

CERTAIN MELASTOMACEAE OF SURINAM

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Recent study of the copious material of Melastomaceae conserved in the Botanisch Museum en Herbarium at Utrecht has shown the existence of several undescribed species in Surinam and has given new ideas on the taxonomic status of a few other species. These results are presented below, in advance of the treatment of the family in the „Flora of Surinam”.

Ernestia Pullei Gleason, sp. nov. Suffruticosa 4 dm. alta. Caulis purpureo-brunneus 4-angulatus dense glanduloso-pubescens, internodiis 10—15 mm. longis. Petioli graciles 5—10 mm. longi glanduloso-villosi. Laminae tenues ovatae usque ad 25 mm. longae 17 mm. latae acutae minutissime serrulatae basi cordulatae 5-nerviae, supra sparse minuteque glanduloso-pilosae, subtus dense cinereo-tomentellae. Paniculae magnae terminales ramosae 8—12 cm. longae multiflorae glanduloso-polisae, bracteis minimis oblongis. Florum 4-merorum non bene conservatorum structura difficiliter et fortasse non rite observanda. Hypanthium tubuloso-campanulatum 8-costatum dense glanduloso-pilosum. Sepala erecta triangularia acuta sparse glandulosa 1.6 mm. longa. Petala non visa. Stamina valde dimorpha. Filamenta glabra erecta gracilia 3.7 mm. longa. Antherae lineari-subulatae, staminum episepalorum horizontales 4.2 mm. longae, connectivo subtereti in semicirculum 1.5 mm. diam. curvato et supra insertionem filamenti in appendices 2 V-forme connatas dilatato, ad angulam externam appendicem inserto; appendicibus in angulo interno ad filamentum affixis, triangulari-subulatis 3.2 mm. longis, infra filamentum attenuatis in calcaria filiformia et interdum calcaribus similibus lateralibus 1 vel 2 ornatis; antherae staminum epipetalorum erectae 3.3 mm. longae, connectivo ad angulam 90° deflexo 1 mm. longo, infra insertionem filamenti calcaria 2 lineari-subulata erecta 1.7 mm. longa gerente. Ovarium superum, teste cl. P u l l e in schedis 3-loculare, sed in uno dissecto

distinctissime 4-loculare; stylo stigmatique non visis; seminibus cochleatis.

TYPE: Pulle 848, collected on the Voltzberg, Surinam, and deposited in the Botanisch Museum en Herbarium at Utrecht. In its strongly dimorphic stamens, *E. Pullei* differs markedly from *E. rubra* Pulle and *E. glandulosa* Gl., the only species hitherto known from the Guianas, and approaches the Andean species. It differs from them in turn in its short and broad sepals, all the Andean forms having subulate sepals as long as or longer than the hypanthium. The shape of the anther-appendages is also unique, but this structure is apparently variable and of little diagnostic value in the genus.

Brachypremna Gleason, nov. gen. Melastomacearum, tribu *Tibouchinearum*. Hypanthium fructiferum 4-merum, 8-costatum. Sepala 4 persistentia in fructu recurva, triangularia, acuta, glanduloso-pilosa. Capsula late ellipsoidea, hypanthium aequans, 3-locularis, loculicida atque septicida; placentis 3 valde incrassatis. Semina numerosa brunnea semi-ovoidea valde cochleata, tuberculis brevibus cylindricis truncatis creberrime notata. Frutex humilis laxo ramosus, caulibus inferne denudatis dense glanduloso-pubescentibus. Folia opposita petiolata pubescentia. Inflorescentia parva terminalis paniculata multiflora, floribus breviter pedicellatis. Petala et stamina ignota.

