

MISCELLANEOUS BOTANICAL NOTES XVIII

C. G. G. J. VAN STEENIS

115. A NEW NAME FOR GASTROCALYX SCHISCHKIN (CARYOPHYLLACEAE)

Schischkiniella Steen., *nom. nov.* — *Gastrocalyx* Schischkin, Bull. Mus. Cauc. Tiflis 12 (1919) 200; *non Gastrocalyx* Gardn. in Ann. Mag. Nat. Hist. 1 (1838) 176, based on *G. connatus* Gardn. l.c., *descr. gen.-spec.* (*Gentianaceae*).

S. ampullata (Boiss.) Steen., *comb. nov.* — *Silene ampullata* Boiss. Diagn. sér. I, 1 (1842) 26; Fl. Orient. 1 (1867) 606. — *Gastrocalyx ampullata* (Boiss.) Schischk. l.c.

For a long time Gardner's genus was overlooked in Index Kewensis, which is obviously the reason that Dr. Schischkin, in whose honour the new name is proposed, was not aware of the homonymy.

116. THE FRUIT AND SEED OF DELTARIA BRACHYBLASTOPHORA STEEN. (THYMELAEACEAE)

In 1959 I described this New Caledonian genus (Nova Guinea, n.s., 10, pt 2, p. 208) but then only one immature fruit was available to me. In his new explorations Dr. McKee naturally continued to have interest in the plant he first detected and in February 1966 he sent some mature fruits and seed. He wrote that ripe fruits open very quickly and were picked up below the tree; seeds remained attached to the fruit valves but may also fall off soon. As can be observed (fig. 1), the mature fruit does not differ very much

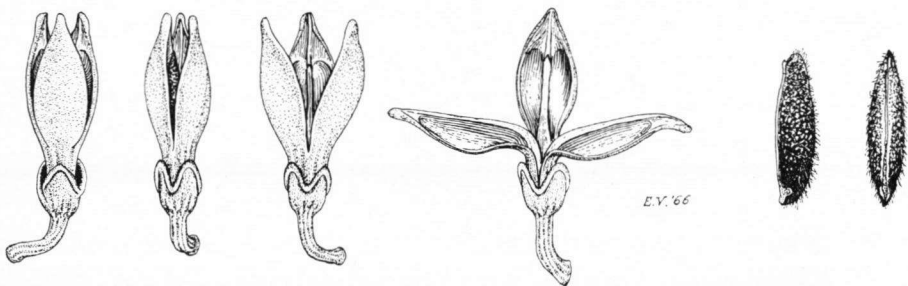


Fig. 1. *Deltaria brachyblastophora* Steen. Fruits in various stages of opening, $\times 1\frac{1}{2}$, seeds $\times 3$.

in size from the immature one I used for the original description. In the figure I have depicted the stages of fruit opening; each of the three seeds is attached at the apex of the cell and more or less notchlike embedded in the pericarp of two valve halves. The seed is black, minutely tubercled and puberulous; the hilum is running over almost its entire length. There is a faint indication of a chalazal strophiola.

117. EVALUATION OF SOME DUBIOUS INDO-PACIFIC BIGNONIACEOUS NAMES

In my revision of Malesian *Bignoniaceae* (Bull. Jard. Bot. Btzg III, 10, 1928, 282) some names, mostly *nomina nuda* or *subnuda*, could not be placed. I have gradually collected information and can now account for all of them.

Bignonia comosa Roxb. (Hort. Beng. 1814, 95) Fl. Ind. ed. Carey, 3 (1832) 103, *non* Cham. 1832; DC. Prod. 9 (1845) 144; Miq. Fl. Ind. Bat. 2 (1858) 751; Steen. Act. Bot. Neerl. 2 (1953) 305. — *Spathodea comosa* (Roxb.) G. Don, Gen. Syst. 4 (1838) 222.

Described from the Moluccas, no drawing at Kew, but the type at Brussels (herb. Martius); the leaves exactly match the description, a detached fruit does not belong to it; the species is doubtless *Clerodendron lanuginosum* Bl. 1825 (*Verbenaceae*).

Bignonia fraxinoides Perrottet, Mém. Soc. Linn. Paris 3 (1824) 102, 94, *nomen semi-nudum*.

Said to grow at Surabaya, E. Java; no material preserved at Paris and according to the text (l.c. 94) not collected; the letters M. C., added to the description, point to the fact that the plant was observed only in the Mascarenes Is and at Cayenne, Guyana. Identification remains a mystery, better to be buried into oblivion. Mme Tardieu-Blot is thanked for essential help.

Bignonia longiflora Reinw. MS *ex* De Vriese, Pl. Ind. Bat. Orient. (1856) 9, *nomen* = *Trichosporum longiflorum* Bl. (*Gesneraceae*).

