# Studies in the Gesneriaceae of the Old World

## VI.—Notes on Aeschynanthus

BY

B. L. BURTT AND R. DAVIDSON

### 1. AESCHYNANTHUS BRACTEATUS

The treatment of this species at the hands of botanists has varied from time to time. The name was first used for a plant from Pundua, Assam, by Wallich in 1828, but it was not described till 1845 when De Candolle treated it for his Prodromus. Four years later Lindley described *A. Paxtoni* from a plant in cultivation in Britain, but this has been by general consent regarded as a synonym of *A. bracteatus* and no more has been heard of it. In 1855 Sir J. D. Hooker published a beautiful illustration of a plant from near Darjeeling under the name *A. Peelii* Hook. f. & Thoms. *A. Peelii* was not accepted as a distinct species by C. B. Clarke. He reduced it first to a variety of *A. bracteatus* and later to a complete synonym of that species. In 1934 J. Anthony came to the opposite conclusion. He decided that *A. Peelii* could be distinguished by its relatively narrower leaves, peduncle exceeding the petiole and larger calyx and corolla. Anthony recognized a distinct variety, *A. Peelii* var. *oblanceolata*, with notably oblanceolate leaves and more slender peduncles. Finally in 1940 C. E. C. Fischer raised Anthony's variety *oblanceolata* to specific rank remarking that in his view, it was far more easily distinguished from *A. bracteata* and *A. Peelii* than these species were from one another. Fischer pointed out that the relative length of petiole and peduncle was not a reliable character when applied to a duplicate of Wallich's type which he had before him.

With additional material of this group awaiting determination, it has seemed desirable to go over the problem once more. Measurements of petiole and lamina, peduncle, calyx-lobes and corolla have been tabulated (Table I). While these measurements show up the variation within the group, they show too that the variations in the flowers and the leaves are not always correlated. There is also seen to be a lack of any constant relation between geography and morphology. For example both long and shortly pedunculate forms have been collected by Lace near Darjeeling and by Kingdon Ward near Laktang. The variation in length of calyx-lobes in Yunnan alone covers almost the whole range of the group in that character. It is concluded, therefore, that there are at present no good grounds for recognizing *A. Peelii* as a species distinct from *A. bracteatus*.

The new material has produced one additional problem. When sorting the specimens, 10 of them were placed on one side owing to their strange superficial resemblance. The most obvious recognition character was the curious cinnamon colour of the undersides of the leaves, and at first this pile suggested an entity distinct from *A. bracteatus*. However, all these 10 sheets were found to have been collected by H. T. Tsai and all but one of them were definitely labelled Ping-pien Hsien, Yunnan. They may well

represent only a single colony. Analysis showed that their measurements fell within the general range of *A. bracteatus* and the variation within them provided a useful check that such measurements are by no means constant even within a restricted area. When further information is available it may perhaps be possible to attach a more definite value to the leaf-colour character; till then, however, this group of specimens must also be included in the one variable species.

| | Leaf Length | Leaf Breadth | Petiole Length | Peduncle Length | Calyx-lobe Length | Corolla Length |
|---|---|---|---|---|---|---|
| *N. Bengal* | | | | | | |
| Lace 2366 : Darjeeling ... | 8 | 3·5 | 1 | 6 | 1·8 | 4·5 |
| Lace (Oct. 1912) : Darjeeling... | 10 | 3·5 | 1·5 | 1–2 | 1·4 | — |
| *Assam* | | | | | | |
| Hooker & Thomson : Khasia ... | 9·5 | 3·5 | 0·5 | 1·5 | 0·8 | — |
| Native collector : Khasia ... | 8 | 2·5 | 1 | 1 | 1·2 | — |
| *N.E. Upper Burma* | | | | | | |
| Ward 3113 : Laktang ... ... | 6·5 | 2·5 | 1 | 1·5 | — | — |
| Ward 3563 : Laktang ... ... | 7·5 | 3 | 1 | 5·5 | 1·9 | 4 |
| Farrer 1257 : Hpawte ... ... | 9 | 2·5 | 1 | 1·5 | 1·3 | 2·5 |
| Farrer 1258 : Hpawte ... ... | 6·5 | 2·5 | 1 | 1·5 | 2 | 4 |
| Forrest 9149 : Sansi Gorge ... | 10 | 4 | 1 | 4·5 | 1·8 | 3·5 |
| *Tibet* | | | | | | |
| Ward 6370 : Tsangpo Gorge ... | 6·5 | 2·25 | 1 | 1 | 1 | — |
| *Yunnan* | | | | | | |
| Forrest 9499 : Tengueh ... | 8·5 | 3 | 1 | 1 | 1·3 | — |
| Forrest 9271 : Mingkwong ... | 9 | 3·5 | 1 | 1 | 1·4 | 4 |
| Forrest 18422 : Salwin ... | 9 | 3 | 1 | — | 2·5 | 4 |
| Tsai 51935 : ? ... ... | 9 | 4 | 1 | 2 | — | — |
| Tsai 55099 : Ping-pien Hsien... | 10·5 | 4·5 | 1 | 2·5 | — | — |
| Tsai 55232 : Ping-pien Hsien... | 10 | 4·5 | 1·5 | 3 | — | — |
| Tsai 60145 : Ping-pien Hsien... | 10 | 3·5 | 1 | 4 | — | — |
| Tsai 60305 : Ping-pien Hsien... | 10 | 4·5 | 1 | 4 | 1·3 | — |
| Tsai 60419 : Ping-pien Hsien... | 9·5 | 4 | 1 | 3·5 | 1·5 | 3 |
| Tsai 60722 : Ping-pien Hsien... | 7 | 3 | 1 | 4 | 1·4 | 3·75 |
| Tsai 61465 : Ping-pien Hsien... | 9 | 3·5 | 1 | 5 | 1·3 | — |
| Tsai 61567 : Ping-pien Hsien... | 10·5 | 4·5 | 1 | 5 | 1·6 | 3·5 |
| Tsai 62136 : Ping-pien Hsien... | 7 | 2·5 | 1 | 3 | 1·5 | 2·5 |

