

**THAI FOREST BULLETIN: EXAMPLE DESCRIPTION OF A TAXON OTHER THAN A NEW TAXON**

**Dioscorea inopinata** Prain & Burkill, Kew Bull. 245. 1927; Prain & Burk. in Ann. Roy. Bot. Gard. (Calcutta) 14(1): 134.1936. Type: Thailand, Prachuap Khiri Khan (Prachuap), Sam Roi Yot (Sam Roi Yawt), on rocky limestone hill, ♂ fl. 13 July 1926, *Kerr* 10978 (holotype **K!**; isotypes **BK!**, **BM!**). Fig. 1.

*Slender climber to 4 m. Underground parts unknown. Indumentum* absent. *Stem* 1.25–3 mm in diam. towards base, twining to the right, annual, unarmed, terete with shallow longitudinal ridges, usually wine-red in colour, sometimes green with scattered red-brownish blotches. *Leaves* simple, alternate, blades (2.2–)3–7 by (0.8–)1–3.5 cm, ovate to narrowly ovate, base cordate, sinus 0.1–4 mm deep, apices 1.5–6 mm long, acute to acuminate, margins entire; 5–7-nerved, only main vein and first vein pair reaching apex; chartaceous, green to dark green and glossy above, paler below; forerunner tips 1.5–3 mm long, brown to dark brown; petioles 5–10 mm long, shallowly angled, channelled above, colour as stem, lateral nodal flanges/spines absent. *Cataphylls* (Fig. 1B) 2–3.5 by 3–3.6 mm, ovate, apex obtuse, chartaceous, pale brown to brown. *Bulbils* absent. *Inflorescences* spicate, axes slender, angled, colour as stem; all bracts chartaceous, tepals inserted on a small discoid torus, erect, free, fleshy in texture with inner whorl tepal slightly thicker than outer, green-yellow. *Male inflorescences* (Fig. 1A, 1C) simple or compound (*Middleton et al.* 1181 only), compound inflorescences 2–3.5 cm long, 1(–2) per axil, primary bracts (Fig. 1D, at inflorescence bases) 1.3–1.5 by

0.5–0.6 mm, elliptic-oblong, apices 0.2–0.4 mm long, acuminate; simple/partial inflorescences 1–2 per axil, peduncles 0.8–1.2 mm long, axes 0.7–2.6 cm long. *Flowers* ± patent to axes; floral bracts (Fig. 1F) 0.6–0.8 by 0.6–0.9 mm, ovate, apices 0.1–0.2 mm long, acuminate; bracteoles (Fig. 1G) 0.5–0.9 by 0.3–0.6 mm, ovate, apices 0.1–0.15 mm long, acuminate; outer tepals (Fig. 1H) 1.5–1.9 by 0.6–1.1 mm, ovatelanceolate to narrowly so, apex acute; inner tepals (Fig. 1I) 1.4–1.8 by 0.4–0.5 mm, narrowly elliptic to elliptic-oblong or lanceolate, apex acute to obtuse; stamens 6 (Fig. 1E), inserted on torus, filaments 0.3–0.6 mm long, anthers 0.2–0.4 by 0.2–0.3 mm; pistillodes (Fig. 1E) 0.15–0.2 by 0.2–0.25 mm, erect, 3-lobed. *Female inflorescences* not seen. *Old female flowers* (Thapyai & Wilkin 513) with floral bracts (Fig. 1L) 1.4–1.5 by 1.1 mm, broadly ovate, apices 0.1–0.2 mm long, acuminate; bracteoles (Fig. 1M) 1–1.2 by 0.6–0.7 mm, ovate-lanceolate, apices 0.1–0.3 mm long, acuminate; outer tepals (Fig. 1N) 1.5–2 by 0.8–1.1 mm, ovate, apices to 0.14 mm long, acute to acuminate; inner tepals (Fig. 1O) 1.4–1.8 by 0.4–0.7 mm, elliptic to narrowly so, apex obtuse; ovaries (Fig. 1J) 3–5.3 by 0.9–2.3 mm, elliptic in outline, with 3 longitudinal ridges, green to dark green, glossy; staminodes 6 (Fig. 1K), 0.15–0.45 mm long, staminiform, inserted on torus; styles (Fig. 1K) 0.3–0.8 by 0.5–0.7 mm, fused for most of their length, erect; stigmas (Fig. 1K) 0.3–0.6 mm long, recurved. *Infructescences* (Fig. 1P) 6–8 cm long; capsules (Fig. 1Q) 1.8–2.1 by 2.5–3 mm, broadly obovate in outline, base truncate, apices retuse, 0.7–1.4 mm deep sinus, capsular stipes 3–4 by 2–3.5 mm, obconic; immature capsules pale green to dark green and glossy, darker along axis and margins, sometimes with purple streaking or blotching; mature capsules deflexed at angle of 25°–45° to axis. *Seeds* (Fig. 1R) 3.5–5.3 by 4.5–6 mm, ovoid-lenticular; wings

