes; glabrous bracteoles; depressed globose, i.e. turbinate, fruit which has 8 vertical lines on the outside; and with a short neck-like areolus.

Distribution: New Guinea, Asbakin, Warsamson Valley: Schram 12260 (holotype L); Sepik District, Yapa (Hunstein River): Hoogland & Craven 10735; Kouffaer River: Docters van Leeuwen 10382. Fig. 7, A & B.

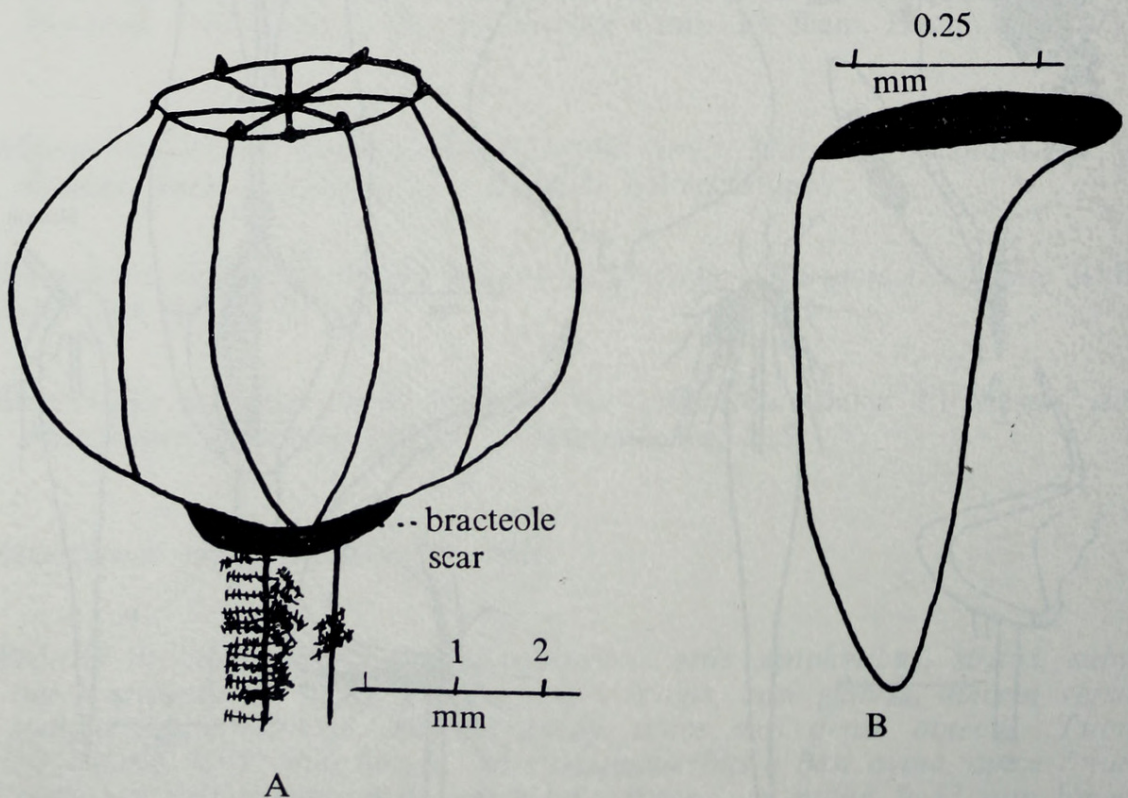


Fig. 7. *Creochiton ledermannii* Mansf. var. *turbinata* Maxw. A: mature fruit; B: seed. A and B Schram 12260 (holotype).

Pseudodissochaeta Nayar has five species, more of which may eventually be found in *Medinilla* Gaud. and other genera in the Melastomataceae which require revision.

38. *Pseudodissochaeta spirei* (Guill.) Veldk. & Maxw., *comb. nov.* *Medinilla spirei* Guill., Fl. Gen. Indo-Ch. 2 (1921) 921. Lectotype: Chevalier 32408 (P) from Co-ba, North Vietnam.