Bignonia moluccana DC. Prod. 9 (1845) 144; Miq. Fl. Ind. Bat. 2 (1858) 751. — *B. discolor* A. Rich. Sert. Astrol. (1834) xxix, *non* R.Br. 1814.

Said to have been collected in the Moluccas at Ambon. Leaves simple, pubescent beneath, flowers terminal, in bracteate spikes, yellow. The description would point to *Gmelina asiatica* (Verben.) but the type at Paris with an indubitably original label was correctly identified by E. Bureau as *Bignonia capreolata* L. I have seen it and had made a drawing of it. It does not at all tally with the description and some confusion with labels and specimens must have taken place, as *B. capreolata* has glabrous leaves, axillary flowers, not yellow, and not in bracteate racemes.

Bignonia ternatea Reinw. *ex* De Vriese, Reinwardt's Reis (1858) 495, 644 = *Dichrotrichum ternatum* Bl. (*Gesneraceae*).

Bignonia tripinnata Noroña, Verh. Bat. Gen. K. & W. 5 (1790) art. 5, p. 8, *nomen* = *Oroxylum indicum* (L.) Vent. Noroña's description in the Paris MS is clear.

Tecoma filicifolium (Bull) Nicholson, Dict. Gard. 4 (1887) 13. — *Campsidium filicifolium* Bull, Wholesale List New Beaut. & Rare Pl. (1874) fig.; Cat., *ex* Johnson & Hogg, Journ. Hort. 51 (1874) 366; A. van Geert, Catal. n. 74 (1874); T. Moore, Fl. et Pom. (1874) 280. Cf. R. Hort. Soc. Dict. Gard. 3 (1951) 1477 sub *Pandorea*, and 4 (1951) 2085.

William Bull first published this in a Catalogue in which he offered plants for sale, giving a description and a plate. His material related to a slender woody climber, 'from the Feejee Islands, and referred doubtfully to *Campsidium*, from the analogy of its foliage. It has opposite imparipinnate leaves, c. 5 in. long, including a petiole 1 in., and consist of nine pairs of leaflets, small, ovate, deeply cut into two or three lobes on each side, the large lobes being sometimes also toothed. A very elegant stove climber'.

Through the interest and care of our late friend N. Y. Sandwith, I got the vital in-

formation on literature and material. He unearthed in the Polynesian cover of *Pandorea austrocaledonica* (Bur.) Seem. at Kew, material of this garden specimen, which N. E. Brown had identified and this is certainly correct.

To me the origin Fiji seems doubtful, as no Fiji material of *Pandorea pandorana* (Andr.) Steen. to which I refer *P. austrocaledonica*, has ever come into my hands. Also Parham, in his newest account of Fiji plants (1964) 210, does not mention it, although he lists about a dozen other cultivated *Bignoniaceae*. My conclusion is that it must have hailed from New Caledonia.

The herbarium specimens differ a little from Bull's plate by having fewer leaflets. As Sandwith remarked their number and serration varies very greatly, sometimes even on one twig, and it is well known that juveniles of *P. pandorana* show wide vegetative variation and are useless for taxonomic purpose.

This removes then the occurrence of native *Bignoniaceae* from SE. Polynesia, the most advanced posts of this family in the West Pacific being *Dolichandrone spathacea* in the Solomons & New Caledonia, *Pandorea pandorana* and *Deplanchea* in New Caledonia, and *Tecomanthe speciosa* in the Three Kings Islands, North of New Zealand.

118. A REMARKABLE MYRMECOPHYTE, *CALLICARPA SACCATA* N. SP., FROM SARAWAK AND SOME ALLIED SPECIES (VERBENACEAE)

Callicarpa saccata Steen., *sp. nov.*

Affinitate *C. havilandii* differt foliis ovato-oblongis, longe acuminate, basi abrupte attenuatis, in saccas duas auriculiformias productis; flores tetrameri. Typus: Sarawak, Sibat ak. Luang S 23637 (L). — Fig. 2.

A treelet 3—6 m; stem 3—7½ cm Ø. Indument conspicuous, all over coarsely brown hispid by more-celled, more or less tubercle-based hairs, further a very short, puberulous tomentum consisting of simple and stellate hairs, sparsely on the leaf, densely and brownish on the stem and cymes; undersurface of the leaves besides with fairly dense, regularly interspersed, fine, pitted glands, on the auricled lobes also large nectarial glands. Leaves ovate- to elliptic-oblong, apex long-acuminate, base rounded and ± abruptly narrowed, equal-sided or unequal-sided, widened into two auriculiform, bullate sacs 1—1½ cm long; margin shortly dentate; blade proper c. 10—17 by 5—11 cm, in some specimens markedly anisophyllous; petiole ½—1½ cm. Cymes fairly many-flowered, axillary and on the old wood, c. 2—2½ cm long. Flowers 4-merous. Calyx outside densely and shortly brown stellate-hairy, inside sparsely stellate-hairy, hypanthium in flower thicker upwards; fruit calyx more distinctly cup-shaped with 4 minute teeth. Corolla tube twice as long as the 4 oblong blunt lobes, in total c. 7½ mm long. Stamens not protruding, style slightly so. Ovary 4-celled, each cell with 2 dissepiment-attached ovules. Fruit almost globular, c. 4 mm Ø, with scattered, yellow, pulverulent glands (as on the ovary), breaking up into 8 segmental pyrenes; pericarp withering; each pyrene containing a small seed without endosperm and with 2 cotyledons in a small outer cavity; besides all pyrenes with an inner empty, air-filled cavity, obviously capable of floating.

