

STUDIES IN THE GESNERIACEAE OF THE OLD WORLD

XIII: MISCELLANEOUS TRANSFERS AND REDUCTIONS

B. L. BURTT

***Ancylostemon aureus* (Franch.) B. L. Burtt, comb. nov.**

Syn.: *Roettlera aurea* Franch. in Bull. Mus. Hist. Nat. Paris, v, 250 (1899).

Didymocarpus aureus (Franch.) Diels ex Lévl., Cat. Pl. Yunnan, 123 (1916).

Ancylostemon concavus Craib in Notes R.B.G. Edinb. xi, 234, 266 (1919); Burtt & Davidson in Notes R.B.G. Edinb. xxi, 217 (1954).

YUNNAN. Koo Toui, 19 July 1889, *Delavay* (holo. P).

Other material, all from Yunnan, has been cited by Craib and by Burtt & Davidson. Franchet's type specimen of *Roettlera aurea* (together with some other types cited in these notes) has been kindly lent for examination by the Director of the Museum d'Histoire Naturelle, Paris. It proves to be the plant which Craib later described as *Ancylostemon concavus*, the species I have taken as the lectotype of the genus *Ancylostemon* (see Notes R.B.G. Edinb. xxi, 194: 1954).

***Ancylostemon lancifolius* (Franch.) B. L. Burtt, comb. nov.**

Syn.: *Didissandra lancifolia* Franch. in Nouv. Arch. Mus. Paris, 2 ser., x, 63 (1887-88).

Ancylostemon purpureus Burtt & Davidson in Notes R.B.G. Edinb., xxi, 216 (1954).

E. TIBET. Prov. de Moupin, July 1869, *David* (holo. P).

W. SZECHUAN. Between Kiating and Tatsien-lu, 2100 m., 10 July 1903, *Wilson* 4277 (holo. *A. purpureus*—K). Without locality, Aug. 1908, *Wilson* 2260 (K).

***Anna ophiorrhizoides* (Hemsl.) Burtt & Davidson in Notes R.B.G. Edinb. xxi, 233 (1955).**

Syn.: *Lysionotus ophiorrhizoides* Hemsl. in Journ. Linn. Soc. Bot. xxxvi, 224 (1890).

Didymocarpus Cavaleriei Lévl. in Fedde, Rep. Sp. Nov. ix, 453 (1911)—non *D. Cavaleriei* (Lévl. & Van.) Lévl. in Compt. Rend. Assoc. Franc. 1905, xxxiv, 427 (1906).

SZECHUAN. Mt. Omei (see Notes R.B.G. Edinb. xxi, 233:1955).

KWEICHOW. West of Lo-Fou, Nov. 1905, *Cavalerie* 2555 (E). Without locality, *Cavalerie* 1467 (E).

The discovery of this synonym for *Anna ophiorrhizoides* makes the first step in bridging the gap between that species and *A. submontana* Pellegr.

in Tonkin. It will be noticed that Lévillé also called another plant *Didymocarpus Cavaleriei*: this figures elsewhere in these notes on being transferred to the genus *Loxostigma*.

***Boea Hemsleyana* B. L. Burtt, nom. nov.**

Syn.: *B. lanata* Hemsl. in Kew Bull. 1908, 180; Schlechter in Engl. Bot. Jahrb. lviii, 261 (1923)—non Ridley (1896).

SOLOMON ISLANDS. Florida, on rocks, *C. M. Woodford* (holo. K).

***Boea Clarkeana* Hemsl. in Journ. Linn. Soc. Bot. xxvi, 232 (1890).**

Syn.: *Boea Mairei* Lévl. in Fedde, Rep. Sp. Nov. xii, 286 (1913).

HUPEH. Nanto, *Henry* (holo. K). Patung Hsien, *Ho-Ch'ang Chow* 639 (E). Hsing Shan, June 1907, *Wilson* 2111 (E).

SZETCHUAN. Mu-li Mts., valley of Litang, 28°12'N, 2400–2700 m., June 1918, *Forrest* 16298 (E).