14–15.5 by 13–14 mm, extending all around seed margin, broadly ovate to rounded with a straight margin along capsule axis.

Thailand.— SOUTH-WESTERN: Prachuap Khiri Khan [Khao Sam Roi Yot National Park, ♂ fl. 13 July 1924, *Kerr* 10978 (holotype **K!**; isotypes **BK!**, **BM!**); idem, ♂ fl. 8 Aug. 1966, *Larsen et al.* 1257 (**AAU**); Khao Sam Roi Yot National Park, Pak Tawan, ♂ fl. 29 July 1931, *Kerr* 20512 (**BK**, **BM**, **K**); Khao Sam Roi Yot National Park, trail from Tham Sai to Tham Phraya Nakhon, 12° 11' N, 100° 01' E, ♂ fl. 18 Aug. 2002, *Middleton et al.* 1181 (**A**, **BKF**, **K**); idem, 12° 10' 53.9" N, 100° 00' 9.8" E, ♀ fr. 2 Dec. 2002, *Thapyai & Wilkin* 509 (**BK**, **BKF**, **PNU**); Khao Sam Roi Yot National Park, Khao Khan Bandai, Ban Na Thung, 12° 16' 7.3" N, 99° 56' 22.4" E, ♂ fl. (old) 3 Dec. 2002, *Thapyai & Wilkin* 514 (**BK**, **BKF**, **PNU**); idem, ♀ fr. 3 Dec. 2002, *Thapyai* 513 (**BK**, **BKF**, **PNU**, **QSBG**)].

Distribution.— Restricted to Khao Sam Roi Yot National Park, Prachuap Khiri Khan Province.

Ecology.— In open vegetation on and around rocky limestone hills and outcrops, from near sea level to about 150 m. Flowering July to August, fruiting October to December. The flowering period is early in the year; most Thai yams from north of the Isthmus of Kra have their peak flowering period in September and October. This is probably a response to water availability at Khao Sam Roi Yot declining rapidly once the rains stop, necessitating early fruit development.

Vernacular.— Man nok (มโนก) (Prachuap Khiri Khan) (Man Tam Rak according to Prain & Burkill (1936), in error).

Conservation.— An endemic of very restricted range. During the 2002 fieldwork one apparently small population (less than five plants seen) was found on the trail from Tham Sai to Tham Phraya Nakhon and a second larger one of about 20 plants at Khao Khan Bandai, Ban Na Thung. Of course, *D. inopinata* may occur on many of the other "300 hills" of Khao Sam Roi Yot National Park. The protection afforded by the park should assure its future. IUCN red list category VU D1 (IUCN 2001).

Notes.— The distinguishing characters of *D. inopinata* are leaves with very short petioles and alternate leaf arrangement on right-twining stems. The male inflorescence axis does not exceed 2.6 cm long, and its flowers are held more or less patent to the axis. The tepals of both sexes are elliptic-oblong and the female infructescences are not more than 8 cm long, bearing five capsules at most. The tubers of *D. inopinata* remain unknown; like those of all limestone species, they are difficult to obtain.