BORNEO. Sarawak: Bt Iju, Ulu Arip, Balingian, 60 m, on hillslope, S 23637 (type); S 23773, S 23728; Sg Belaga, Ashton S 18286; 3rd Division, Bt Raya, Kapit, E. Wright S 23866; Sarawak, M. Hirano and M. Hotta 1118 (Kyoto Univ. Herb.).

Field notes and Ecology: From the lowland to c. 450 m, on hill slopes, land slips along river, clayey or sandy-clay soils. Ashton noted of his specimens that branches are weak

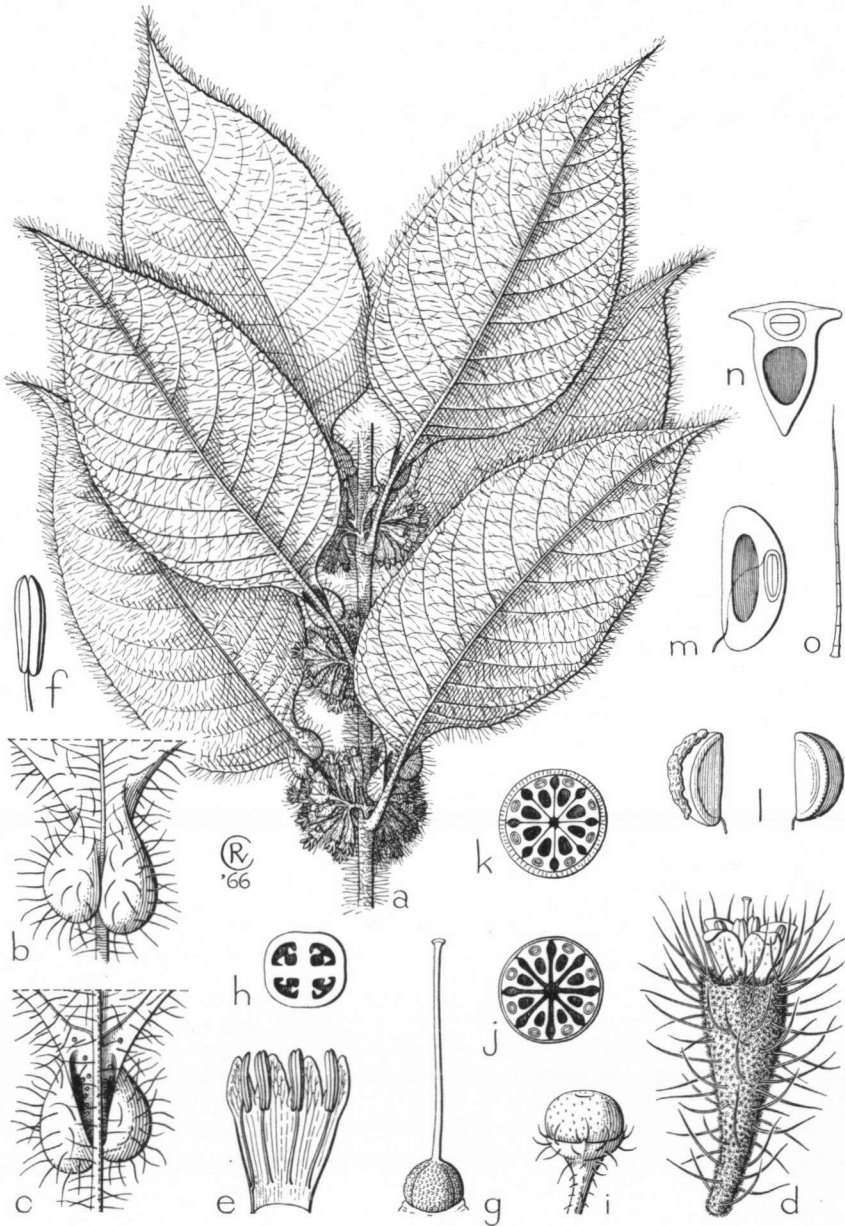


Fig. 2. *Callicarpa saccata* Steen. a. Habit, $\times \frac{1}{2}$, b—c. leaf-base, with glands, $\times 1\frac{1}{2}$, d. flower, $\times 3$, e. opened corolla, $\times 3$, f. stamen, $\times 4\frac{1}{2}$, g. ovary and style, $\times 4\frac{1}{2}$, h. section of young ovary, $\times 15$, i. fruit, $\times 3$, j. section of fruit, $\times 3$, l. mericarps (pyrene), one with remains of pericarp, $\times 3$, m. lengthwise section of pyrene, $\times 4\frac{1}{2}$, n. cross section of pyrene, $\times 9$, o. hair, $\times 6$. — *Callicarpa havilandii* (K. & G.) H. J. Lam, k. cross section of fruit, $\times 3$ (a—h, j, l—o. SAR 23637, i. Ashton S 18286, k. Haviland 3549).