YUNNAN. La-Kou, 2400 m., Jul. 1912, *Maire* (holo. *B. Mairei*—E). Paulong-se, 2490 m., *Maire* (E). Tcha-ho, 2600 m., *Maire* 90, 1914 (E). Nanfantchoong, 2 Jul. 1920, *S. Ten* 320 (E). Tong Shan, 27°20'N, Aug. 1914, *Forrest* 13101 (E). Bi-y-te Shan, 27°45'N, 100°18'E, 3000 m., July 1921, *Forrest* 2057 (E). Mts. N.E. of Yangtze bend, 27°45'N., 3000 m., Sept. 1913, *Forrest* 11374 (E).

This is an anomalous species in *Boea*, having a corolla tube of some 1.5 cm. and included stamens, and it thus might equally well be placed in *Streptocarpus*. However it has no closer affinity in that genus and it is therefore left undisturbed until the generic limits can be clarified. A curious feature is the stiff opaque white hairs on the underside of the leaves; these hairs have a calcareous coating which can be dissolved away in hydrochloric acid.

***Briggsia Rosthornii* (Diels) B. L. Burtt, comb. nov.**

Syn.: *Didissandra Rosthornii* Diels in Engl. Bot. Jahrb. xxix, 574 (1900). N. KWEICHOW. Nan Ch'u'an, *Bock & von Rosthorn* 772, 938 (Copenhagen). SIKONG PROV. Herbs, lvs. basal, flower very irregular with violet stripes near the water stream, on the slope at Da-Kwan, Konting trip, 1610 m., 28 Aug. 1939, *C. Y. Chiao* 2045 (A).

The type of this species has been examined by courtesy of the Director of the Botanical Museum, Copenhagen. It is closely allied to *B. Mairei* Craib but that may be distinguished by its proportionately longer petioles and more deeply dentate leaves, by the more matted indumentum of the young leaves, by the more robust rhizome and by the inflorescences being 3–6-flowered (in *B. Rosthornii* only 1–2-flowered). *B. hians* Chun and *B. Chienii* Chun, both of which are known to me only from description, are evidently of the same affinity, as is *B. Agnesiae*. Craib's segregation of the latter species on account of the corolline intrusions near the base of the filament is undesirable; similar intrusions are present in *B. aurantiaca* B. L. Burtt and in *B. muscicola* (Diels) Craib, the only species I have had an opportunity of examining alive, just as *B. Agnesiae* was the only species Craib examined alive. The intrusions are probably difficult to see in dried specimens.

Chirita oblongifolia (Roxb.) B. L. Burtt, *comb. nov.*

Syn.: *Incarvillea oblongifolia* Roxb., Fl. Ind. iii, 113 (1832).

Calosacme acuminata Wall., List, No. 802 (1829), *nomen nudum*.

Chirita acuminata R. Br. in Benn., Pl. Jav. Rar. 117 (1840), *nomen illegitimum*; R.Br. in Ann. Sci. Nat. 2 ser., xiii, 161 (1840);

C. B. Clarke, Comm. & Cyrt. Beng. t. 81 (1874) et in DC., Mon. Phan. v, 119 (1883) et in Hook. fil., Fl. Brit. Ind. iv, 359 (1884).

Babactes oblongifolia (Roxb.) DC. in Meisn., Gen. Pl. ii, 211 (1836-43) et Prodr. ix, 260 (1845).

Aeschynanthus oblongifolia (Roxb.) G. Don, Gen. Syst. iv, 657 (1834); D.F.N. Dietr., Syn. iii, 580 (1839-52).

No Roxburgh specimen of *Incarvillea oblongifolia* is known, nor is there a painting of this plant in the Kew collection. Under the circumstances it might seem undesirable to adopt the name. Robert Brown's *Chirita acuminata* was, however, illegitimate, being validated only by the reference to Roxburgh's description of *Incarvillea oblongifolia*, and it cannot therefore continue in use.

