A new genus and new species of Malesian Orchids

by

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Recently I have received specimens and photographs of orchids from Mr. K. C. Cheang (Penang) and Mr. A. G. Alphonso (Singapore). These indicate that corrections should be made to some statements in my book *Orchids of Malaya* (3rd edition, 1965), and involve the recognition of a new genus and a new species. From Singapore I have also received specimens of a further new species originating in Sabah. The new genus and new species are described in the present paper, with appropriate name-changes.

Smitinandia, a new genus of Sarcanthine Orchids

Smitinandia, genus novum, habitu Sarcantho Lindl. simile; inflorescentia horizontale vel nutans, simplex vel ramosa; flores parvi, carnosi, diu persistentes; labellum calcaratum, trilobum, lobis lateralibus parvis, carnosis, lobo intermedio fere quadrangulari, carnoso, antice tenui et rotundato, ore calcaris callo e basi lobi intermedii nascente occluso; pollinia 4, in paribus valde inaequalibus disposita, stipite brevi sursum dilatato suffulta.

Species typica: *Saccolabium micranthum* Lindl.

In *Orchids of Malaya* (1st ed. p.731, 3rd ed. p.735) I included *Saccolabium micranthum* Lindl. with doubt in the genus *Ascocentrum* Schltr, remarking that I knew of no other genus to which it could be referred. In recent years several plants of this species have been sent to Kew from Thailand and have flowered; I have also received flowering material in alcohol, and photographs, from plants in cultivation at the Botanic Gardens at Singapore and Penang.

This new material shows the pollinia clearly. They are not, as I had supposed, like those of *Ascocentrum*, which has two pollinia, each with a small cleft; the species *micranthum* has four pollinia, in two pairs, the two in each pair very unequal, as they are in *Sarcanthus* and *Thrixspermum*. Viewed from the front, the smaller members of each pair are hidden, and so are not shown in Pantling's drawing, on which I largely based my description, as I had no fresh material when I prepared the book. The shape of the labellum differs greatly from that of *Sarcanthus*, and the callus which closes the entrance to the spur is an outgrowth from the base of the midlobe of the lip, not from the back of the spur as in *Sarcanthus*. As pointed out by Seidenfaden and Smitinand, *Saccolabium humile* Ridl., agrees exactly in floral structure with *S. micranthum*, and I unite the two species in a new genus, as these authors suggest, naming it in recognition of their excellent work on the orchids of Thailand.

Key to the species of Smitinandia

Inflorescence unbranched, scape much shorter than rachis; dorsal sepal 3 mm. long. *S. micrantha*

Inflorescence branched, scape as long as one of the branches; dorsal sepal hardly 2 mm. long. *S. humilis*

Smitinandia micrantha (Lindl.) Holttum, **com nov.** — *Saccolabium micranthum* Lindl., Gen. et Sp. Orch. (1833) 220. — *S. fissum* Ridl., Journ. Linn. Soc. Bot. 32 (1896) 361; Flora Mal. Penin. 4 (1924) 173. — *Cleisostoma micranthum* (Lindl.) King & Pantl., Ann. R. Bot. Gard. Calcutta 8 (1898) 234, t.312. — *Ascocentrum micranthum* (Lindl.) Holtt., Rev. Fl. Malaya 1 (1953) 731; Seidenfaden & Smitinand, Orch. Thailand pt. IV, 1 (1963) 595, fig. 446. — *Cleisostoma tixieri* Guillaum., Bull. Mus. Hist. Nat. Paris, ser. 2, 32 (1959) 369; Seidenfaden & Smitinand, Orch. Thailand Pt. IV, 2 (1964) 826.

Type specimen: Wallich 7300, Sylhet and Nepal (K).

Distribution: Sikkim Himalaya southwards through Tenasserim, Laos, Cambodia and Thailand to Langkawi and Kedah.

As noted in Holttum 1953, the distribution of purple markings in the flowers varies somewhat, those from northern Malaya having least purple, but the shape of the flowers varies little. The scape of the inflorescence is often very short (under 1 cm.) and is much thicker than that of *S. humilis*. Old inflorescences bearing fruits are sometimes longer than the leaves, but usually they do not exceed the leaves.

Smitinandia humilis (Ridl.) Holttum, **comb. nov.** — *Saccolabium humile* Ridl., Journ. Str. Br. R. Asiatic Soc. no. 59 (1911) 198; Seidenfaden & Smitinand, Orch. Thailand pt. IV, 1 (1963) 616, 617, fig. 465 A, B.

Type specimen: Curtis 3028, Poongah (Phang-nga), Thailand (S. dupl. K).

Distribution: Eastern and Peninsular Thailand, Laos.

Seidenfaden and Smitinand publish good illustrations, and (p. 616) point out the relationship of this species to *S. micrantha*. I have not seen a specimen of *Cleisostoma poilanei* Gagnep. (Bull. Soc. Bot. France 79: 34, 1932) but from the description it seems likely to be synonymous with *S. humilis*, rather than with *S. micrantha* as suggested by Seidenfaden and Smitinand (p. 595).

A new species of Hylophila Lindley

Hylophila cheangii Holttum, **sp. nov.** — *H. lanceolata* sensu Holttum, Rev. Fl. Malaya 1 (1953) 119, p.p.

Hylophila habitu H. lanceolata (Bl.) Miquel similis, sed ab ea inflorescentia omnino hirsuta atque aurantiaca, appendiculis stigmatis nullis, distincta.