TABLE 1. Measurements from herbarium material of *Aeschynanthus bracteatus*. All measurements are given in centimetres and are averages for the sheet concerned.

AESCHYNANTHUS BRACTEATUS [Wall. (List No. 794 : 1828) ex] DC. Prodr. ix, 261 (1845); C.B.Cl. Comm. et Cyrt. Bengal. t. 43 (1874), et in DC. Mon. Phan. v, 31 (1883), et in Hook. fil. Fl. Brit. Ind. iv, 342 (1884).

Syn.: *A. Paxtoni* Lindl. in Journ. Hort. Soc. iv, 79 (1849).

*A. Peelii* Hook. fil. et Thoms. in Hook. fil. Ill. Him. Pl. t. 17 (1855); Anthony in Notes Roy. Bot. Gard. Edinb. xviii, 190 (1934).

*A. bracteatus* var. *Peelii* (Hook. fil. et Thoms.) C.B.Cl. Comm. et Cyrt. Bengal. t. 44 (1874).

## 2. Aeschynanthus parasiticus

*Aeschynanthus parasiticus* was first described by Roxburgh as *Incarvillea parasitica* Roxb. (Plants of the Coast of Coromandel, iii, 88, tab. 291 : 1819). Three years later D. Don founded the genus *Trichosporum*, basing his description of the genus and the two species he recognized on material collected by Wallich in Nepal. Under *T. grandiflorum*, however, Don cited as a synonym *Incarvillea parasitica* Roxb. ; consequently *T. grandiflorum* is now judged to be an illegitimate name.

Writing in 1825, Sprengel (Syst. Veg. ii, 836) retained the name *Incarvillea parasitica* Roxb., but 2 years later (Syst. Veg. Cur. Post. 238), adopted W. Jack's genus *Aeschynanthus* * and transferred to it Don's *Trichosporum grandiflorum*, still however in an illegitimate sense with *Incarvillea parasitica* as a synonym. Nevertheless the name *Aeschynanthus grandiflorus* (D. Don) Spreng. has persisted in general use down to the present day.

The combination *Aeschynanthus parasiticus* (Roxb.) Wall. was validly published in 1828 (Wallich, List No. 796), but has hitherto been ignored. It must now be adopted in place of *A. grandiflorus*.

Aeschynanthus parasiticus (Roxb.) Wall. List, No. 796 (1828).

Syn. : *Incarvillea parasitica* Roxb. Pl. Corom. iii, 88, t. 291 (1819) et Fl. Ind. iii, 112 (1832) ; Spreng. Syst. Veg. ii, 838 (1825).

*Trichosporum grandiflorum* D. Don in Edinb. Phil. Journ. vii, 95 (1822) et Prodr. Fl. Nepal. 125 (1825).

*Aeschynanthus grandiflorus* (D. Don) Spreng. Syst. Nat. Cur. Post. 238 (1827); DC. Prodr. ix, 261 (1845); Hook. Bot. Mag. t. 3843 (1841); C. B. Clarke in DC. Mon. Phan. v, 22 (1833) et in Hook. fil. Fl. Brit. Ind. iv, 338 (1884).