There was some early confusion about the identity of Roxburgh's plant and De Candolle (in Meisn., Gen. Pl. i, 302: 1836-43) excluded it from *Chirita* and adopted the independent genus *Babactes* for it, largely on account of Roxburgh's description of winged seeds. Clarke (Comm. & Cyrt. Beng. t. 81: 1874) has pointed out that Roxburgh's accuracy of description did not always extend to minute objects as the means of magnification at his disposal were very imperfect. Clarke concluded that Roxburgh had been in error on this point of detail and said that he had collected the plant in Roxburgh's locality in the Chittagong Hills. There seems no reason now to disagree with Clarke's decision, especially as the remainder of Roxburgh's description is remarkably clear and gives a very good picture of this plant. This may usefully be quoted:—

"Shrubby, downy. Leaves opposite, unequally ovate-oblong, acuminate, downy, serrulate. Cymes axillary. Leaves opposite or tern, long-petioled, from six to twelve inches long, villous, one side broader, and running further down the petiole. Peduncles axillary, solitary, dichotomous, with a flower in the fork; divisions from three to six-flowered, all very villous. Flowers large, like those of *Martynia diandra*; colour a mixture of whitish red, tinged with yellow. One pair of the filaments slender, and abortive; the other thick and villous, with large, two-lobed anthers without anything like a spur, or arista. The capsules are not above one-third or one-fourth the length of *I. parasitica* (*Aeschynanthus parasiticus*) but rather thicker; and the seeds are flat and winged with a membranous margin all round."

De Candolle (Prodr. ix, 269: 1845) used the name "*Chirita acuminata* R. Br." as though it had an existence independent of the synonym *Incarvillea oblongifolia*. This, of course, is not so. The plant De Candolle described (since usually cited as *C. acuminata* DC.) is determined by C. B. Clarke to be *Didymocarpus acuminatus*.

Corallodiscus conchifolius Batalin in Act. Hort. Petrop. xii, 176 (1892).

Syn.: *Didissandra Forrestii* Anth. in Notes R.B.G. Edinb. xviii, 195 (1934).

Corallodiscus Forrestii (Anth.) B. L. Burtt in Gard. Chron. ser. 3, cxxii, 212 (1947).

KANSU. Inter pagos Dsao-li-ping et Schun-dan-sien, 7-19 Sept. 1885, Potanin (Leningrad).

SZETCHUAN. Li-fan Hsien, 200 m., 9 July 1930, F. T. Wang 21680 (E). Without locality (probably Szechuan), 2700-3000 m., 13 June 1904, E. H. Wilson 4282 (E).

YUNNAN. Divide between Chungtien and the Yangtze, lat. 27°50'N., 3300 m., Aug. 1914, Forrest 13181 (holo. *C. Forrestii*, E). Bei Ma Shan, Mekong-Yangtze divide, lat. 28°20'N., 3000-3300 m., Aug. 1914, Forrest 13186 (E). Mekong gorge, 25 miles S. of Yakale [29°N, 98°40'E], 26 Aug. 1922, Kingdon Ward 5361 (E).

When all the species covered by Craib's concept of *Didissandra* were transferred to *Corallodiscus*, the identity of *D. Forrestii* with *Corallodiscus conchifolius* was not appreciated. Comparison with the type material of Batalin's species has been possible through the courtesy of the authorities at the Academy of Sciences, Leningrad, and it leaves no doubt that the two are conspecific. The species is, in fact, a very distinct one in this difficult genus. In Craib's key it runs down nearest to *C. Cooperi* (Craib) B. L. Burtt, but it may be distinguished from that species by its broader leaves, and stoloniferous habit. The specimens cited above from Szechuan have slightly narrower leaves than the other material, but no other difference warrants their separation.

***Epithema involucratum* (Roxb.) B. L. Burtt, comb. nov.**

Syn.: *Gratiola involucrata* Roxb., Hort. Beng. 80 (1814), nomen nudum et Fl. Ind. i, 138 (1820) et Fl. Ind. ed Carey, i, 137 (1832); Sprengel, Syst. Veg. i, 40 (1825); Roem. & Schult., Syst. Veg. Mant. i, 122 (1822); A. Dietr. in Linn., Sp. Pl. ed. 6, i, 551 (1831); D.F.N. Dietr., Syn. Pl. i, 39 (1839).

Epithema Roxburghii DC., Prodr. ix, 279 (1845), nomen illegitimum; Miquel, Fl. Ind. Bat. ii, 736 (1856).