Brachypremna petiolata Gleason, sp. nov. Caules graciles late ramosi certe 4 dm. alti. Petioli gracillimi molliter glandulosi 4—12 mm. longi. Laminae tenues obovato-oblongae 15—35 mm. longae 10—24 mm. latae, superne ad cuspidem brevem rotundatae, minutissime denticulatae, dentibus glanduloso-setosis, ad basin late rotundatae, 5-nerviae, interdum obscure 7-nerviae, venulis fere planis utrinque conspicue reticulatis, utrinque tenuissime pubescentes. Inflorescentia breviter pedunculata 2—5 cm. longa glanduloso-villosa. Pedicelli 1 mm. longi. Hypanthium fructiferum urceolato-ovoideum 4 mm. longum sparse glanduloso-villosum. Sepala acuta 1.5 mm. longa basi 0.8 mm. lata. Capsula 4 mm. longa glabra. Semina atro-brunnea 0.7 mm. longa 0.5 mm. lata.

TYPE: Hulk 341. Lucie River, on "Mt. A," Surinam, on rocks at an altitude of 600 m., and deposited in the Botanisch Museum en Herbarium at Utrecht. The generic name refers to the short protuberances which thickly cover the seeds.

To one with some familiarity with the *Melastomaceae* of northeastern South America, this plant appears distinct from all other genera in its general facies, in which it most nearly resembles

Tateanthus duidae Gl., a species of entirely different structure. Only two tribes of American melastomes have capsular fruit and cochleate seeds, the *Tibouchineae* and *Rhexieae*. Among the latter it approaches most nearly to *Monochaetum*, but differs in its pubescence and 3-celled ovary. In the *Tibouchineae*, a 3-celled ovary exists in certain species of *Acisanthera*, *Ernestia*, *Appendicularia*, *Nepsera*, *Mecairea*, *Marcetia*, and rarely in *Tibouchina*. Of these, *Acisanthera* and *Ernestia* have 5-merous flowers and differ greatly in habit. *Marcetia* has minute leaves; the pubescence is different in *Tibouchina*; the sepals are minute and blunt in *Appendicularia*; *Nepsera* differs in its inflorescence and general habit. In *Macairea* the ovary is setose at the summit and remains so in fruit, but a similar general habit is found in *M. duidae* Gl. The fruit of *Brachypremna* is glabrous and shows no indication that it was ever setose. We may accordingly conclude that our plant is a new genus, probably related to *Ernestia*, and may predict that flowering material, when collected, will show staminal structures in support of this belief.

Certain species of *Acisanthera* and *Comolia*. Presl described *Dicrananthera hedyotideae* in 1832, basing his diagnosis on a specimen collected by Lhotsky in Bahia. This specimen has not been mentioned in literature subsequently and was apparently not examined by Naudin, Triana, or Cogniaux. Presl's description and plate clearly indicate truncate anthers, clavate style, intersepaline setae, and bilocular ovary; the petals are stated to be absent, even in unopened buds.

Naudin accepted Presl's name and cited for the species Kegel 461 from Surinam, on which he failed to find petals. He described intersepaline setae, a clavate style, and a bilocular ovary, as in Presl's plant, but the anthers were stated and figured clearly as long-rostrate. At the same time Naudin described another plant from Bahia, collected by Salzmann, as *Dicrananthera Salzmanni*. It agrees by description with Presl's plant in every respect except that petals are present.

Triana later examined the Salzmann plant, or at least cited it, and regarded it as insufficiently different from *D. hedyotideae* to be maintained as a species. He accepted Presl's specific name and transferred it to the genus *Acisanthera*. Triana did not see the Kegel plant from Surinam, citing it *fide* Presl. Presl did not mention it, as a matter of fact, and Triana probably meant *fide* Naudin.

Cogniaux continued Presl's name, but applied it only to

specimens from Para and northward, describing it with petals and rostrate anthers, as Naudin had done before him. He was the latest monographer to discuss the genus and left Presl's name attached to a plant of different structure and different geographic distribution.

I have examined Kegel 461 superficially. Unbroken anthers apparently do not exist and probably never did exist on the specimen, which is in fruiting condition. Intersepaline setae are clearly visible and the sepals are about 1.7 mm. long.

Acisanthera Boissieriana Cogn. was based on Wulfschlaegel 168, collected in Surinam. I have examined the actual type, inscribed in Cogniaux's hand "Exemplaire figure in Flora Brasil." Careful comparison with Kegel 461 reveals no essential point of difference between them. Whether it is also the same as Presl's *D. hedyotideae* from Bahia is not known, and until this is ascertained the name *A. Boissieriana* may be maintained.