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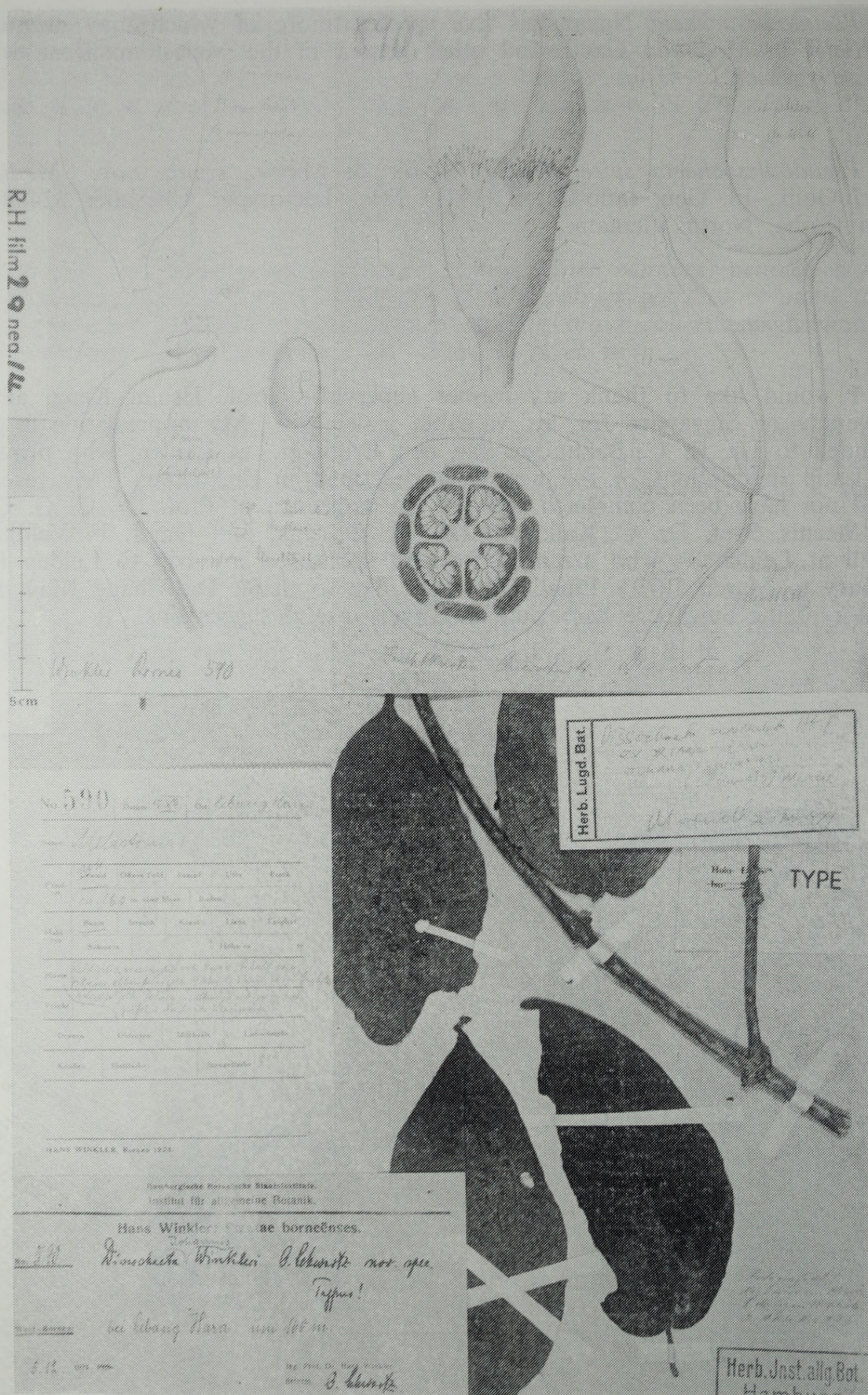


Plate 1. Holotype of *Dissochaeta annulata* Hk. f. ex Triana var. *johannis-winkleri* (Schwartz) Maxw. at Hamburg. The specimen was collected in Hara, western Borneo by Hans Winkler (590) on 5 December 1924. Photo: Rijksherbarium, Leiden..

