Notes RBG Edinb. 38(1):19–21 (1980)

NOTES ON ZINGIBERACEAE

R. M. SMITH

ABSTRACT. New combinations are made in *Boesenbergia* and *Geanthus* (Borneo) and in *Hedychium* (Moluccas). The New Guinea *Hornstedtia lycostoma* K. Schum. is placed in synonomy under *H. scottiana* (F. Muell.) K. Schum. (Australia) and the Bornean *H. hewittii* Ridl. and *H. licmeres* Ridl. are shown to be conspecific with *Achasma nasutum* (K. Schum.) Loesen. from the same country.

NEW COMBINATIONS

Boesenbergia oligosperma (K. Schum.) R. M. Smith **comb. nov.**
Syn.: *Haplochorema oligosperma* K. Schum., Pflanzenr. Zing. 90 (1904).
Type. Sarawak. First Division, Batang Lupar, Marop, iv 1864, *Beccari* 3307 (K).

SARAWAK. First Division, nr Kuching, recvd K xi 1891, *Haviland* 449 (K); *ibidem, Haviland* 450 (K); Lundu distr., Kampong Keranji, 16 viii 1962, *Burtt & Woods* B.2885 (E); Third Division, Hose mts, base camp, 23 viii 1967, *Burtt & Martin* 5135 (E, cultivated material only).

The distichous arrangement of the bracts of this species is characteristic of *Boesenbergia*. *B. oligosperma* has yellow-orange flowers with no conspicuous patterning and the anthers dehisce by apical pores rather than by longitudinal slits.

Boesenbergia ornata (N.E. Br.) R. M. Smith **comb. nov.**
Syn.: *Kaempferia ornata* N.E. Br. in Illustr. Hortic. 31: 159, t.537 (1884).
Gastrochilus ornatus (N.E. Br.) Val. in Bull. Jard. Bot. Buitenz., ser. 2, 27:89 (1918).
Type. Borneo. Without precise locality, coll. Teuscher for the Compagnie Continentale d'Horticulture à Gand, cultivated material only (K).

The upper surfaces of the leaves of *B. ornata* are beautifully marked by an irregular silver band on either side of the midrib; on the undersurface the foliage is reddish-brown. The flowers are yellow with an orange-spotted labellum.

Geanthus sanguineus (Winkler) R. M. Smith **comb. nov.**
Syn.: *Hornstedtia sanguinea* [Ridl. ex] Winkler in Bot. Jahrb. 44:531 (1910).
Type. Kalimantan. Without precise locality, 1908, *Winkler* 2147 (BM, G, K).

Examination of type material shows this species to have the inflorescence and flower structure of *Geanthus*. The outermost bracts of the inflorescence are sterile and merge gradually into flower-bearing bracts. Each flower has a tubular bracteole and the lower part of the labellum is united with the base of the filament into a distinct tube: a condition never found in *Hornstedtia*.

Hedychium tenellum (K. Schum.) R. M. Smith **comb. nov.**
Syn.: *Brachychilum tenellum* K. Schum., Pflanzenr. Zing. 61 (1904).
Type. Moluccas. Ternate or Tidore, *Curtis*? s.n., Hort. Veitch 1897 (K).

The type sheet of this species is annotated 'Hedychium tenellum' in Schumann's hand. Nowhere does the name *Brachychilum* appear and the description suggests that an error has occurred. The deeply divided labellum is described as 1·5 *mm* long, but is, in fact at least 1·5 cm and quite typical of *Hedychium*; there is an elongated filament. In *Brachychilum* the labellum is from 3–5 × 3–5 mm, emarginate and strongly recurved; the short filament barely equals the anther in length.

New Synonomy

Achasma nasutum (K. Schum.) Loesen. in Pflanzenfam. 2 Aufl. 15A: 596 (1930); Burtt & Smith in Notes R.B.G. Edinb. 31:307 (1972).

Syn.: *Amomum nasutum* K. Schum. in Bot. Jahrb. 27:230 (1899) & Pflanzenr. Zing. 223 (1904).

Hornstedtia hewittii Ridl. in Journ. Str. Br. Ro. As. Soc. 46:241 (1906). Syntypes: Sarawak. First Division, Santubong, *Hewitt* s.n. (K); Siol, 28 ix 1905, *Ridley* s.n. (SAR).

H. [*Hornstedtia*] *licmeres* Ridl. op. cit. 49:44 (1907). Type? Sarawak. First Division, Kuching, 16 ix 1905, *Hewitt* s.n. (SAR).

Type. Sarawak. First Division, Kuching, *Beccari* 315 (FIR).

It is possible that the Hewitt collection cited above under *H. licmeres* does not represent type material, but the determination is in Ridley's hand. This specimen, together with the syntypes of *H. hewittii*, shows the narrow involucral bracts characteristic of *Achasma nasutum*. Ridley states that in *H. hewittii* the labellum has a central yellow bar, he makes no comment on that of *H. licmeres*, but, this possible colour difference apart, the two cannot be separated. In the description of *H. licmeres* (the genus is indicated by '*H*.' only, but *Hornstedtia* was clearly intended) the labellum is described as shorter than the petals: 'about ½″ long'. Although the material seen is rather poor it shows that the labellum has an elongated central portion of probably up to 3 cm and is therefore quite typical of *Achasma*.