Kegel collected another *Acisanthera*, number 1129. On it some one as written the name *D. hedyotideae* Presl, status apetalus. The latter two words are erroneous, since petals are plainly visible. The same person has also indicated that *D. Salzmanni* Naud. is a synonym. Careful dissection of this plant shows that the anthers are distinctly rostrate, the style filiform, the intersepaline setae none, the sepals 3.7 mm. long, and the ovary 4-locular. In all of these features it is distinctly unlike *A. hedyotideae*, as described by Presl, and instead agrees precisely with *A. glomerata* Gl. One can easily infer that Naudin's statement of rostrate anthers in *A. hedyotideae* was derived from an examination of this plant rather than of Kegel 461.

Comolia tetraptera Cogn. is based on Wulfschlaegel 175, from Surinam, in the herbarium at Brussels, and is apparently known only from this one collection. Although flowers in anthesis are lacking, a fact which led Cogniaux to place it erroneously in the genus *Comolia*, careful examination of the fruiting hypanthium, sepals, and vegetative parts shows clearly that it is the same as Kegel 1129.

Acisanthera hedyotideae therefore disappears from the flora of Surinam, at least until further knowledge of the nature of the type specimen is available, since the two specimens on which the record is based are assigned to other species. For one of these species a new combination becomes necessary:

Acisanthera tetraptera Gleason, comb. nov.

Comolia tetraptera Cogn. Flor. Bras. XIV 3 (1885) 426.

Acisanthera glomerata Gl. Bull. Torrey Club 52 (1925) 332.

Acisanthera hedyotideae of various authors, in part; not Presl.

Adelobotrys monticola Gleason, sp. nov.

Caules juniores graciles complanati bisulcati brunneo-strigosi, vetustiores glabrescentes teretes, nodis setulosi. Petioli breves, 4—7 mm. longi, supra complanati, strigosi. Laminae late ellipticae vel oblongae, usque ad 6 cm. longae, 4 cm. latae, abrupte acuminatae vel cuspidatae, subtiliter denticulatae et sparse ciliatae, inferne ad basin acutam late rotundatae, supra glabrae minutissime alborugulosae, subtus pallidiores et sparsissime setulosae, 5-nerviae, venis secundariis obscuris sub angula 45° adscendentibus. Paniculae breves, 4—7 cm. longae, 5—7 cm. latae, axibus angulatis sparse strigosis, umbellulis 2—4 floris. Pedicelli 3—5 mm. longi graciles. Hypanthium anguste obconicum 6 mm. longum sparse strigosum. Calycis tubus patens 1.6 mm. longum, strigosum, lobis obsoletis, dentibus exterioribus infra marginem orientibus, 0.8 mm. longis, e basi conica in apicem subulatum angustatis. Petala 9 mm. longa, verisimiliter anguste obovata. Stamina episepala: Filamenta gracilia complanata 8 mm. longa. Antherae fere rectae lineares 5.5—6 mm. longae. Calcar basale cuneiforme 0.7 mm. longum, minute 2-dentatum. Stamina epipetala: Filamenta 7.2—7.7 mm. longa. Antherae subulatae valde arcuatae 6.5—7 mm. longae. Calcar basale 0.5 mm. longum vix bidentatum. Calcar dorsale curvatum 3—3.5 mm. longum apice 2-lobum, lobis obtusis 0.8—1.3 mm. longis. Ovarium liberum oblongo-clavatum glabrum 5 mm. longum 5-loculare, stylo leviter sigmoideo 8 mm. longo, stigmate punctiformi. Hypanthium fructiferum ovoideo-urceolatum 7 mm. longum valde 10-costatum, calyce persistente 7 mm. lato. Capsula 5-valva 6 mm. longa. Semina lineari-cuneata 2 mm. longa utrinque alata, ala basali angusta, terminali paullo dilatato.

TYPE: Stahel 441 (B.W. 7069), collected near the summit of Wilhelmina Mountains, alt. 1200 m., and deposited in the Botanisch Museum en Herbarium at Utrecht. Apparently the same species was collected by Tate at the same altitude on the slopes of Mount Duida. *A. monticola* is related to *A. rotundifolia* Triana and *A. Spruceana* Cogn., in both of which the flowers are much smaller and the leaves distinctly veined.