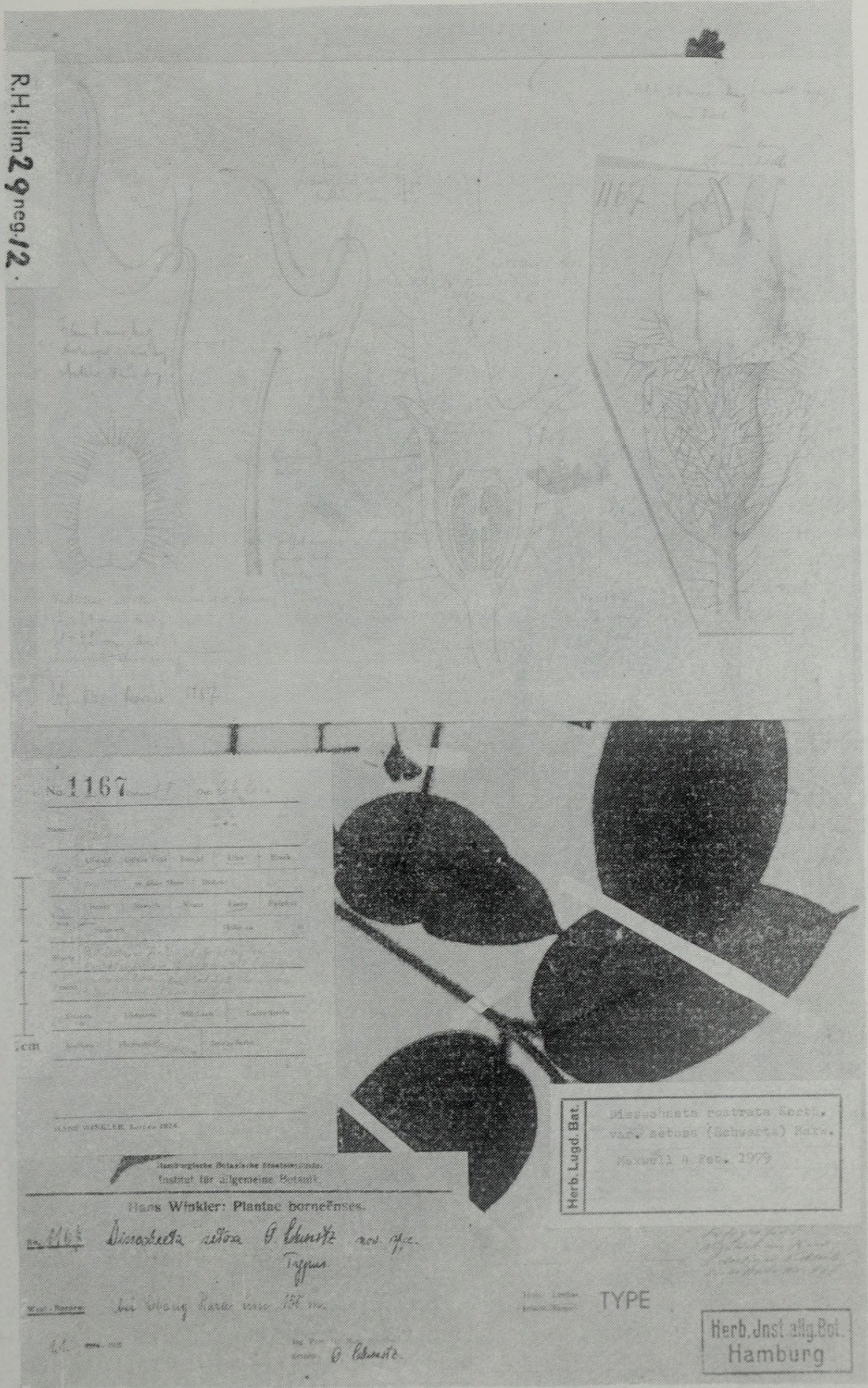


Plate 2. Holotype of *Dissochaeta rostrata* Korth. var. *setosa* (Schwartz) Maxw. at Hamburg. This species was collected in Hara, western Borneo by Hans Winkler on 1 January 1925 and was originally described as *Dissochaeta setosa* Schwartz in 1931. The drawings are attached to the sheet. Photo: Rijksherbarium, Leiden.



Maxwell, J F. 1980. "Taxonomic Notes on the Tribe Dissochaeteae (Naud.) Triana (Melastomatacea)." *The Gardens' bulletin, Singapore* 33, 312-327.

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