and sagging to the ground. The fruit is red or bright red, petals, stamens, and style white; all parts covered with rusty hairs.

Remarks. The species makes part of an assemblage of rusty-rough-haired species of Borneo and the Philippines. Its most remarkable feature is the sac-like auricles at the base of the blade, reminding exactly of those of some tropical American *Melastomataceae* belonging to the group of genera *Tococa*, *Myrmedone*, *Maieta*, *Microphysca*, and *Calophysa*, which have a similar formicarium. Of course some other plants have glandular auricles, as *Adenia*, but these are much smaller and not ant-inhabited, like in ours. Thus it represents another example of convergence among formicaria (compare Beccari, *Malesia* 2: 234). In looking up some literature on the American genera mentioned above I found that Gleason (in Pulle, *Fl. Surin.* 3, 1935, 235) remarked that in *Tococa guianensis* 'formicaria are sometimes absent'; whether he means from some specimens or only occasionally from some leaves is not quite clear. Anyway, in this new *Callicarpa* all leaves possess these unique sacs. It is remarkable that the cauliflorous inflorescences (only collected by Ashton) differ markedly in structure from the axillary ones. This is also found in *C. involucrata* (see below); they are hardly branched fascicles on knobs.

Affinity. Doubtless allied to *C. havilandii* (K. & G.) H. J. Lam, *C. superposita* Merr., *C. barbata* Ridl., *C. fulvohirsuta* Merr., all of Borneo; but the affinity affects also some Philippine species. The present occasion shows the need of a thorough revision of this group.

It also necessitates to reconsider the generic difference between *Geunsia* and *Callicarpa*. Lam, in his thesis (1919, p. 29—30) cited for *Geunsia* that it would always have some alternate leaves besides the decussate ones, that the nodes show an interpetiolar margin of hairs, that the anther-cells would only open in the apical part of the slit, that the ovary cells are (3—)5 and 2-seeded. King (*J. Asiat. Soc. Beng.*, 74, 2, 1897, 801) on the other hand separated *Geunsia* from *Callicarpa* only by the 5-merous flowers and 5—10 pyrenes. Lam discarded the merousness of the flowers as generic distinction (l.c. 52), describing under *C. havilandii* a var. *tetramera* H. J. Lam with 4-merous flowers and fruit. I have examined it (*Haviland* 3549), but the peculiar fact is that it has 8 1-seeded pyrenes exactly as in *C. saccata*, although both Lam and King cite an isomerous number. *Fig. 2k.*

The only character which might hold between the genera or subgenera is the isomerous ovary and fruit in *Callicarpa* and the bimerous ovary and fruit in *Geunsia*. If such a division is possible, and data are established for all species, one might again consider the specific affinity in order to find out whether the division is natural or artificial. Bakhuizen van den Brink, in his later treatment (*Bull. Jard. Bot. Btzg III*, 3, 1921, 9) merged *Callicarpa* and *Geunsia*, but I do not believe, and at least can not make out from his key, that he examined in detail the structure of ovary and fruit in all species. This is then an interesting task for a future revisor. Moldenke (*Phytologia* 13, 1966, 425—426) recently kept *Geunsia* separate from *Callicarpa* but did not critically go into the matter. For the present I accept tentatively one genus, *Callicarpa*.

There occur several interesting *Callicarpas* in Borneo from which I want to mention here one in more detail:

***Callicarpa involucrata* Merr., J. R. Soc., Mal. Br. I (1923) 31.**

BORNEO. *M. Ramos* 1523 (type); *BRUN* 5248 Ashton; R. Soc. Exp. 1647 Chew, Corner & Stainton; *SAN A* 3986 G.H.S. Wood; *Endert* 3836, 3742, 3651; *SAR K* 79 Anderson & Keng; and as *f. clemensae* Bakh.: *Clemens* 27520/31306, 29965, 28285.