## 3. A New Species from New Guinea

**Aeschynanthus microcardia** Burtt et Davidson, **sp. nov.** e sectione *Microtrichio* Benth. ; e descriptione *A. atrorubenti* Schlechter affinis, sed foliis minoribus cordatis marginibus ciliatis petiolis brevioribus, calycis segmentis brevioribus, filamentis glabris, stylo sparsim glanduloso recedit.

*Planta* repens, caule tenui griseo parce ramoso ad apicem pilis brevibus rigidis albis praedito. *Folia* petiolis 1·5 mm. longis pilis brevibus rigidis indutis instructa ; lamina carnosa, ovato-cordata, 1·4—2 cm. longa, 1·0—1·6 cm. lata, apice acuta basi cordata, supra glabra, subtus costa densius vestita excepta pilis multicellularibus parcis praedita, marginibus subintegris leviter revolutis ciliatis, nervis lateralibus indistinctis. *Inflorescentia* (an semper ?) pseudo-terminalis, 2-3-flora, floribus aliis solitariis in axillis foliorum ultimorum interdum praestantibus. *Pedicelli* 2 cm. longi, pilis brevibus albis aliis parcis longioribus glandulosis intermixtis induti, ebracteolati. *Calyx* usque ad basin in segmenta 5 linearia 6 mm. longa sparsim et breviter albo-pilosa. *Corolla* atrorubens, extra pilis rubris multicellularibus glandulosis parcis vestita, intus infra medio pilis squamiformibus retrorse papillosa, tubus

* *Aeschynanthus* Jack was actually published in 1823, one year after *Trichosporum* D. Don. *Aeschynanthus*, however, is now included in the list of *Nomina generica conservanda*.

cylindricus, arcuatus, 4 cm. longus, basi per 3 mm. bulboso-ampliatus 4 mm. diametro, supra abrupte ad 2 mm. latus angustatus, deinde sensim ad orem 7 mm. latum ampliatus; lobi anguste ovati, obtusi, 5 mm. longi, 3 mm. lati. *Stamina* 4; filamenta glabra, ad corollam per 2·3 cm. adhaerentia, parte libera 1·5 cm. longa; antherae 1 mm. longae, 0·75 mm. latae, apicibus per paria connatae. *Discus* 1 mm. altus, cupularis. *Gynoecium* 4·4 cm. longum, 2 mm. latum, stylo parce glanduloso-piloso, stigmate capitato 1·5 cm. diametro. *Fructus* circiter 13 cm. longus, 3 mm. latus, basi longe et sensim attenuatus, apice abruptius angustatus. *Semina* numerosa, utrinque pilo robusto 0·5 mm. longo appendiculata, 1·5 mm. longa (appendiculis inclusis).

*Papua*. Gaunan, 1200 m., creeping over tree roots in Nothofagus forest, fls. dark red, leaves grey-green, 28 October 1952, N. E. G. Crutwell 388.

The section *Microtrichium* of *Aeschynanthus* is evidently strongly represented in the island of New Guinea, twenty-three species having been recorded by Schlechter (in Engler's Bot. Jahrb. lviii, 268: 1923) *A. microcardia* comes among the last nine species in Schlechter's key, but it does not fall neatly alongside any single one. On the whole its closest affinity appears to be with *A. atrorubens* Schlechter, with which it has been compared in the diagnosis above. *A. atrorubens* comes from the Sepik district, in the north-eastern part of the island. Gaunan (the locality for *A. microcardia*) is on the north-east side of the Owen Stanley Range.

Another close affinity may be with *A. kermesinus* Schlechter (more fully described in Nova Guinea, xiv, 309: 1927), but this comes from north-western New Guinea and is easily distinguished by its less pointed leaves, smaller, lighter-coloured flowers on pedicels half the length of those of *A. microcardia*, and densely glandular-villous style.

Only one species of this group has been described since Schlechter's revision. This is *A. tenericaulis* Diels (in Engler's Bot. Jahrb. lxii, 492: 1929) from the Sarawaged Mts., N.E. New Guinea. It differs from *A. microcardia* by its small more orbicular leaves being long-pilose on both surfaces and by its smaller glandular corolla.

The inflorescence of *A. microcardia* is described as pseudoterminal because the aggregation and early fall (or reduction ?) of the uppermost pairs of leaves gives the appearance of a small terminal umbel, though in origin the flowers are doubtless solitary and axillary.

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## VII.—A Second Species of the Genus Anna

BY

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The genus *Anna* was established by Pellegrin (in Bull. Soc. Bot. France, lxxvii, 46: 1930) for a single species, *A. submontana*, from Tonkin. No further material was known when the same author contributed the account