

35. PAPHIOPEDILUM EXUL

Paphiopedilum exul is closely allied to the Himalayan *P. insigne* and to *P. gratrixianum* from Indo-China. It differs in having suberect narrower leaves, a shorter peduncle and a smaller flower with the synsepal almost as large as the elliptic dorsal sepal and extending beyond the apex of the lip, a smaller obovate obtuse staminode, shorter glossy petals, and a shorter lip with a narrower mouth. In its lip shape and flower size it comes close to *P. druryi*.

Ridley originally described this species as a variety of *Cypripedium insigne* in 1891 based on plants sent to Singapore from southern Thailand. The following year Rolfe raised it to specific rank although O'Brien is often given credit for this change. However, the publication of the *Journal of Horticulture* with Rolfe's article preceded O'Brien's in the *Gardeners' Chronicle* by two days. Rolfe transferred it to *Paphiopedilum* in 1896.

It is debatable whether *P. exul* should not be considered a variety or subspecies of *P. insigne*. However, its geographical isolation and the several characters by which it can be distinguished from *P. insigne* suggest that it is best treated as distinct at specific level.

Fowlie (1976a) gives a detailed account of *P. exul* in its native habitat on the islands of the Gulf of Krabi on the west coast of peninsular Thailand. It grows there on the north-east and eastern sides of the limestone islands 7–35 m or more above the sea, attached by its roots to the steep cliffs or in pockets in the rock filled with humus. It usually forms clumps in the wild which grow in either full sun or in the light shade of trees such as *Pandanus*. The temperature rarely falls below 21–22°C (70–72°F) in winter nor rises above 34–35°C (93–95°F) in summer. The humidity is usually high, above 85 per cent with the area affected by monsoonal rains from May through until December. Plants in the wild flower in May and June. Seidenfaden (1972), however, records it as flowering in the dry period in February in Phuket Bay.

DESCRIPTION. A terrestrial or lithophytic herb. Leaves suberect, 4–5, linear, obtuse to rounded at unequally bilobulate apex, up to 35 cm long, 1.8–3 cm wide, yellowish green. Inflorescence 1-flowered; peduncle 13–18 cm long, slender, green, shortly purple-pubescent; bract narrowly elliptic to elliptic, obtuse, 4–4.4 cm long, 2–2.4 cm wide, green to yellow-green. Flower c. 6.5 cm across; dorsal sepal white, with raised maroon spots on yellow central half; synsepal pale yellow-green with darker veins; petals glossy, pale buff-yellow with darker veins; lip glossy, buff with darker veins; pedicel and ovary yellow-green, pubescent, 2.2–4 cm long. Dorsal sepal ovate-elliptic, obtuse, 3–4.8 cm long, 2.8–3 cm wide, pubescent on outer surface. Synsepal oblong-elliptic, obtuse, 3.4–4.7 cm long, 1.6–2.5 cm wide. Petals incurved, subhorizontal, oblanceolate to narrowly oblong, obtuse, 4.3–5 cm long, 1.4–1.7 cm wide, ciliate, purple-pubescent at base, margins undulate. Lip 3–3.5 cm long, 1.9 cm wide. Staminode obovate, obtuse to rarely retuse, 6–8 mm long, 7–9 mm wide. $2n = 26$. (PLATES 40–41 & FIG. 69).

DISTRIBUTION. Peninsular Thailand (western and eastern coasts); sea-level to 50 m altitude. (MAP 42).

Fig. 69. *Paphiopedilum exul*, flowering in cultivation. (Photo.: E. Grell)