Type: Timor (not seen)

Gratiola involucrata Roxb. provides the earliest epithet in the genus and it does not seem possible to avoid reverting to it. Unfortunately no type specimen is known and it is not figured in Roxburgh's collection of drawings at Kew (see Sealy in Kew Bull. 1956). The species of *Epithema* are very hard to define and the limits of *E. involucratum* are uncertain. C. B. Clarke included it under *E. Brunonis* (Wall.) Decne., and, as this species also came from Timor and Wallich himself said when describing it that Roxburgh's *Gratiola involucrata* was very probably the same, it seems likely that Clarke was correct. However the synonymy cited above is purely nomenclatural. What other names are to be added as taxonomic synonyms must await further investigations.

***Loxocarpus* R. Br. in Benn., Pl. Jav. Rar. 120 (1840); Ridley, Fl. Malay Penins. ii, 526 (1926).**

Syn.: *Didymocarpus* sect. *Loxocarpus* (R. Br.) Benth. in Benth. & Hook. f., Gen. Pl. ii, 1022 (1876); C. B. Clarke in DC., Mon. Phan. v, 98 (1883); Burtt in Notes R.B.G. Edinb. xxi, 201 (1954).

Roettlera sect. *Loxocarpus* (R. Br.) K. Fritsch in Engl. & Prantl, Nat. Pflanzenfam. IV, iii B, 148 (1895).

Ridley has already revived Robert Brown's genus *Loxocarpus* for the species of the Malay Peninsula, but has not dealt with those from the Malay Islands. The result is that there are species from the mainland which only have names in *Loxocarpus*, while their close allies from nearby Borneo have names only under *Didymocarpus*. As a genus *Loxocarpus* seems to be justified in the context of modern work on Gesneriaceae, and it is therefore adopted here. The essential feature of *Loxocarpus* is the short fruit swollen at the base and beaked at the top and dehiscing by a slit on one side only (the upper side when the fruit, as often, is held more or less horizontally). This contrasts strongly with the long pod dehiscing on both sides which is characteristic of true *Didymocarpus*. The species of *Loxocarpus* all have entire petiolate leaves borne close together, often at the top of a rather woody rootstock, and long pedunculate inflorescences; the flowers tend to be small and shortly tubular. The differences in fruit are also sufficient to distinguish *Didymocarpus* sect. *Orthoboea* Benth. (= *Henckelia* Spreng.) for in that group the pods, although they may dehisce on one side only, are long, more or less cylindrical and taper gradually to the apex. The general facies is different too, due to the generally lobed or sinuate leaf-margins of *Didymocarpus* sect. *Orthoboea*.

Geographically *Loxocarpus* appears to range from Lower Thailand to Sarawak and Borneo, whereas *Didymocarpus* sect. *Orthoboea* is restricted to eastern and southern India and Ceylon. The following transfers account for the species, not already named in *Loxocarpus*, which are known to me personally. *Didymocarpus conicapsularis* C. B. Cl., *D. Stapfii* Winkl. and *D. minutus* Winkl. I have not seen and I leave their transfer until specimens can be examined.

***Loxocarpus longipetiolatus* B. L. Burtt, nom. nov.**

Syn.: *Didymocarpus longipetiolatus* Merrill in Sarawak Mus. Journ. iii. 549 (1928)—non Gardner (1846).

SARAWAK. Gunong Pueh, 1267 m., small herb growing on rocks at summit, pale lilac flowers with two deeper purple dots, 24 Sept. 1955, *J. W. Purseglove & M. Shah* (P. 4783).

This was one of a number of interesting Gesneriaceae kindly communicated by Mr. J. W. Purseglove while Director of the Singapore Botanic Gardens. His collections include some new species not yet described.

***Loxocarpus petiolaris* (C. B. Cl.) B. L. Burtt, comb. nov.**

Syn.: *Didymocarpus petiolaris* C. B. Cl. in DC., Mon. Phan. v, 100 (1883).

BORNEO. Barber (K). Labuan, Motley (K).

***Loxocarpus rufescens* (C. B. Cl.) B. L. Burtt, comb. nov.**

Syn.: *Didymocarpus rufescens* C. B. Cl. in DC., Mon. Phan. v, 99 (1883).