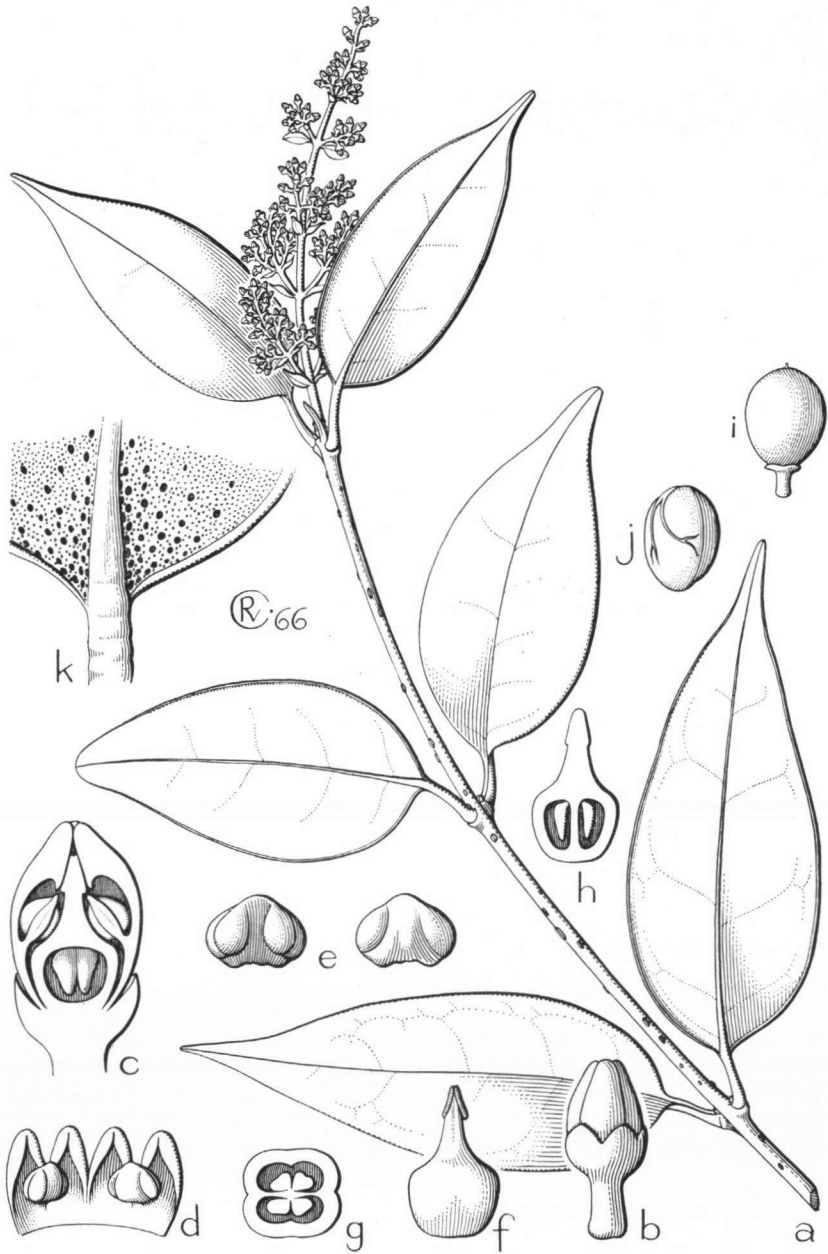


Fig. 3. *Myxopyrum enerve* Steen. a. Habit, $\times 2/3$, b. bud, $\times 6$, c. section of bud, $\times 12$, d. opened corolla, $\times 6$, e. anther, both faces, $\times 12$, f. ovary, $\times 12$, g. ditto, in section, $\times 12$, h. ditto, lengthwise, $\times 12$, i. fruit, $\times 2$, j. seed, $\times 4$, k. undersurface leaf base, with glands, $\times 4$ (a—k S 22740).

A remarkable species with cauliflorous and ramiflorous inflorescences. The flowers are born in fascicles either axillary or in fascicles or clusters on knobs on the stem and twigs; by absence of fruit setting they appear to grow into thick, woody, brachyblasts lengthening to 15 cm, with fascicles on top, a situation similarly found in *Rapanea*, *Deltaria*, etc.

From related species easily distinct by entirely glabrous leaves and twigs, a multitude of (in sicco) immersed dots on both leaf surfaces, each with a fine, globular, yellow gland, and a more or less swollen upper leaf base with few to many flat-crateriform, sessile, larger, prominent glands.

A small tree 3—5 m with pale ochraceous papery bark; flowers white, berries white then red. Stamens 4. Seed surrounded by a corky tissue.

Whether *f. clemensae* Bakh., found on Mt. Kinabalu at c. 1500 m, is tenable is doubtful; the smaller leaves seem to be the only difference.

To the same affinity belong *C. cauliflora* Merr. and *C. ramiflora* Merr. from the Philippines, both according to Merrill erroneously reduced to *C. pentandra* Roxb. They are brown-haired species.

