

## THE TAXONOMIC POSITION OF DUNNIA (RUBIACEAE)

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*Dunnia*, an apparently rarely collected genus of the *Rubiaceae*, has always been considered to be a member of the tribe *Cinchoneae* where, on account of the pale floral bracts, it has been compared and contrasted with *Emmenopterys*. On examination of the type (*Dunn's Collector in Herb. Hongkong 910, K*) it was found that raphides were abundant in all the tissues, a feature which excludes it from the *Cinchoneae*. The genus must belong to one of the tribes of the sub-family *Rubioideae*. The relevant characters at tribal level are: ovary 2-loculed with large placentas centrally attached to the septum, numerous ovules per locule; fruit a dry capsule with a hard endocarp. These characters are typical of the tribe *Hedyotideae s.l.* The general appearance of the plant immediately brings to mind the genus *Hymenopogon*. *Dunnia* differs from *Hymenopogon* in the shape of corolla, the form and mode of dehiscence of the fruit, and in the shape of the seeds.

Examination of other material of *Hymenopogon* revealed that the shape of the corolla and the form of the immature seeds of *Hymenopogon assamicus* Hook. *f.* deviate considerably from the type species of that genus and agree with the characters of *Dunnia*, where it is here placed. No representatives of *Dunnia* have yet been seen from Burma where the genus may also be expected to occur.

## DUNNIA

*Dunnia* Tutchcr, J. Linn. Soc. Bot. 37 (1905) 69; Fedde Rep. 2 (1906) 111; Lemée, Dict. 2 (1930) 760; Li, J. Arn. Arb. 25 (1944) 427.

Small shrubs. Plant tissues with raphides. *Leaves* opposite. Stipules interpetiolar. *Inflorescences* terminal with scattered, elliptic(—oblong), white to pallid 'petaloid' bracts. *Flowers* 4—5-merous; calyx campanulate; corolla infundibular, lobes valvate; stamens inserted high in the tube, anthers introrse. Stigma 2-bifid. Ovary 2-locular, placentas centrally attached to the septum, ovules numerous. *Fruit* a dry capsule with a hard endocarp, septicidally dehiscent. Seeds more or less flattened with a small, irregular, marginal wing.

*Type species*: *D. sinensis* Tutchcr.

## KEY TO THE SPECIES

- 1a. Calyx lobes up to 1 mm long. Leaves chartaceous, apices acute, rarely shortly acuminate. Distance between the lateral nerves (in the middle of the

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- lamina and equidistant between the midrib and margin) 6—10 mm. Stipules with toothed margins . . . . . 1. *D. sinensis*
- b. Calyx lobes over 1 mm long. Leaves membranaceous, apices long acuminate. Distance between the lateral nerves (in the middle of the lamina and equidistant between midrib and margin) up to 5 mm. Stipules with entire margins. . . . . 2. *D. assamica*

### 1. *Dunnia sinensis* Tutcher

*D. sinensis* Tutcher, J. Linn. Soc. Bot. 37 (1905) 70; Feddes Rep. 2 (1906) 111; Dunn & Tutcher, Kew Bull. Misc. Inf. Add. Ser. 10 (1912) 125; Chung, Mem. Sc. Soc. China 1 (1924) 235; Chun, Sunyatsenia 4 (1940) 260, fig. 45, plate 43; Li, J. Arn. Arb. 25 (1944) 427; How Sunyatsenia 7 (1948) 26; Anon., Icon. Corm. Sinic. 4 (1975) 199, t. 5811. — Type: *Dunn's Collector in Herb. Hongkong 910* (K).

Young stems glabrous. *Stipules* ovate to triangular, bifid at least in the upper third, 6—8 × 8—10 mm, persistent, outside glabrous, inside pubescent and with colleters at the base; margins distinctly toothed to lacinate. *Leaves* elliptic-oblong, (10—)12—20 × (2—)3—5(—6) cm, chartaceous, glabrous; apex acute, rarely shortly acuminate; base cuneate, attenuate; lateral nerves 20—30 pairs, distance between the nerves (in the middle of the lamina and equidistant between midrib and margin) over 6—10 mm; domatia absent. Petiole up to 10 mm. *Inflorescences* 9—12 cm long with 4—6 pallid 'petaloid' bracts up to 5 × 2 cm. *Flowers* reported to be yellow. Hypanthium 1 mm. Calyx 1—2 mm; lobes deltoid to slightly obtuse, 0.5—0.8 mm long. Corolla 10—12 × 2—3 mm overall, slightly widening above, outside puberulous, inside villose; lobes ovate, 2 × 1.5 mm. Filaments 1 mm, anthers 1.5—2 mm. Style 5—6 mm long. *Fruit* 4—5 mm overall. Seeds 0.6—1 mm.

**Distribution:** China (Kwangtung).

### 2. *Dunnia assamica* (Hook. f.) Ridsd., comb. nov.

*Hymenopogon assamicus* Hook. f., Fl. Brit. Ind. 3 (1880) 34; Kanjilal & Das, Fl. Assam 3 (1939) 25. — Type: *Masters s.n., s.l.* (K; iso in L).

Young stems glabrous. *Stipules* narrowly triangular, shallowly bifid, 6—9 × 3—5 mm, outside sparsely pubescent, inside sparsely pubescent and with colleters at the base; margins entire. *Leaves* elliptic-oblong, 14—25 × 4—5 cm, membranaceous, glabrous; apex long-acuminate; base cuneate; lateral nerves (25—)30—40 pairs, distance between the nerves (in the middle of the lamina and equidistant between midrib and margin) up to 5 mm; domatia absent. Petiole up to 20 mm. *Inflorescence* up to 25(—54) cm long with 3—5 pallid 'petaloid' bracts up to 6 × 2 cm. *Flower* colour unknown. Hypanthium 1 mm. Calyx 2—3 mm; lobes deltoid, 1.3—1.8 mm long, glandular at the apex. Corolla 11 × 2—3 mm overall, slightly widening above; outside slightly pubescent, inside villose; lobes triangular to slightly ovate, 1 × 0.8 mm, outside with distinct short thick (? glandular) hairs. Filaments 0.5 mm, anthers 2 mm. Style 10 mm. *Fruit* unknown.

**Distribution:** India (Assam).