SARAWAK. Lobb (K). Mt. Santubong, 13 March 1914, native collector, D. 157 (E). Summit of Santubong, fls. lilac, 23 Feb. 1949, *J. Sinclair* (Sing. 38355—E).

Loxocarpus verbeniflos (C. B. Cl.) B. L. Burt, **comb. nov.**

Syn.: *Didymocarpus verbeniflos* C. B. Cl. in DC., Mon. Phan. v, 99 (1883).

N.W. BORNEO. Landakan, *Burbridge* (K, BM).

Loxostigma Cavalieriei (Lévl. & Van.) B. L. Burt, **comb. nov.**

Syn.: *Didissandra Cavalieriei* Lévl. & Van. in Compt. Rend. Assoc. Franc. 1905, xxxiv, 425 (1906).

Didymocarpus Cavalieriei (Lévl. & Van.) Lévl. in Compt. Rend. Assoc. Franc. 1905, xxxiv, 427 (1906)—non *D. Cavalieriei* Lévl. in Fedde, Rep. Sp. Nov. ix, 453 (1911).

Briggsia Cavalieriei (Lévl. & Van.) Craib in Notes R.B.G. Edinb. xi, 263 (1919).

KWEICHOW. Pin-fa, 21 Aug. 1902, *Cavalerie* 239 (holo. E). Pin-fa, 1902, *Cavalerie* 777 (E, K). Without locality, *Esquirol* 646 (E).

KWANGSI. Chen Pien district, herb on tree in woods, 14 Nov. 1935, *S.P. Ko* 56035 (A).

Ripe fruits of this species have not hitherto been known. They are present on *S.P. Ko* 56035 and their seeds, long drawn out at both ends, show that the species is better placed in *Loxostigma* than in *Briggsia*. The flower has the characteristic facies and indumentum of *Loxostigma* and although the seeds are smaller than those of *L. Griffithii* (Wight) C. B. Cl. they are essentially similar in structure and are closer to them than they are to seeds of the true species of *Briggsia*. Placed in that genus this plant occupied an isolated position and had no close affinity. A characteristic feature of herbarium sheets of *Loxostigma Cavalieriei* is the long straggling stems covered with adventitious rootlets; the lower part of the stem of other species of *Loxostigma* is similar. The plants are epiphytic on mossy tree trunks. The following details may now be added to its description:—"Calyx persistent in fruit. Fruit somewhat curved, 4.5–5 cm. long, 3 mm. broad, seeds scarcely exceeding 1 mm. long, produced at both ends into narrow processes equalling the embryo in length."

Loxostigma mekongense (Franch.) B. L. Burt, **comb. nov.**

Syn.: *Roettlera mekongensis* Franch. in Bull. Mus. Hist. Nat. Paris, v, 252 (1899).

Loxostigma Forrestii Anth. in Notes R.B.G. Edinb. xviii, 199 (1934).

YUNNAN. Near the Mekong, between Tali-fou and Tsekon, *Prince Henri d'Orleans* (holo. P). Hills around Htawgaw, 26°N, 98°25'E, Oct. 1925, *Forrest* 27362 (holo. *L. Forrestii*, E).

The type specimen is rather fragmentary and only in flower, which accounts, no doubt, for its correct genus not being recognized.

Loxostigma ? sesamoides Handel-Mazzetti in Oest. Bot. Zeitschr. lxxxv, 217 (1936).

KWANTUNG. Wan Tong Shan, *H. Y. Liang* 60394 (holo. W).

The type of this species has been kindly sent on loan from the Naturhistorisches Museum, Vienna. Its examination shows that the plant is not a member of Gesneriaceae at all. It belongs to Acanthaceae and to the

genus *Staurogyne*, having the characteristic long acuminate, strongly nerved calyx segments and bracteoles of that genus, its condensed inflorescence (as found in the type species *S. argentea* Wall.) and the distinctive stigma. This has a central conical cavity and the marginal tissue, which forms the sides of the cone, irregularly flared. The species is close to *S. argentea* Wall. but the calyx-lobes are finely lanceolate-acuminate rather than lanceolate with setose-points, the stigma is irregularly flared but lacks the horns illustrated by Wallich (Pl. As. Rar. ii, t. 186: 1831) and the corolla of the Chinese species is much larger. Although the taxonomy of *Staurogyne* is sadly in need of revision, it appears that this species has no name in the genus and I therefore make the transfer:

Staurogyne sesamoides (Hand.-Mazz.) B. L. Burtt, **comb. nov.**

Lysionotus serratus D. Don in Edinb. Phil. Journ. vii, 85 (1822); C. B. Cl. in DC., Mon. Phan. v, 58 (1883).