Macrocentrum fruticosum Gleason, sp. nov. Frutex parvus ad 5 dm. altus, ramis gracilibus glabris teretibus vel obscure angulatis, internodiis 1—3 cm. longis. Folia opposita in quoque jugo aequalia. Petioli gracillimi glabri 5—15 mm. longi. Laminae tenues ovatae vel lanceolatae, usque ad 50 mm. longae 25 mm. latae,

acuminatae, margine ciliato-serrulatae, basi rotundatae vel subcordatae, 5-nerviae, in juventute supra sparsissime breviterque setosae maturae glabrescentes, utrinque minutissime albo-punctato-scaberulae; venae primariae et secundariae utrinque planae, tertiariae obscurae reticulatae. Pedunculus glaber terminalis primum brevis gracillimus, ad et post anthesin usque at 5 cm. elongatus. Cyma bifida vel trifida, ante anthesin conferta et umbelliformis, in fructu elongata et racemiformis; pedicelli 1—3 mm. longi. Flores 4-meri. Hypanthium anguste campanulatum, 3.5 mm. longum, 8-costatum, ad basin angustatum, glabrum. Calycis tubus 0.4 mm. productus; sepala triangularia dorso carinata, e sinubus obtusis 0.6—0.7 mm. longa, dentibus exterioribus subapicalibus subulatis paululum incurvis 0.2—0.3 mm. longis. Petala ad anthesin erecta, elliptico-lanceolata, acuta, 7—7.5 mm. longa, 1.6 mm. lata, 5—7 nervia. Stamina isomorpha. Filamenta complanata 3.2 mm. longa. Antherae angustissime subulatae, paulum retrorse arcuatae, 4.2—4.4 mm. longae, thecis undulatis. Connectivum infra thecas brevissime productum, dorso ad basin calcare subulatum 1.9—2 mm. longo ornatum. Ovarium liberum oblongum 2 mm. longum apice retusum, 3 (vel nonnunquam 4) locale, ovulis numerosis. Stylus gracillimus, 8.5 mm. longus, stigmate punctiformi.

TYPE: Stahel 457 (B.W. 7073), collected in the Wilhelmina Mountains of Surinam, alt. 1200 m., and deposited in the Botanisch Museum en Herbarium at Utrecht. Stahel 582 (B.W. 7121), collected in the same region, exhibits three smaller plants from 2 to 3.5 dm. tall. In two of them the leaves are broadly obtuse or subcuneate at base. A third specimen is Hulk 342, collected at an altitude of 600 m. on Mt. "A," along the Lucie River. Its stems are barely shrubby; its leaves are lanceolate and conspicuously cordate at base. Flowers are absent, but the excellent fruiting hypanthia are 6 mm. long and deeply 8-sulcate.

A brief key to the seven hitherto known species of this small genus appeared in the Bulletin of the Torrey Club, vol. 58, page 424, 1931. According to this key, *M. fruticosum* is most nearly related to *M. cristatum* (L. C. Rich.) Triana, and this is further substantiated by structural details. In *M. cristatum* the stems are herbaceous, with much shorter internodes and smaller 3-nerved leaves distinctly and regularly cuneate at base; the hypanthium and calyx together are only 2—2.5 mm. long; the sepals are very short or almost obsolete, without exterior teeth; the petals are only 4 mm. long, and all other parts of the flower are smaller in about the same proportion.