119. THE AFFINITY OF THE GENUS MYXOPYRUM WITHIN THE OLEACEAE, WITH DESCRIPTION OF A REMARKABLE NEW SPECIES FROM BORNEO

This genus of *Oleaceae* was described first by Blume in 1850 (*Mus. Bot. Lugd. Bat.* 1: 320); its lectotype should be *M. nervosum* Bl. It is distributed from continental SE. Asia through Malesia as far as New Guinea and the Bismarcks. The species are all lianas with panicles of many small flowers; fruits are drupaceous.

Knoblauch (in Engler-Prantl, *Nat. Pfl. Fam.* 4, 2, 1895, 13) placed it next to *Ligustrum*, in the subfamily *Oleoideae*, tribe *Oleineae*.

In identifying it with his tribal key, however, there appears to be a remarkable discrepancy in that this tribe is characterized by 2 ovules in each of the 2 ovarial cells, whereas in his key sub Ba-Bb *Myxopyrum* is differentiated in having 1—3 ascending ('*aufsteigende*') ovules.

How he came to this definition is partly not clear, as Blume described it with 3 ovules per cell, but nobody, as far as I know, with 1 ovule per cell. Bentham & Hooker (*Gen. Pl.* 2, 1876, 680) noted '1—2 (vel 3?) laterally attached subbasal ovules' for the genus.

This discrepancy appears to be a rather serious question, because Johnson in his new subdivision of the family (*Contr. N.S.W. Nat. Herb.* 2, 1957, 395) attributed to subfam. *Oleoideae* 2 pendulous ovules, but arranged *Myxopyrum* as a new subfamily *Myxopyrae* (l.c. 397) with 1—3 ascending ovules per cell, similarly as Knoblauch cited. The number and position of the ovules is thus in oleaceous taxonomy an essential character.

In dissecting and drawing the details of the ovarial structure of the remarkable new species described below, we found in many flowers definitely 2 collateral, pendulous, subapically attached, anatropous ovules in each cell. In checking the same character with material of *M. nervosum* from Java, exactly the same structure was found.

I conclude therefore, that Blume must have made an erroneous observation or made a writing error; the flowers are very small and the ovules are very close together; an error is not without excuse.

Hill, in his revision of the genus (*Kew Bull.* 1910, 37—44) did not mention anything about the ovules and the systematic position within the family.

In identifying *Myxopyrum* with Johnson's key to his *Oleoideae* and accepting the presence of 2 pendulous ovules per cell one arrives directly at the fork discriminating *Ligustrum* and *Tetrapilus*.

My conclusion is that its affinity was correctly pointed out by Knoblauch in the *Oleoideae* near *Ligustrum*, and that it should not, as Johnson wanted to have it, be the type of a separate subfamily *Myxopyrae* and that it is not at all anomalous in *Oleeae* as Johnson suggested (l.c. 406).

Next to its climbing habit, *Myxopyrum* had one useful vegetative character, namely its *Strychnos*-like triple-nerved leaves in all species described (13, not 3 as Johnson cited, l.c. 406). Unfortunately this character breaks down in the new species described below, which is doubtless a *Myxopyrum*. A similar occurrence of triple-nerved and enerved species in one genus is similarly observed in *Memecylon* of the *Melastomataceae*.

***Myxopyrum enerve* Steen., sp. nov.**

Fortasse Myxopyro elliptico affine, sed a speciebus omnibus differt foliis non-triplinerviis, subtus glandulis duo generis munitis, nervis vix conspicuis. Typus Asah ak Luang S 22740 (L; isotypes K, Sar). — Fig. 3.

Liana, 4½ m. Twigs terete at apex, older parts only faintly 4-gonous, lenticellate. Leaves on a strong, in sicco dark-coloured petiole 1—1½ cm long, ovate-oblong, broad-cuneate to rounded at the base, the larger ones attenuate-acuminate to apex, very thick-coriaceous, with recurved margin, the venation only visible as very faint impressions, consisting of 5—6 arching nerves, without trace of triplinervedness, midrib impressed above, prominent beneath, 7½—12 by 3—6 cm, the leaves below the inflorescence smallest, undersurface densely finely gland-dotted, in the rounded basal parts besides with a fairly large number of crateriform, impressed glands. Panicles terminal but obviously later pushed aside and seemingly axillary, at base with bracts or their scars, rather narrow, c. 7½ cm long; branching decussate, subtended by acute, ± rhomboid bracts, 3—5 mm long. Flowers in triads or more together, c. 1—1½ mm pedicelled. Calyx cupular, less than halfway obtusely 5-lobed, c. 2 mm Ø, persistent. Corolla induplicate-valvate, c. 2 mm high, over halfway 4-lobed, without rim or hairs in throat. Stamens 2, wider than long, c. ¾ mm wide, with broad connective and short blunt apical appendage, almost sessile at incision of corolla lobes. Pistil a little over 1 mm long, bottle-shaped, the style widened to base and at apex with 2 lateral linear stigmas; cells 2, each with 2 pendent, collateral, subapically attached anatropous ovules. No disk. Fruit broad-ellipsoid, c. 6 mm, tipped by style base; seed 1.