Syn.: *Didymocarpus Esquirolii* Lévl. in Fedde, Rep. Sp. Nov. ix, 328 (1911).

Lysionotus serratus is a widespread plant of N. E. India and southern China. Lévillé's type specimen of *Didymocarpus Esquirolii* (Kweichow: Tse-Hen to Fou-Kia-Po, *Esquirol* 941) is in flower and the appendaged seeds, which would at once mark it as a member of the subtribe *Trichosporeae*, consequently cannot be observed. There is, however, a feature of the stamens which always permits the recognition of *Lysionotus*, a small sterile hook arising at the point of attachment of the anther and curling round the top of it. This character, quite unknown in *Didymocarpus*, is clearly shown on the specimen Lévillé described. Full synonymy of the species is given in Clarke's Monograph.

Paraboea glabra (Ridley) B. L. Burtt, **comb. nov.**

Syn.: *Boea glabra* Ridley in Journ. Linn. Soc. London, Bot. xxxii, 519 (1896).

PENINSULAR THAILAND. Poongah, *Curtis* 3039 (holo. K). Kao Chem, Tung Song, on rock, *Rabil* 103, 106 (BM! ABD). Hill above Ronpahun, 90 m., fls. purplish, stamens pale yellow, 16 July 1940, *Kingdon Ward* (Singapore 37460—K). Nakawn Sritamarat, Kiriwong, Tap Charng, c. 400 m., succulent herb common on wet rocks in evergreen jungle, fl. pinkish, 26 July 1951, *Smitinand* 510 (E). Patalung (cult. at Bangkok), flowers white, Sept.—Oct. 1930, *Kerr* 19745 (ABD).

This is one of the interesting species (some of them as yet undescribed) received in a small collection of Gesneriaceae from Mr. Tem Smitinand of the Royal Forest Department, Bangkok. It was previously known only from the type specimen, which was in young flower, but now proves to have been collected on a number of occasions. The fruit present on *Rabil* 106 shows no sign of torsion and the species therefore belongs to *Paraboea* and not *Boea* as Ridley supposed. Its affinity with *P. capitata* is quite close and Kingdon Ward's specimen had been identified as that species; however, *P. glabra* is well distinguished by its broad subfoliaceous calyx lobes.

Paraboea is not recorded in Lecomte, Flore Générale de l'Indo-Chine, but at least two species occur in Thailand, *P. glabra* and *P. glabrisepala* B. L. Burtt (see Kew Bull. 1940, 21). There is also a species in Kwantung

(Lu Tseh Tsung, Yun Fou distr., 24 Jan. 1928, *C. T. Wuang* 496—E), but the material is inadequate for description.

Petrocosmea Kerrii Craib in Kew Bull. 1918, 265, et in Notes R.B.G. Edinb. 1919, xi, 274 (1920).

Syn.: *P. Wardii* W. W. Sm. in Notes R.B.G. Edinb. xiii, 175 (1921); Chatterjee in Kew Bull. 1946, 50 (1947).

Damrongia Kerrii (Craib) Pellegrin in Lecomte, Fl. Gén. Indo-Chine, iv, 556 (1930).

YUNNAN. Above the Nam Ting, 23°40'N, 99°15'E, 1800–2100 m., 23 April 1921, *Kingdon Ward* 3772 (holo. *P. Wardii*, E). Shweli-Salwin divide, 25°45'N, 98°40'E, 3000–3500 m., June 1924, *Forrest* 24376 (E). Szemeo, 1500 m., *Henry* 13120 (E, K). Shunning, Wongkuangkuai, 16 June 1938, *Yu* 16311. Shweli-Salwin divide, 25°48'N, 98°48'E, 3000 m., July 1924, *Forrest* 24690 (E).