Topobea cuspidata Gleason, sp. nov. Rami superiores graciles, teretes aut subteretes, glabri, internodiis plusminusve elongatis. Petioli graciles 2—3 cm. longi. Laminae tenuēs, late obovato-oblongae, 8—12 cm. longae, 6—11 cm. latae, superne ad cuspidem triangularem 3—8 mm. longam rotundatae, integrae, basi rotundatae vel late obtusae, 7-nerviae, glabrae aut juventute subtus minute furfuraceae, utrinque minutissime albo-punctulatae, venis secundariis vix prominulis, sub angulo 80° orientibus. Flores 6-meri, pauci in fasciculis axillaribus, pedicellis subcentimetralibus. Bractae ad basin liberae, late obovato-rotundae, exteriores 4 mm., interiores 7 mm. longae. Hypanthium late campanulatum, 10 mm. longum, minutissime brunneo-punctulatum. Calycis tubus fere 4 mm. longus, lobis depresso-triangularibus fere obsoletis; dentibus exterioribus nullis. Petala late obovata, circa 15 mm. longa. Filamenta complanata. Antherae subulatae 10 mm. longae, basi ut videtur ecalcaratae. Ovarium ovoideum glabrum 6-loculare; ovulis numerosis; stylus filiformis, stigmate punctiformi.

TYPE: Gonggrijp (B.W. 3710), collected at Poeloegoedoe, on the Tapanahoni River, Surinam, and deposited in the Botanisch Museum en Herbarium at Utrecht. The collector noted that the flowers were light violet and the fruit white, marked with red at the summit.

According to the treatment of the genus in *Cogniaux'* Monograph, *T. cuspidata* stands next to *T. superba* Naud., which differs in its square stem and crowded leaves. The same characters are found in *T. parasitica* Aubl., the only other species known from the Guianas. The latter is further distinguished by its bracts, which are as long as the hypanthium. From a dissection of a single large bud of the type, it was impossible to determine whether the anthers bear a basal spur.

Henriettella Patrisiana (DC.) Naud.

Naudin was apparently correct in placing this species in the genus *Henriettella*, although DeCandolle, Miquel, Naudin, Triana and Cogniaux successively regarded it a *Henriettea*. The primary technical difference between the two genera lies in the shape of the anthers, which are rostrate in *Henriettea* and merely obtuse in *Henriettella*. DeCandolle did not describe the stamens, nor did Triana. Miquel figures one with great fidelity in his *Stirpes Surinamenses Selectae*, pl. 12, where it is distinctly shown as erostrate. Cogniaux describes them as subrostrate, possibly in an attempt to harmonize the actual shape with his generic character of *Henriettea*. Miquel also illustrates the petals

as acute, another character typical of *Henriettella*. A third character has hitherto been overlooked. Many species of *Henriettella* contain slender hexagonal prismatic crystals in the mesophyll. When the leaves are dried, these are visible on the surface as minute linear ridges, seldom more than 0.5 mm. long. The same markings on the surface and the same crystals in the mesophyll also appear in *H. Patrisiana* and give additional confirmation to the correctness of Naudin's transfer.

Henriettella caudata Gleason, sp. nov. Arbor 5 m. alta. Rami superiores teretes glabri. Petioli graciles semiteretes glabri 15—40 mm. longi. Laminae tenues, oblongo-oblancoolatae, 13—25 cm. longae, 4—7 cm. latae, anguste caudato-acuminatae (acumine 15—25 mm. longo), minute denticulatae aut integrae, denticulis juventute setoso-ciliatis, supra glabrae, subtus glabrae vel sparse furfuraceae, praecipue ad venas, 5-pli-nerviae; nervi primarii supra vix prominuli subtus fere plani, jugo superiore 2—4 cm. supra basin folii oriente, jugo inferiore submarginali; nervi secundarii e costa sub angulo circ. 80° divergentes, utrinque plani. Flores 5-meri in fasciculis 1—3-floris secus ramos vetustiores longe dissiti; pedicelli 3—10 mm. longi graciles glabri. Hypanthium 2—3 mm. longum glabrum subglobosum vel hemisphaericum. Calycis tubus truncatus, lobis et dentibus exterioribus obsoletis. Petala et stamina adhuc ignota.

TYPE: tree 1204, from the forest at Brownsberg, Surinam, represented in the herbarium at Utrecht by collections numbered B.W. 6094, 6400, 6518 and 6928. *Henriettella caudata* is obviously related to *H. Duckeana* Hoehne, *H. sessilifolium* (L.) Triana, and *H. flavescens* (Aubl.) Triana. It differs from the first of these in its pedicelled flowers, from the second in its long-petioled leaves, from the last in its essentially glabrous foliage, and from all of them in its much narrower and conspicuously caudate-acuminate leaves.