BORNEO. Sarawak: G. Dulit, at Ulu Atun, foot of sandstone cliff, c. 1300 m alt., fruit green with purple flesh, 15-4-65, *Asah ak Luang S 22740* (SAR, K, L).

Notes. Possibly allied to *M. ellipticum* A. W. Hill, also from Sarawak, which has also coriaceous leaves gland-dotted beneath but which has, as in all other species hitherto described, strongly triple-nerved leaves.

120. BRIEF NOTE ON SOME NEW RECORDS FROM FLORES, LESSER SUNDA ISLANDS

Father J. A. J. Verheijen collected, mainly for the purpose of assembling materials for a dictionary of the languages of Flores, a collection of plants with vernacular names which we have identified, as far as possible. Amongst them are some most unexpected records. Some are eastern-extended ranges of mainly rainforest plants which are rare in Java. Some others, however, suggest a distinct northern element from Central Malesia, e.g. *Lobelia borneensis* (Hook. f.) Moeliono, hitherto only known from Borneo and Celebes, in the montane zone. A similar distribution is that of *Drimys piperita* Hook. f. and that of *Lycianthes banahaense* Elm. from the Philippines and Celebes. This Central

Malesian 'element' was never found in the South Malesian Province (Java and the Lesser Sunda Is). Whether these are exceptions, or that Flores occupies an exceptional place in the Lesser Sunda Is can only be verified by more abundant later collections, especially in the wet montane forest. As Flores is largely of volcanic geology, and as many of its volcanoes, which constitute the mountains, are fairly young, a 'peculiar' position is not very likely.

Aspidopterys elliptica (Bl.) Juss. *Verheijen 2260*.

From West Malesia, formerly not known east of the line Philippines, Borneo, and Bali.

Capparis floribunda Wight, *Verheijen 2262, 2314*.

According to Dr. Jacobs a remarkable form; the species not known earlier from the Lesser Sunda Is.

Christisonia sp. *Verheijen 1699*.

Differs from *Aeginetia* by the regularly lobed calyx. The genus centers in SE. Asia, 1 sp. described from the Malay Peninsula, one from the Philippines, one specimen collected by a Japanese botanist in SW. Celebes (during the war, unpublished).

Cryptostylis arachnites Rchb. *Verheijen 2059*.

Known eastwards of Java only from Bali and Batjan.

Drimys piperita Hook. f. *Verheijen 1671/72, 2001/02*, at 1500—1930 m alt.

Never found west of Borneo, and south of Celebes and the Moluccas.

Erythroides sp. *Verheijen 1991/92*.

The genus was only known from Malaya, Sumatra, and Java.

Erythrophalum scandens Bl. *Verheijen 2267*.

New for the Lesser Sunda Is.

Geniostoma rupestris Forst. *Verheijen 1683/84*.

A very narrow-leaved characteristic form, also collected earlier (*Posthumus 3237*) in Flores, reminding of *G. stenophyllum* Merr. from the Philippines, considered synonymous.

Hedyotis sp. *Verheijen 2218*.

A small woody species, never found in Java.

Lobelia borneensis (Hook. f.) Moeliono. *Verheijen 2174/75*.

Hitherto only known from Borneo and Central Celebes.

Lycianthes banaensis (Elm.) Bitt. *Verheijen 2149/50*.

Hitherto only known from the Philippines and Celebes.

Phaeanthus sp. *Verheijen 1057/58*.

This genus was in Malesia neither known from Java nor from the Lesser Sunda Is.

Polygala wightiana W. & A. *Verheijen 1918/19*, near Bondei.

New for Malesia (det. J. Adema), further only known from the Deccan Peninsula.

Strychnos colubrina L. Verheijen 1498/99, at Sita.
First record from the Lesser Sunda Is.

121. NOTES ON AND NEW RECORDS OF PAPUAN PLANTS

Lecythidaceae

Chydenanthus excelsus (Bl.) Miers, Trans. Linn. Soc. II, 1 (1875) 112; Shaw, Kew Bull. (1949) 152.

WEST NEW GUINEA. Salawati I., near Kaloal, BW 4675 (*Chr. Versteegh*), 30 Jan. 1956, in primary forest, along tidal river, swampy terrain on clay, inundated during wet season, at sealevel, a common tree, 12 m, pale green, style yellow. Ripe fruit brown. Specimen distributed as *Barringtonia* sp.

Distribution. This monotypic genus ranges now from Tenasserim and the Andaman Is eastwards through Sumatra, Borneo, Java, and the Lesser Sunda Is (Bali, Sumbawa) to New Guinea.