Stem 25 cm or more long, basal part creeping and rooting at the nodes, internodes 2.5–3.5 cm long; leaf-blade 9–11 x 2.5–3.0 cm, widest in the middle, narrowed to base and slightly acuminate apex,

sheath and petiole 2.5 cm long (closed sheath 8 mm). Inflorescence terminal, scape to 3 cm; rachis 2.5–4.5 cm long, hairy, reddish orange; bracts 12 mm. long, narrowed to a slender tip, hairy as rachis and of same colour; dorsal sepal orange, 10 mm long, 4 mm wide near base when flattened, gradually narrowed to apex, hairy on outer surface; lateral sepals 10 mm long, 5 mm wide near base; petals as long as sepals, 3 mm wide, widest in middle, hairless, clear yellow; labellum saccate, 6 mm long, orange yellow, its base joined to the sides of the column, with a very small aperture in front of the column, its blade very narrow, 5 mm long, a deeper orange; column less than 2 mm long, bearing a distinctly bilobed swollen stigma in an arc across its front, the two halves together forming a crescent with ascending arms just beneath the rostellum; anther elongate and bent forwards almost at right angles to the column; pollinarium 7 mm long, the narrow viscisium 5 mm long; rostellum deeply lobed.

Type: coll. *K. C. Cheang, s.n.*, terrestrial by streamside, Fraser's Hill, Pahang, 27 June 1968 (K). The following specimen in Herb. Kew also agrees: Moulton 6694, Gunong Temabok, Upper Baram Valley, Sarawak, 3,000 ft. (distributed as *Dicerostylis lanceolata* Bl.).

I believe Mr. Cheang's specimens to be identical with those few others from Malaya which have passed as *Hylophila lanceolata* and are so described in my book on the orchids of Malaya. When preparing my description for the book, I saw no fresh material, and accepted J. D. Hooker's identification of Malayan specimens with Blume's Java species (see Hook. fil. in Fl. Brit. India 6: 110). I took details of colour from J. J. Smith's revised description of the Java species, made from fresh specimens in 1921. Ridley's previous description of the same old Malayan specimens available to me (he never found any himself) included the statement "flowers white", which he probably copied from Blume. My description, as regards dimensions of flowers and their parts, was evidently taken from dried Malayan specimens, and agrees well with the new specimen found by Mr. Cheang. The only discrepancy is the absence of stigmatic appendages on Mr. Cheang's specimen; I suspect that I took these on trust, copying Hooker's statement. Hooker saw only a single specimen, collected in Perak by Scortechini about 1885, and the Kew sheet bears sketches of floral details, made by Hooker. The sketches show two appendages at the base of the column, but comparison with the floral fragments left after Hooker's dissection inclines me to think they may have been parts of the lip remaining attached to the column. I tried to dissect two further flowers-buds from Scortechini's specimen, but both had been so damaged by an insect that details could not be seen. Whatever may be the truth about this Scortechini specimen, I have no doubt that Mr. Cheang's is quite distinct from Blume's species *Dicerostylis lanceolata* which was illustrated by him in Coll. Orch. (1859) 116, pl. 38, fig. 1.

So far as I know, the only other record of this species from Malaya is a specimen (in Herb. SING.) collected by Curtis on Bujong Malacca in the 1890s. Thus Mr. Cheang's specimen is the first known to have been found for about 70 years.

It may be that *Hylophila* and *Dicerostylis* should be distinguished by the shape of the stigma itself rather than by the two appendages on the column which are not part of the stigma and which were regarded as distinctive of *Dicerostylis* by Blume. The type species of *Hylophila* is *H. mollis* Lindl. When preparing my book I saw fresh material of this, and described the stigma as "large, convex"; I have tried to check this from dried specimens but find it very difficult to see details clearly on them. If a bilobed stigma is regarded as characteristic of *Dicerostylis* and a simple one of *Hylophila*, then *H. cheangii* would belong to *Dicerostylis;* but in view of the close similarity of all other parts of the flower I think it not unnatura in any case to unite the two genera, as was done by Miquel.

A new species of Trichoglottis from Sabah.

Trichoglottis appendiculifera Holttum, **sp. nov.**

Caulis ad 40 cm vel ultra longus; folia 4–6 cm longa, 11–16 mm lata, apice sat profunde inaequaliter biloba, lobis rotundatis, costis subtus (praesertim basin versus) carinatis, carina in vaginam decurrente et illic alam 1 mm latam translucentem efficiente, varginis leviter imbricatis. Inflorescentia per vaginam erumpens, uniflora. Flores pallide viridelutei, sepalis petalisque fasciis transversalibus subro-aurantiacis irregulariter ornatis. Sepala petalaque 13 mm longa, sepalum dorsale 3½ mm, sepala lateralia 4½ mm, petala 2¼ mm lata. Labellum 9 mm longum; lobi laterales pallide brunnei, erecti, fere oblongi basi 2½ mm longi, 1½ mm alti, intus breviter pilosi; lobus intermedius labus, striis pallide violaceis ornatus, 6½ mm longus, e basi sensim ampliatus, ambitu anguste triangularis desuper visus, carina tenui alta antice abrupta declivi praeditus et supra apicem appendiculam angustam tenue fere 2 mm longam oblique ascendente gerens, carina omnino pilis horizontaliter patentibus ac basi pilis ascendentibus ornata. Gynostemium 3 mm altum, minute papillosum; pes gynostemii vix 2 mm longus; ligula as basin gynostemii enata 2 mm longa, angusta, apicem leviter bilobatam versus ampliata, marginibus ciliata.

Type: cult. Hort. Bot. Singap., origin Sook Plain, Sabah, coll. *A. G. Alphonso, no 1/110/66* (Singapore Introd.), specimen in Herb. Kew.

The peculiar complex structure of the labellum of this species seems to be quite distinctive.