Leandra montana Gleason, sp. nov. (*Secundiflorae*). Caules laxe ramosi basi prostrati 2 dm. alti, superne glanduloso-pubescentes, inferne glabrescentes. Petioli graciles 8—13 mm. longi glanduloso-pubescentes. Laminae ovato-oblongae, maximae 45 mm. longae 20 mm. latae, acuminatae, integrae, basi rotundatae, obscure 5-nerviae, utrinque tenuiter pubescentes, pilis patulis brevibus saepe glandulosis. Cymae pauciflorae glanduloso-pubescentes. Flores 4-meri sessiles secundi. Hypanthium subglobosum 1.7 mm. longum dense glanduloso-pubescent. Sepala late triangularia recurva vel patula, 0.7 mm. longa, superne paullo plicata, glanduloso-pubes-

centia. Petala ovata acuta 2.1 mm. longa apice glanduloso-setosa. Stamina isomorpha; antherae lineares 1.4 vel 1.1 mm. longae, connectivo tereti 0.2—0.3 mm. producto. Ovarium semi-inferum 2-loculara, stylo 2 mm. longo, stigmatibus punctiformi.

TYPE: Stahel 494, collected on the expedition to the Wilhelmina Mountains, Surinam, and deposited in the Botanisch Museum en Herbarium at Utrecht. *Leandra montana* is very obviously related to *L. intermedia* (DC.) Cogn., agreeing with it in its 4-merous flowers but differing in the spreading glandular hairs which invest the stem, petioles, inflorescence, and hypanthia.

Clidemia biformis Gleason, sp. nov. (Sect. *Calophysoides*). Caulis fruticosi graciles subteretes superne glanduloso-hirsuti, pilis 2—3.5 mm. longis, internodiis 2—4 cm. longis. Folia valde inaequalia. Petioli graciles, 2—3 cm. vel 2—3 mm. longi, glandulosi-hirsuti. Laminae foliorum majorum anguste elliptico-oblongae, usque ad 15 cm. longae 5 cm. latae, anguste acuminatae, ciliatae (ciliis eglandulosis 1.5—3 mm. longis), ad basin rotundatam angustatae, 3-plinerviae, jugo marginali obscuro adjecto, supra sparse setosae (setis 1.5—2.5 mm. longis), venis primariis impressis secundariis planis, subtus ad venas primarias sparse setosae ceterum glabrae. Laminae foliorum minorum ovato-lanceolatae, 13—30 mm. longae 6—13 mm. latae, acuminatae ciliatae basi rotundatae. Inflorescentiae axillares, 2—4 cm. longae, laxae pauciflorae, glanduloso-hirsutae, ramis gracilibus. Pedicelli ut videtur 1 cm. longi, infra apicem setis 3—4 longis notati et pedicelli veri 1 mm. longi glabri. Flores 4-meri. Hypanthium globoso-urceolatum dense glanduloso-hirsutum, pilis 1—1.3 mm. longis. Petala staminaque jam delapsa. Sepala erecta ovata late obtusa 0.7 mm. longa; dentes exteriores lineari-subulati erecti, usque apicem sepalorum adnati et ultra sepala 1.5 mm. longi, sparse glanduloso-hirsuti. Ovarium 3-loculare. Semina numerosa in placentis latis, semi-ovoidea, 0.7 mm. longa, minutis sime granulosa, infra medium atra ultra medium pallide brunnea.

TYPE: B.W. 3667, collected on the Marowijne River, Surinam, and deposited in the Botanisch Museum en Herbarium at Utrecht. Its nearest relative is apparently *C. dispar* (Triana) Cogn., in which the leaves are nearly sessile and glandular-pubescent is lacking.

