



Eriopsis biloba

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TAB. 611
ERIOPSIS BILOBA
Orchidaceae

The usual form of this tropical American species has not been figured previously in this Magazine although it is such a striking plant and quite commonly cultivated even by those who rarely grow 'pure' species. A pale-flowered form, described as *Eriopsis ruti-dobulbon* by the elder Hooker, was illustrated here in 1849 (t.4437) but has apparently not survived in cultivation. Several other forms have also been described as species and illustrated elsewhere, but recent authors agree that they fall within the natural variability of the species and do not merit specific rank. There is variation not only in the intensity of the colour of the flowers and, to a lesser extent, of the pseudobulbs, but also in the shape of the labellum, especially in the relative size of the bilobed mid-lobe, and in the shape of the pseudobulbs. The latter can range from the typically ovoid shape usually associated with orchids to a tall, narrowly cylindrical type. In wild plants this variation appears to be related to environmental factors, especially altitude and vegetation type, and the same factors probably also control whether the plant grows epiphytically or terrestrially.

The specimen figured here was received at Kew from Mr W. E. Clark of Falmouth, Maine, U.S.A. It is representative of the form most usually seen in cultivation which, in the wild, is found growing terrestrially at the lower altitudes recorded for the species, i.e. about 1200 metres.

Both living plants and preserved specimens of *E.biloba* have frequently been confused with the only other species in the genus, correctly called *E.sceptrum* Rchb. f. & Warsc. but usually referred to as *E.sprucei* Rchb. f. or *E.helenae* Kraenzl. At first sight the two are similar but there are significant differences in the detail of the crests of the labella. In *E.sceptrum* these consist of a pair of divergent horn-like lamellae, whereas in *E.biloba* there are a pair of broad undulate or serrate lamellae and two more or less separate teeth in front.

So named because when not in flower it might be mistaken for the quite unrelated genus *Eria*, *Eriopsis* belongs to the subtribe *Stanhopeinae*, which includes, besides *Stanhopea*, such other well-known genera as *Gongora*, *Coryanthes* and *Neomoorea*.

Little is known of the history of the original *E. biloba* other than that it was sent to Lindley in 1849 by Mr J. J. Blandy of Reading and had been purchased by him among the many rare species forming the late Mr Barker's collection. (This Mr Barker was presumably the 'George Barker Esq. of Springfield' to whom *Barkeria* Knowles & Westc. was dedicated.) Data exists, however, regarding subsequent importations and this has served to emphasize the considerable geographical, ecological and morphological variation of the species. Despite its attractive appearance, floriferous nature and the fact that it is frequently grown, it has rarely been exhibited for an award and apparently never used for hybridization.

CULTIVATION. *E. biloba* grows well at Kew in an intermediate house, the temperature ranging from 16°C (60°F) at night to 24–27°C (75–80°F) with sun-heat during summer. Shade should be provided during the summer whenever the sunlight becomes very intense. A moderate amount of water is necessary at all times and in the summer it is essential that the atmosphere should remain moist. Good ventilation should be given except during the coldest days of winter.

Eriopsis biloba Lindl. in Bot. Reg. 33: sub t.9 (1847) et l.c. t.18 (1847); Linden, Pescatorea, t.20 (1860); Godef.-Leb. in L'Orchophile 12: 297 (1892) et in Le Jardin 6: 283 (1892); B. S. Williams, Orchid-grower's Manual, ed. 7: 396 (1894); Cogn. in Mart. Fl. Bras. 3(5): 586 (1902); Schltr., Orch. 383 (1914); C. Schweinf. in Bot. Mus. Leafl. Harvard Univ. 11: 190 (1944) et in Fieldiana Bot. 30: 596 (1960); C. H. Curtis in Gard. Chron. ser. 3, 130: 247 (1951); Withner, Orch. 128, t.43, fig. 9 (1959); Dunsterville & Garay, Venez. Orch. Ill. 3: 126 (1965).