Iridaceae

Sisyrinchium micranthum Cav., Diss. 6 (1788) 345, t. 191; Bot. Mag. 47 (1819), t. 2116; Bth., Fl. Austr. 6 (1873) 412; F. M. Bailey, Queensl. Fl. 5 (1902) 1603; Backer, Handb. Fl. Java pt 3 (1924) 125; Oliver, in Cheesem., Man. N. Z. Fl. ed. 2 (1925) 1060; Ewart, Fl. Vict. (1930) 302; Johnston, J. Arn. Arb. 19 (1938) 390; Guillaumin, Fl. Nouv. Cal. (1948) 57; Mém. Mus. Nat. Hist. Nat. sér. B. Bot. 8^a (1959) 187; J. H. Willis, Handb. Pl. Victoria 1 (1962) 335.

EAST NEW GUINEA. Morobe Distr., top of Edie Creek, 1950 m, bushy herb with equitant light green leaves, very local but then abundant, on open slope among low grasses, tepals yellow with purplish black midrib, fruits brown, *P. van Royen* NGF 16028.

This S. American plant, ranging from NW. Argentina and S. Brazil to Central America, was obviously first introduced in Indo-Australia about 1870 in Queensland. Later it spread to New South Wales and Victoria, and also New Zealand (North I.). In West Java it was found naturalized in lawns in the Mountain Garden at Tjibodas, at c. 1425 m.

The introduction in New Guinea of this alien, known as 'scour weed' in Australia, is probably recent and must have come from Australia. In all probability it will spread gradually to other terrains in Papua.

Chenopodiaceae

Chenopodium pumilio R.Br., Prod. (1810) 407; Black, Fl. S. Austr. 2 (1948) 289; Aellen, in Hegi, Ill. Fl. Mitt. Eur. 3, 2 (pt 2) (1960) 578, 597, fig. 255 D-E.

TERRITORY OF NEW GUINEA. Morobe Distr., B. G. D. Leron Cattle Station, 500 ft alt., bare patch in browsed grassland, small soft prostrate aromatic herb, with green flowers, *E. E. Henty* NGF 16668, Aug. 1, 1963.

This is the second species of *Chenopodium* to be reported from New Guinea, the first being *C. carinatum* R. Br. (Fl. Mal. I, 4, 1954, 595). It can easily be distinguished from *C. carinatum* R. Br. by narrow, not crested perianth segments, the nut being discernible between them.

As *C. carinatum* it is assumedly a new introduction from Australia where it is widely distributed, occurring also in New Zealand.

Boraginaceae

Coldenia procumbens L.; Merr., En. Philip. 3 (1923) 375; Beumée, Trop. Natuur 15 (1926) 82—85, fig. 1—2; Back. & Bakh. f., Fl. Java 2 (1965) 460.

NEW GUINEA. Papua, Central Distr., Laloki R., 13 miles from Pt Moresby, bare patches of ground among Mimosa clumps, J. S. Womersley NGF 17709.

A pantropical weed of open dry places, fallow rice-fields, roadsides, and other bare or sparsely grown grounds, very heliophilous, prostrate with rosette-like branching. It is extremely indifferent to soil and climate conditions, occurring in the wettest parts of Borneo as well as in the dusty, driest areas in NE. Java and Madura, with localities in intermediate stations. It is found on marl, black soils, limestone, sandy beaches, but also on clays and laterite. Beumée (l.c.) gave valuable ecological and some anatomical data; he pointed to the very high soil temperatures to which such prostrate plants are subjected during the daytime (40—50°) and the role dew plays in providing moisture during the dry season. Among species of similar rosette-habit he mentions *Dentella repens*, *Tribulus cistoides*, *Polygonum plebejum*, and *Trianthema* and *Glinus* species.

Though making the impression to be an introduced weed, the fact remains that it was already found in Borneo nearly 130 years ago which is unlikely for post-Columbian introductions. The same holds for the occurrence in the Northern Territory of Australia.

In Malaya it was only recently found and may be a local new introduction; this may also be the case in New Guinea.

Euphorbiaceae

Longetia nitida (Miq.) Steen., Blumea 12 (1964) 362.

WEST NEW GUINEA. Div. Hollandia, Wiligimaan, in the Balim, 1700 m, BW 10478 (Chr. Versteegh), 25-6-61, meptekeh (Dani lang.), in young secondary forest on stony sand, scarce, a young tree 8 m, dbh 15 cm, fruits yellow to brownish red (L, CANB).

This specimen agrees well with material from Borneo and Celebes. There are two other numbers of *Longetia* from New Guinea, BW 3060 collected near the Wissel Lakes at 1750 m, the other from the Arfak Mts, Anggi Gigi, at 2100 m. They have smaller leaves than usual but may represent a mountain mossy forest facies of this species.

The genus which is common in West Malesia, but which has also several species in New Caledonia and one in Queensland, was not yet recorded from New Guinea.