

Flemingia tuberosa Dalz. (Fabaceae) - a new addition to the flora of Kerala, India

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During a survey of flowering plants along the proposed thermal power plant area of Cheemeni, Kasaragod District, Kerala, the authors collected one interesting Fabaceae member with trailing stem and lilac flowers. On detailed examination of the specimen, it turned out to be *Flemingia tuberosa* Dalz., a plant earlier known from Concan (Hooker 1876), Maharashtra (Dalzel & Gibson 1861; Cooke 1908), Goa (Rao 1985) and districts of North Kanara (Talbot 1909) and Udupi (Bhat 2003) in Karnataka. This species is hitherto not recorded from the state of Kerala (Nayar et al. 2006). Brief description, economic importance and photographs of this species are given to facilitate its easy identification.

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Flemingia tuberosa Dalz. (Images 1-3)

in Hooker's J. Bot. Kew Gard. Misc. 2: 34. 1850; Hook.f., Fl. Brit. India 2: 230. 1876; Dalz. & Gibs., Bombay Flora 75.1861; Woodr., J. Bomb. Nat. Hist. Soc. 11: 426.1897; Cooke. Fl. Pres. Bombay 1: 230. 1908; Bhat, Fl. Udupi 150. 2003. *Moghania tuberosa* (Dalz.) Kuntze, Rev. Gen. Plant. 1: 199. 1891.

Under shrubs; stems 0.9-1.2 m long, scandent or trailing; branches terete; roots tuberous, oblong, tapering at one end, 5-6.25 cm long, dark brown outside, white inside. Leaves 3-foliolate; leaflets 1.8-3.5 x 0.4-0.8 cm, linear-oblong, oblong-elliptic or lanceolate, acute, hairy along the nerves, ciliate on margins; nerves 8-11 pairs; petioles ca 1.4x2.6 cm long; stipules minute, acute, caducous. Flowers solitary, in few-flowered lax axillary racemes; peduncles distinct, exceeding the leaves; bracts and bracteoles rigid, minute. Calyx 1-1.2 cm, prominently ribbed, covered with yellowish hairs; teeth sub equal. Corolla lilac, slightly exerted; keel very narrow, incurved at the tip. Stamens 9 + 1. Pod oblong, 1-2-seeded, slightly exceeding the calyx, glabrous.

Specimen examined: 17.x.2010, Cheemeni, Kasaragod District, Kerala, India, coll. K.S. Prasad, 01650 Sir Syed College Herbarium, Taliparamba, Kannur (SSC).

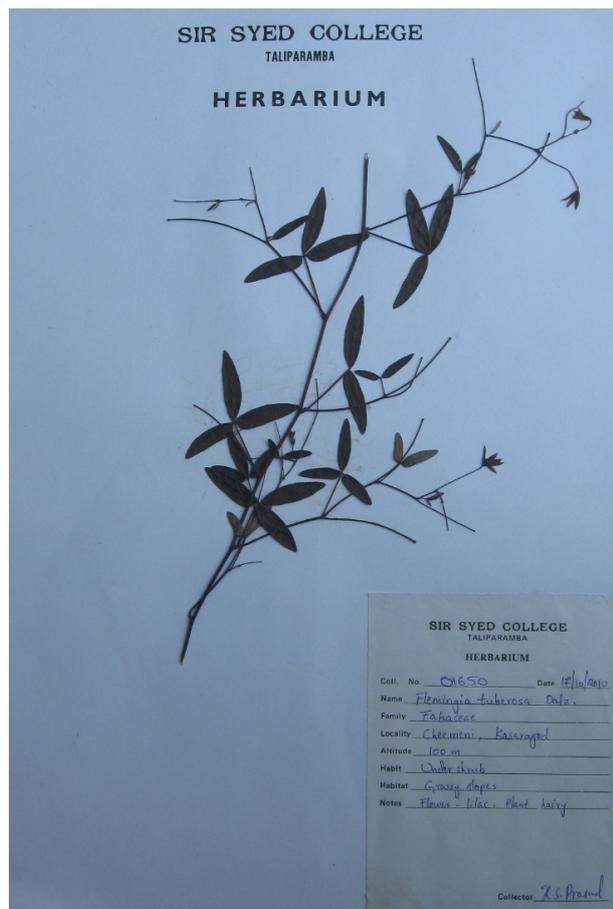
Distribution: Konkan, Dakshina Kannada, Uttara Kannada, Goa, and Maharashtra. Recorded for the first time in Kerala.

Habitat: Growing in grassy slopes.

Flowering and fruiting: September - October.

Notes: This species is known for its edible tuberous roots, which are often offered for sale in country fairs and markets. In Marathi it is known as Birmova (Dymock et al. 1890), and Jaambula Gadde in Kannada (Bairy 2007). Tubers are sweet and astringent, people consume them either raw or roasted which removes astringency. Fresh tubers contain 40.12% starch, 25.47% sugar and gum, 13.04% albuminoids, 12.16% cellulose, 4.13% asparagin, 3.44% ash, 1.16% yellow resin and are used as a remedy for dysentery and diarrhoea (Dymock et al. 1890).

Dalzel & Gibson (1861) reported it from Malwan District of erstwhile Bombay Presidency. Talbot (1909) considered it as 'apparently endemic' to

Image 1. Herbarium of *Flemingia tuberosa*Image 2. *Flemingia tuberosa* flowerImage 3. *Flemingia tuberosa* fruit

Concan and North Kanara. Bhat (2003) reported it as 'very rare' in Udupi District of Karnataka. Rao (1985) included it from Goa without giving location and status. However, Kothari (2000) reported it as 'rare' in moist deciduous forests of Raigad, Ratnagiri and Thane of Maharashtra.

The present collection is from a proposed thermal power station site, which makes this plant highly vulnerable in Kerala. Since, it is rare elsewhere there is a call for urgent attention for conservation of this rare, palatable and medicinally important plant.

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