

A NEW SPECIES OF CURCUMA FROM SOUTHERN INDIA

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ABSTRACT. A new species of *Curcuma* (Zingiberaceae), *C. ecalcarata* Sivarajan & Indu, is described from the Western Ghats of India. It is a member of subgenus *Hitcheniopsis* and is closely related to *C. parviflora* Wall., a native of Thailand and Burma.

A weedy *Curcuma* was found growing wild in moist shady places in the Herbal Garden of Arya Vaidya Sala, Kottakkal at its Kanjirappuzha campus and flowering during the monsoon. The plant has a typical *Curcuma* inflorescence and habit but differs from the known Indian species in its ecalcarate anthers. It was sent to Miss R. M. Smith, Royal Botanic Garden, Edinburgh, who informed us that it almost certainly represents a new species and matches some un-named specimens in the Edinburgh herbarium collected by Robert Wight in Malabar in June 1836 (Wight 1066, 1068 & 1069).

***Curcuma ecalcarata* Sivarajan & Indu, species nova. Fig. 1.**

Similis *C. parviflorae* Wall., indigenae Thailandiae et Burmae, thecis antherae ecalcaratis, inflorescentia centrali et foliis longepetiolatis sed foliis paulo cordatis, pedunculis nonoccultis, staminodiis citrinis vividis quae petala excedunt, et labello 3-lobato, quam lateralibus staminodiis vix longiore differt.

Resembling *C. parviflora* Wall., a native of Thailand and Burma, by the ecalcarate anther-thecae, central inflorescence and long-petioled leaves but differing by the slightly cordate leaves, unconcealed peduncles, bright lemon-yellow staminodes which exceed the petals, and 3-lobed labellum scarcely longer than the lateral staminodes.

Rhizome short, lateral roots often fleshy, many of them terminating in small, fusiform tubers which are white within. Leaves bifarious; petiole 10-20cm, minutely pubescent, ligulate at about the middle; lamina to 20×7cm, membranous, broadly oblong-lanceolate, acuminate, slightly and often unequally cordate at base, glabrous, profusely gland-dotted on the lower surface and sparsely on the upper. Inflorescence c. 10×4cm, arising from the centre of the foliage, peduncle 5-9cm, not concealed within sheaths, pubescent; bracts 8-10, lower fertile ones green, 4.5×1.5cm, adnate by their bases, oblong-obtuse, tips free, spreading; coma (sterile bracts) longer than the fertile ones, oblanceolate, obtuse, not adnate; calyx 1cm long, truncate at apex, pubescent; corolla-tube 2.5cm, slender, lobes white, laterals 1.5×0.5cm, oblong-obtuse, the dorsal much broader (1cm), concave, hooded and apiculate at tip; lateral staminodes bright yellow 2.5×0.8cm, oblong-obtuse, obscurely emarginate; labellum 2.5×2cm, 3-lobed, lateral lobes rounded, middle one triangular, much exceeding the

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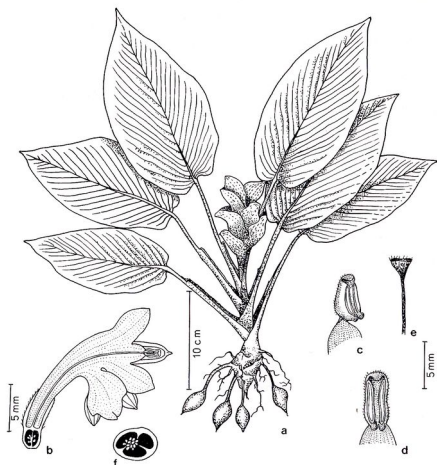


FIG. 1. *Curcuma ecalcarata*: a, habit; b, flower, in dissection; c, stamen, lateral view; d, stamen, frontal view; e, style and stigma; f, TS ovary.

laterals; stamen yellow, anther versatile, thecae 4mm long, ecalcarate but with two dark, short truncate appendages at base, connective broad, hooded at apex, pubescent; ovary 3-locular, many-ovuled, without epigynous glands; style filiform; stigma cup-like, pubescent, truncate at apex; fruits not known.

Type: India; Kerala, Kanjirappuzha, Palghat Dt, 14 x 1982, *Sivarajan & Indu* AVS 1497 (holo. E; iso. CALI & Arya Vaidya Sala, Kottakkal, Kerala).

Curcuma ecalcarata is the most southerly representative of the small subgenus *Hitcheniopsis* (Bak.) K. Schum. The subgenus is characterised by the lack of prominent anther-spurs and appears to be confined to the monsoon areas of Asia (Larsen, K. & Smith, R. M. (1978). A new species of *Curcuma* from Thailand. *Notes RBG Edinb.* 36: 269-272).

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