Mouriria acutiflora Naud. and a new variety of it. This species was based originally on specimens of Hostmann 408. They show the freely branched, many-flowered cymes characteristic of the species, with the very short peduncles branching and bracteolate only near the base and with long free pedicels. A single cluster at one node may have as many as twenty flowers. The leaves are

ovate-lanceolate, broadest slightly below the middle, and about 2.7 times as long as wide. More recent collections from Surinam have the same inflorescence, but tend to vary somewhat in the shape and proportions of the leaf. The leaves of Tree 137, of which several specimens have been preserved, vary in length from 2.7 to 1.9 times as long as wide, while the leaves of Kuyper 62 are 3.3 to 3.6 times as long as wide. Here the leaves are broadest at the middle, while in most other specimens the widest part is usually distinctly below the middle. In every case they are abruptly narrowed to a cuneate base, but the cuneate portion is so short that they always appear at first sight to be rounded. In three other specimens in the Utrecht collections the leaves are distinctly elliptic-oblong, 2.2 to 2.4 times as long as wide, long-acuminate into a distinctly caudate tip, and with certain other differences which warrant their recognition as a variety.

Mouriria acutiflora var. *oligantha* Gleason, var. nov. Folia elliptico-oblonga, typice 9—11 cm. longa, 4—4.5 cm. lata, basi cuneata, apice longe acuminata in caudam 1 cm. vel ultra longam, petiolo 5—10 mm. longo. Cymae in quaque axilla 1 vel 2, 1—3 (nonnunquam 5)-flora. Flores ut in specie typica.

TYPE: Tree 1025, Brownsweeg, Surinam, represented by B.W. 6286 (in bud), B.W. 6926 (in flower), and B.W. 1695 (in fruit).

Miconia surinamensis Gleason, sp. nov. (*Eumiconia*, *Paniculares*). Arbor parva. Rami juniores glabri ad nodos crassiusculi, internodiis brevibus, obscure 4-angulatis et bisulcatis. Folia opposita glabra. Petioli crassiusculi 6—12 mm. longi. Laminae tenues, siccitate nigrae nitidaeque, anguste ellipticae vel oblongo-ellipticae, in ramis floriferis praecipue 7—10 cm. longae 3—4 cm. latae, in ramis sterilibus usque ad 16 cm. longae 6 cm. latae, ad apicem obtusam breviter acuminatae, integerrimae, ad basin acutam angustatae, 3-plex-nerviae nervo marginali tenui neglecto; nervi primarii laterales 5—8 mm. supra basin orientes, supra plani subtus levissime elevati; nervi secundarii sub angulo ca. 80° a costa divergentes, rectiusculi, supra plani obscuri, subtus minutissime impressi; nervulae tertiariae supra obsoletae subtus levissime impressae et pulcherrime reticulatae. Panícula terminalis decomposita 6—10 cm. longa, saepe a basi ramosa, minutissime furfuracea, ramis in quoque nodo utroque 2 vel 3. Flores 5-meri in cymulis terminalibus conferti, sessiles aut brevissime pedicellati. Hypanthium poculiforme, 1.6 mm. longum, minutissime stellato-puberulum. Calycis tubus patulus 0.3 mm. latus, lobis semicircularibus a toro 0.5 mm. longis ad anthesin reflexis. Petala anguste obovata, 3 mm. longa, 1.8 mm. lata, vix

inequilatera, ad apicem rotundata. Stamina dimorpha. Ser. ext.: Filamenta complanata 3.2 mm. longa. Antherae rectiusculae ca. 3 mm. longae. Connectivum infra thecas productum, in appendicem cordatam obliquam expansum, quae lobo dorsali truncato lobis lateralibus rotundatis. Ser. int.: Filamenta 3.2 mm. longa quam exteriora satis angustiora. Antherae rectae, 2.3 mm. longae. Connectivum infra thecas productum in lobum unum dorsalem obtusum brevissimum et lobos 2 laterales subtriangulares. Ovarium seminferum 3-loculare, summo rotundato glabro. Stylus 5.4 mm. longus, stigmatē capitato 0.7 mm. diam.

TYPE: Tree 123, in the forest of Zanderij, Surinam, represented at the Botanisch Museum en Herbarium bij numbers B.W. 3330 (flowering), 2455 (old flowers), 1549 (young sterile branches), and 4448 (fruit). Other specimens in the same herbarium are taken from tree 702 at Kaboerie, 688 at Sectie O, and 1656 at Watramiri.