THAILAND. Doi Sutep, 1560 m., 6 Sept. 1914, *Kerr* 3361 (holo. K, iso. E). Doi Anglea, Pa Kampeng, 1750 m., 26 May 1938, *Garrett* 529 (E, K, ABD). Cult. in hort. bot. reg. Edinb., 1956, No. C.1611 (E).

Of the above quoted material only one specimen, *Garrett* 529, is in complete agreement with the type specimen of *P. Kerrii*. The remainder differ to a greater or lesser extent and I originally intended not only to maintain *P. Wardii*, but to describe *Henry* 13120 and *Yu* 16311 as an independent species. A more cautious approach has eventually seemed appropriate and as it has been partly dictated by the characters of the plant in cultivation, that may be considered first. The detailed origin of this plant is unknown: it is presumed to have been introduced from Thailand by the late Dr. A. F. G. Kerr. From the type of the species it differs in two main features: the coarse brown hairs do not clothe the whole petiole nor extend to the veins on the underside of the leaf, but are restricted to the lower part of the petiole; the flowers are borne in a pedunculate several-flowered cyme, not solitarily on slender pedicels.

In both these respects the cultivated plant resembles two of the specimens from Yunnan (*Henry* 13120 and *Yu* 16311). These are all robust plants. The type of *P. Kerrii* and *P. Wardii* are much more delicate and I can see no satisfactory difference between them.

Examination of living material of *P. Kerrii* has emphasised its isolation within the genus. The flowers are white with a yellow mark at the base of each lobe of the upper lip; the calyx is bilabiate, the three upper lobes being joined for about half their length, while the lower two are almost free; the anthers are produced into a blunt beak and as the anthers cohere face to face the two beaks also face one another and together they form a short tube. When the anther is pressed a jet of pollen is squirted out of this tube. A fuller investigation of the features separating sect. *Petrocosmea* (sect. *Eupetrocosmea* Craib) and sect. *Anisochilus* is needed before deciding whether *P. Kerrii* can be properly retained within either. There are also other anomalous species, not closely related: such are *P. Parryorum* C. E. C. Fischer and *P. peltata* Chun & Merrill. The present division of the genus is an over-simplification but a more natural treatment must await better material of some of the more obscure species.

It is evident from his key that Pellegrin transferred *P. Kerrii* to *Damrongia* on account of its bilabiate calyx. It has already been pointed out (Burt in Notes R.B.G. Edinb. xxi, 187: 1954) that taken alone this is quite an unreliable character. Indeed when *P. Kerrii* was first being studied it was found that *Trisepalum* ? *Kingii* C. B. Cl. was undoubtedly congeneric with it, and that species has since been rightly transferred to *Petrocosmea* by Chatterjee (in Kew Bull. 1946, 50: 1947). The long funnel-shaped corolla tube of *Damrongia* is alone sufficient to separate it from *P. Kerrii*: it may well be that *Damrongia* is itself not generically distinct from *Trisepalum*.

Saintpauliopsis Staner in Bull. Jard. Bot. Brux. xiii, 8 (1934).

This genus from the Belgian Congo was described as a new member of Gesneriaceae in 1934: I have not traced any further reference to it. It consisted of a single species with a distinct variety. For the opportunity of examining the type material I am indebted to Professor Dr. W. Robyns, Director of the Jardin Botanique de l'Etat, Brussels.

It has been reported on an earlier page that *Loxostigma*? *sesamoides* Hand.-Mazz. proves to belong to the Acanthaceae genus *Staurogyne*. It is a remarkable coincidence that this African plant must now be referred to the same genus! Whereas *S. sesamoides* (Hand.-Mazz.) B. L. Burt is closely related to *S. argentea* Wall., the species of *Saintpauliopsis* is obviously of a rather different affinity, but that is not surprising as the genus occurs in the tropics of Asia, Africa and America and includes species superficially very distinct even in one area.