Hornstedtia scottiana (F. Muell.) K. Schum. Pflanzenr. Zing. 194 (1904).

Syn.: *Elettaria scottiana* F. Muell. Fragm. 8:24 (1872); Benth. Fl. Austral. 7:264 (1873).

Amomum lycostomum Lauterb. & K. Schum. in Bot. Jahrb. 27:305, t. 4, fig. H–J (1899). Syntypes: Papua New Guinea, Ramufluss, 9 vii 1896, *Lauterbach* 2495; *ibidem*, 21 vii 1896, *Lauterbach* 2542; Aru-Inseln, Vokan, iii 1873, *Beccari* s.n.—*omn n.v.*

Hornstedtia lycostoma (Lauterb. & K. Schum.) K. Schum., Fl. Deutsch. Schutzgeb. Sudsee: 228 (1901) & Pflanzenr. Zing. 194 (1904).

Type. Australia. Queensland, Rockingham Bay, *Dallachy* s.n. (*n.v.*).

AUSTRALIA. Queensland, Lower Stoney Creek, 28 vii 1946, *Flecker herb.* 10327 (QRS); Chuchaba, 29 ii 1936, *Flecker herb.* 2617 (QRS); Mission Beach, 17° 53′ S, 146° 02′ E, xi 1964, *Hyland* 3078 (BRI); Claudie River, 12° 45′ S, 143° 15′ E, 60 m, 3 i 1973, *Hyland* 6660 (QRS); Wyvuri Holding, 17° 20′ S, 146° E, 40 m, 11 vii 1974, *Hyland* 7360 (QRS); S.F.R. 675, Mulgrave L.A., 17° 05′ S, 145° 40′ E, 100 m, 8 i 1975, *Hyland* 7957 (E, QRS); *ibidem*, 120 m, 13 ii 1975, *Hyland* 8525 (E, QRS); *ibidem*, 120 m, 13 ii 1975, *Hyland* 8527 (QRS); *ibidem*, 100 m, 25 xi 1976, *Hyland* 9203 (E, QRS); *ibidem*, 100 m, 25 xi 1976, *Hyland* 9216 (E, QRS); Porn

62, Alexandra, near Noah Creek, 16° 08′ S, 145° 27′ E, 7 m, 19 xii 1972, *Dockrill* 604 (QRS). PAPUA NEW GUINEA. Central Distr., subdistr. Port Moresby, NE of Manumu Village, 9° 05′ S, 147° 34′ E, 500 m, *Isles & Vinas*, NGF 34472 (E, LAE); E Sepik District, subdistr. Angoram, Kundiman Yauyang Village, 4° 37′ S, 143° 27′ E, 30 m, *Leach*, NGF 34231 (E, LAE); W Sepik District, subdistr. Amanab, Imonda Patrol Post, 3° 20′ S, 141° 10′ E, 300 m, 25 xi 1971, *Streimann & Martin,* LAE 52901 (E, LAE); West New Britain District, subdistr. Gasmata, Tullebora Harbour, 6° 10′ S, 150° 40′ E, 100 m, 3 v 1973, *Stevens et al.*, LAE 58193 (E, LAE); subdistr. Hoskins, 4° 40′ S, 151° 34′ E, 345 m, 4 vi 1973, *Stevens & Lelean*, LAE 58535 (E, LAE); New Ireland District, subdistr. Namatani, Danfu R area inland from Manga, 4° 13′ S, 153° E, 750 m, 5 ii 1970, *Coode & Lelean*, NGF 46078 (E, LAE); Bougainville District, subdistr. Buin, Tonelei harbour, 6° 44′ S, 155° 55′ E, 100 m, 11 viii 1969, *Coode, Dockrill & Foreman,* NGF 40416 (E, LAE).
NEW HEBRIDES. N Efate, between Narabat and Bald Mill, 17° 35′ S, 168° 21′ E, 300 m, 5 vii 1971, *Green,* RSNH 1042 (K, E); Malekula, SW Bay, 300 m, 11 x 1971, *Hallé,* RSNH 6419 (K, E).

H. scottiana displays the rigid fusiform inflorescence character of almost all members of the genus. The ground colour of the outer (sterile) bracts is commonly bright red, although paler forms occur, and these bracts are clothed, to a lesser or greater degree, by a short, dense, white to cream indumentum. Flower colour is generally red but white-flowered examples may be found, probably, as in *Hyland* 8525, in those plants with paler bracts.

Only two species of *Hornstedtia* have been recorded from New Guinea: the very distinctive *H. cyathifera* and the much more widespread *H. lycostoma*. Although no type material has been examined, study of the generally excellent modern collections cited above indicates that *H. lycostoma* cannot be separated from its Australian counterpart.

The author is indebted to the directors of the following institutions for the loan of material: BRI, G, K, LAE, QRS, SAR.