Miconia surinamensis is apparently most closely related to *M. Kapplerii* Naud., which differs in its larger flowers, erect calyx, much more pubescent hypanthium and calyx, strongly flattened peduncles, and thicker, proportionately broader, and longer acuminate leaves.

Application of *Hartigia oblongifolia* Miq. In proposing the genus *Hartigia*, Miquel called attention to a morphological structure which by itself shows indisputably the identity of the plant to which he gave the name *Hartigia spectabilis*, while his excellent plate and the type specimen confirm the conclusion that it is *Miconia racemosa*. At the same time he described *Hartigia oblongifolia*, differing from the preceding species in being less pubescent. This species has since been referred by authors to *Miconia ciliata* (L. C. Rich.) DC., but careful examination of the type shows that it is also *M. racemosa*. Later in the same year he transferred *Miconia barbigera* DC. to *Hartigia*, under the name *H. barbigera*. The application of this name depends on the exact identity of De Candolle's type, collected by Patris in French Guinea, which I have not seen. The Utrecht herbarium contains a sheet labeled *H. barbigera* in Miquel's hand, with two small branches of Focke's number 981 and a fragment of Hostmann 1011. The latter is clearly *Miconia ciliata*, while the former is *M. racemosa*.

Miconia diaphanea Gleason, sp. nov. (Sect. *Eumiconia*). Frutex vel herba, altitudine ignota. Internodia superiora valde elongata gracilia 4-angulata densissime hirsuta, pilis validis stramineis 2—3 mm. longis, apice 4—6-fidis in ramulos capillaceos divaricatos 0.3

—0.4 longos, faciliter detergibilibus, prope nodos et in lineis longitudinalibus persistentibus. Petioli circa 5 mm. longi densissime hirsuti. Laminae oblongae, usque ad 24 cm. longae 11 cm. latae, utrinque acuminatae, minute serrulatae, 5-plici-nerviae vel jugo venarum submarginalium obscurarum adjecto 7-plici-nerviae; venae primariae supra fere planae subtus leviter prominentes, jugo superiori 5 cm. ultra basin folii oriente; venae secundariae sub angula fere recta patentes, supra planae, subtus vix prominulae; pagina superior glabra, costa leviter setosa; pagina inferior molliter stellato-villosa, pilis ad venas validioribus et prope basin longioribus. Inflorescentia terminalis 1 dm. longa spiciformis hirsuta, floribus 5-meris in glomerulis densis lateralibus dispositis, sessilibus, a circulo basali setarum persistentium involucrat. Hypanthium subglobosum 1.6 mm. longum minutissime stellato-pubescent et superne setis paucis e basinibus validis ornatum. Calyx scariousus 1 mm. longus, ad anthesin in lobos 3—4 irregulariter fissus, dentibus exterioribus minutis tuberculiformibus pubescentibus interdum paucisetosis. Petala ovata 2 mm. longa erecta subacuta. Stamina fere isomorpha; antheris linearibus 2—2.3 mm. longis, connectivo brevissime producto et infra insertionem filamentum in appendicem dorsalem dilatato, appendice in seriei episepala rotundata 0.5 mm. lata, in ser. epipetala angustiori. Ovarium fere liberum 3-loculare ovoideum 1.2 mm. longum, acute 10-costatum, stigmate truncato.

TYPE: Gonggrijp & Stahel 186, collected in the Emma Mountains, Surinam, and deposited in the Botanisch Museum en Herbarium at Utrecht.

The relationship of *M. diaphanea* is obscure. In its thin and lacerate calyx it certainly suggests sect. *Laceraria*, but this section contains no species even remotely resembling it in appearance. The character of the inflorescence, venation, and connective suggest rather *M. nervosa* (Sm.) Triana, to which I believe it may be related. That species, together with the closely allied *M. ceramicarpa* Cogn. and *M. pseudo-nervosa* Cogn. have simple strigose pubescence and petals usually broadest toward the upper end. The stout branched hairs of *M. diaphanea* closely resemble those of *M. barbinervis* (Benth.) Triana, to which it shows no further similarity.