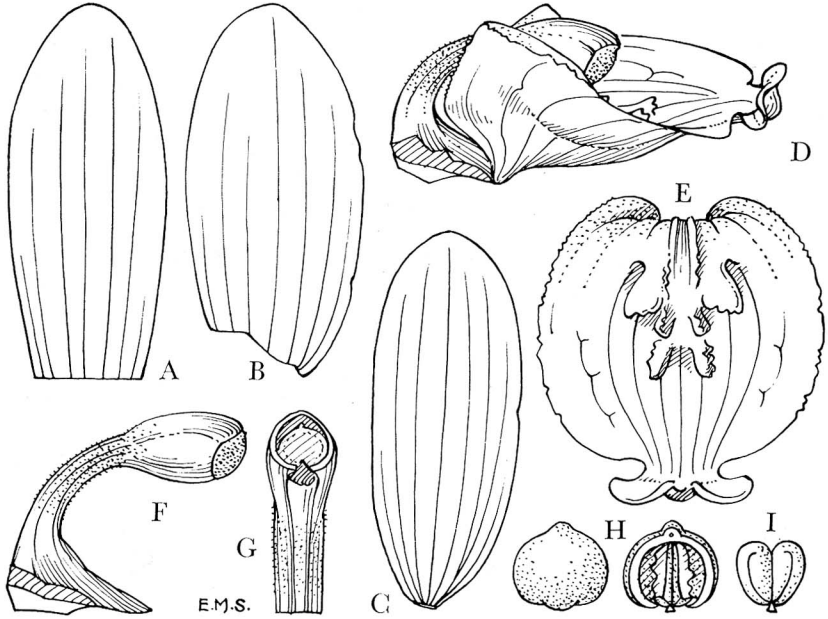
E. rutidobulbon Hook. in Bot. Mag. 75: t.4437 (1849) et Ann. Gand 5: 171, t.252 (1849); Lemaire in Jard. Fleur. 2: misc. 77 (1852) ('*rhytidobulbon*'); Rchb. f. in Bonpl. 2: 281 (1854) et in Walpers Ann. 6: 662 (1863); Warner & Williams, Orch. Album 8: t.377 (1889); Pfitzer in Engl. & Prantl, Nat. Pflanzenfam. 2(6): 171, fig. 181 A–E (1889); Kerchove, Livr. Orch. 124 (1894); B. S. Williams, Orchid-grower's Manual, ed. 7: 396, cum ic. (1894); L. Linden in Lindenia 16: 41, t.739 (1901); Gartenwelt 15: 86 (1911); Schltr., Orch. 384 (1914); Allen in Ann. Miss. Bot. Gard. 36: 42 (1949); Withner, Orch. 114, t.29, fig. 17 (1959).

Pseuderioopsis schomburgkii Rchb. f. in Linnaea 22: 853 (1849).

E. schomburgkii (Rchb. f.) Rchb. f. in Bonpl. 3: 67 (1855).

E. fuerstenbergii Kraenzl. in Orchis 2: 62 (1908); Schltr., Orch. 383, fig. 121 (1914).

E.wercklei Schltr. in Feddes Repert. Sp. Nov. 16: 447 (1920) et Beih. 59: t.62 (1931); Lankaster in Orch. Rev. 51: 8, cum ic. (1943).
E.mesae Kraenzl. in Notizbl. Bot. Mus. Berl. 7: 427 (1920).
E.colombiana Schltr. in Feddes Repert. Beih. 27: 172 (1924) et l.c. 58: t.48 (1930); C. Schweinf. in Fieldiana Bot. 30: 596 (1960).
E.grandibulbosa Ames & Schweinf. in Bull. Torr. Bot. Club 58: 350 (1931).



A, dorsal sepal, $\times 3$; **B**, lateral sepal, $\times 3$; **C**, petal, $\times 3$; **D**, labellum and column, $\times 3$; **E**, labellum, $\times 3$; **F**, column, $\times 3$; **G**, part of column, front view, anther-cap removed, $\times 3$; **H**, anther-cap, two views, $\times 6$; **I**, pollinia, $\times 6$.

DESCRIPTION. Epiphytic or terrestrial *herb* with pseudobulbs arising along a rhizome; *pseudobulbs* extremely variable, subterete to stoutly ovoid, from 45 cm. high, 3 cm. broad in slender forms, to 14 cm. high, 8 cm. broad in the shorter forms, dark purple, brown or brownish-green smooth or rugose, bearing two to four leaves, often sheathed; *leaves* rigid or membranous, narrowly lanceolate, 50 cm. long, 2 cm. broad, to narrowly ovate, 30 cm. long, 8 cm. broad, all fresh green, shining on inner surface. *Flowering scape* arising in axil of outermost sheath at base of pseudobulb, erect, up to 110 cm. high, with a few sheaths at base, dull green to purple towards base, pale above, up to 35 flowers arising in upper two-thirds; *flowers* \pm open simultaneously, each subtended by a small bract; *pedicellate ovary* up to 1.5 cm. long, purplish. *Tepals* yellow to brownish-yellow, variously flushed maroon, elliptic-ovate; *sepals* up to

2.5 cm. long, 1 cm. broad; *petals* up to 2.3 cm. long, 0.7 cm. broad; *labellum* broadly ovate, variously trilobed, with the small mid-lobe bilobed, up to 2.3 cm. long, 2.1 cm. broad, side-lobe yellow or brownish yellow suffused maroon, veins deep maroon, mid-lobe usually white, spotted purplish; crests a pair of broad undulate or serrate lamellae with two \pm separate teeth in front. *Column* up to 1 cm. long, slender, terete, arching; *anther* yellow; *pollinia* two.

DISTRIBUTION. Tropical America, from Costa Rica to Brazil and Peru.

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