Features that immediately distinguish *Saintpauliopsis* from any known member of Gesneriaceae are the short hard capsule with widely recurved valves, the pair of bracteoles lying close beneath the calyx and elongate inflorescence with flowers borne solitarily in a bractless raceme. These are not "family" characters in the technical sense, but they are sufficient to mark off *Saintpauliopsis* as decidedly different from anything in Gesneriaceae, and they are characters that fit happily with *Staurogyne* in Acanthaceae. I have not felt the material available sufficient to justify a fresh study of the ovary, nor does the situation require it. *Staurogyne* belongs to the subfamily *Nelsonioideae* which is distinguished by its more numerous ovules and by the absence of the retinacula so characteristic of the rest of the family. Bremekamp (in Proc. Kon. Ned. Akad. Wetensch. ser. C, lvi, 545: 1953) has, in fact, made this subfamily into a tribe of the Scrophulariaceae, but that is a debatable step beyond my immediate concern.

The material of *Saintpauliopsis* has, through the courtesy of the Director, Dr. G. Taylor, been compared with African material of *Staurogyne* in the herbarium at Kew. It did not prove the same as any species represented there, though the generic position was confirmed. I have failed to equate the species with any other in the literature and I therefore propose the necessary transfer:

Staurogyne Lebrunii (Staner) B. L. Burt, comb. nov.

Syn.: *Saintpauliopsis Lebrunii* Staner in Bull. Jard. Bot. Brux. xiii, 8 (1934).

Tengia scopulorum Chun in Sunyatsenia, vi, 281 (1946).

KWEICHOW. Pinfa, Chiu Feng Shan, 15 Aug. 1935, *Teng* 843 (Canton—not seen). Na-fo, 1907, *Cavalerie* 3148 (K).

The determination of *Cavalerie*'s specimen is based on comparison with Chun's description and illustration, and is a further tribute to the thoroughness of *Cavalerie*'s collecting.

Chun has very rightly called attention to the close superficial resemblance between *Tengia* and *Petrocodon*. The two genera have similar habit and both have leaves which dry almost black on the upper surface—a distinctive feature among Chinese Gesneriaceae. In both the corolla is regular, urceolate, shortly five-lobed and the style straight and exserted—and again there is no known parallel for these features in the group. It is in the androecium that the abrupt difference is found: two fertile stamens with coherent anthers in *Petrocodon*, five fertile stamens with free anthers in *Tengia*. It is almost as though the androecium of *Tengia* were a peloriate form of that of *Petrocodon*; yet of the two, *Petrocodon* is the more remarkable. Looking at the regular corolla one expects five fertile stamens, as in *Tengia*; in *Petrocodon* the irregular and reduced androecium comes as a sharp surprise.

I do not feel any doubt that these two genera are very closely allied: that the resemblance is more than superficial. A specimen collected by Handel-Mazzetti* seems clearly, from vegetative characters alone, to belong to one genus or the other; but being only in fruit it is not possible to determine to which. Similarly *Didymocarpus nigrescens*,† described from fruiting material only, almost certainly belongs to one of these genera.

Tengia and *Petrocodon* do not, however, stand alone. There is a third genus of this affinity, namely *Bournea* (see Oliver in Hook. Ic. Pl. t. 2254: 1893). Mathematically it holds a position between the other two genera, having an androecium of four free stamens. In *Bournea*, however, the corolla is lobed for two-thirds of its length and the lobes are only four in number, one being somewhat larger than the other two; the androecium differs from that of *Tengia* by the filaments being longer, so that the oblong anthers are slightly exserted. The style is short and the capitate stigma just reaches the level of the anthers. Thus *Bournea* may be distinguished by characters other than those of the androecium: yet its general habit and essential features are such that its generic rank must come up for review whenever additional material makes it possible to push the study of *Tengia* and *Petrocodon* a step further.

* "*Didymocarpus* sp." Kweichow. Prope urbem Kutschon in silvis templi Yanggumiau, ad rupes copiosissime, 300 m., 20 Jul. 1917, *Handel-Mazzetti* 18876.

† *Didymocarpus nigrescens* Lévl. & Van. in Bull. Soc. Bot. Fr. liii, 550 (1906). Kweichow. Tou Chan, route de Honang Tien, Jan. 1903. *Cavalerie* 2056.