

# *Memecylon agastyamalaianum* (Melastomataceae), a new species from India

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**Abstract.** *Memecylon agastyamalaianum* Santhosh, Raju & Shanavas, a new species of Melastomataceae from India, is described and illustrated. This new species is allied to *M. manickamii* C. Murugan, Sundaresan et Jothi.

**Keywords:** India; Kerala; Melastomataceae; *Memecylon agastyamalaianum*; New species.

## Introduction

The genus *Memecylon* L. consists of about 150 species, mainly in the Old World tropics (Mabberley, 1987). In India, the genus is represented by about 33 species (Clarke, 1879; Santapau and Henry, 1972), of which 13 are endemic to peninsular India (Nayar, 1996).

The Agastyamalai "hot spot" lies between 8° 51' -9° 0' N. latitude and 77° 0' -77° 05' E longitude. It has an area of about 2450 km<sup>2</sup> and comprises three well protected wild-life sanctuaries, Chenduruni, Neyyar, and Peppara. Different altitudinal ranges, rich rainfall, and varied types of vegetation together make a unique flora with about 189 species exclusively endemic to this "hot spot." The authors conducted an expedition as a part of an *ex-situ* conservation programme of the medicinal plants of Kerala. This resulted in the discovery of an interesting species of *Memecylon*, which was clearly different from the hitherto described species of the genus (Clarke, 1879; Gamble, 1919; Bremer, 1979; Murugan et al., 2000). This species is described and illustrated here as new.

***Memecylon agastyamalaianum*** Santhosh, Raju et Shanavas, sp. nov.—TYPE: India, Kerala State, Thiruvananthapuram District, Agastyamalai Hills, Bonaccord, 850 m 8 July 1999, *Santhosh Kumar TBG& RI 37656* (holotype: TBGT; isotype: K, CAL, MH).

Figure 1

*Memecylon manickamii* C. Murugan, Sundaresan et Jothi., arcte affinis, sed inflorescentiis axillaribus paucifloribus pedunculis brevibus (0.5 cm longis) teretibus, pedicellis 4-5 mm longis, et ramulis acute 4-angulatis differt.

Large shrubs or small trees, 2-3.5 m high; bark grayish-black, shallowly fissured; branchlets acutely 4-angular.

Leaves opposite, 1.5-2.5 × 0.5-1 cm, elliptic, cuneate-attenuate at base, entire at margin, obtuse or emarginate at apex; midrib with indistinct intramarginal and lateral veins, coriaceous, drying dull greenish-yellow; foliar sclereid filiform. Inflorescences axillary 2-5-flowered umbellate cymes; peduncle 0.5 cm long, terete; pedicels 4-5 mm long, slender, pink; bracts 0.3-0.5 mm long. Flower buds obtuse-rounded at apex with exposed petals; expanded flowers 4-6 mm across. Calyx pink, campanulate, 1.8-2.2 mm across, shallowly 4-lobed, papillate on the outer surface. Petals 4, blue, broadly elliptic-obovate, to 2 × 2.2 mm, shortly clawed at base, acute or apiculate at apex. Disc shallowly striate. Stamens 8, equal; filaments slender, to 2.5 mm long; anthers 1 mm long, connective with a gland. Ovary unilocular, placentation free-central; ovules 4-5; style subulate; 3-3.5 mm long; stigma simple. Fruit globose, 7-8 mm in diameter, crowned by calyx. Seed 1; embryo with wrinkled cotyledons and long hypocotyl.

*Additional specimens examined.* India. Kerala State, Thiruvananthapuram District, Agastyamala Hills, Bonaccord, alt. 850 m, 22 Jun 2001, *Santhosh Kumar TBG & RI 45829* (TBGT).

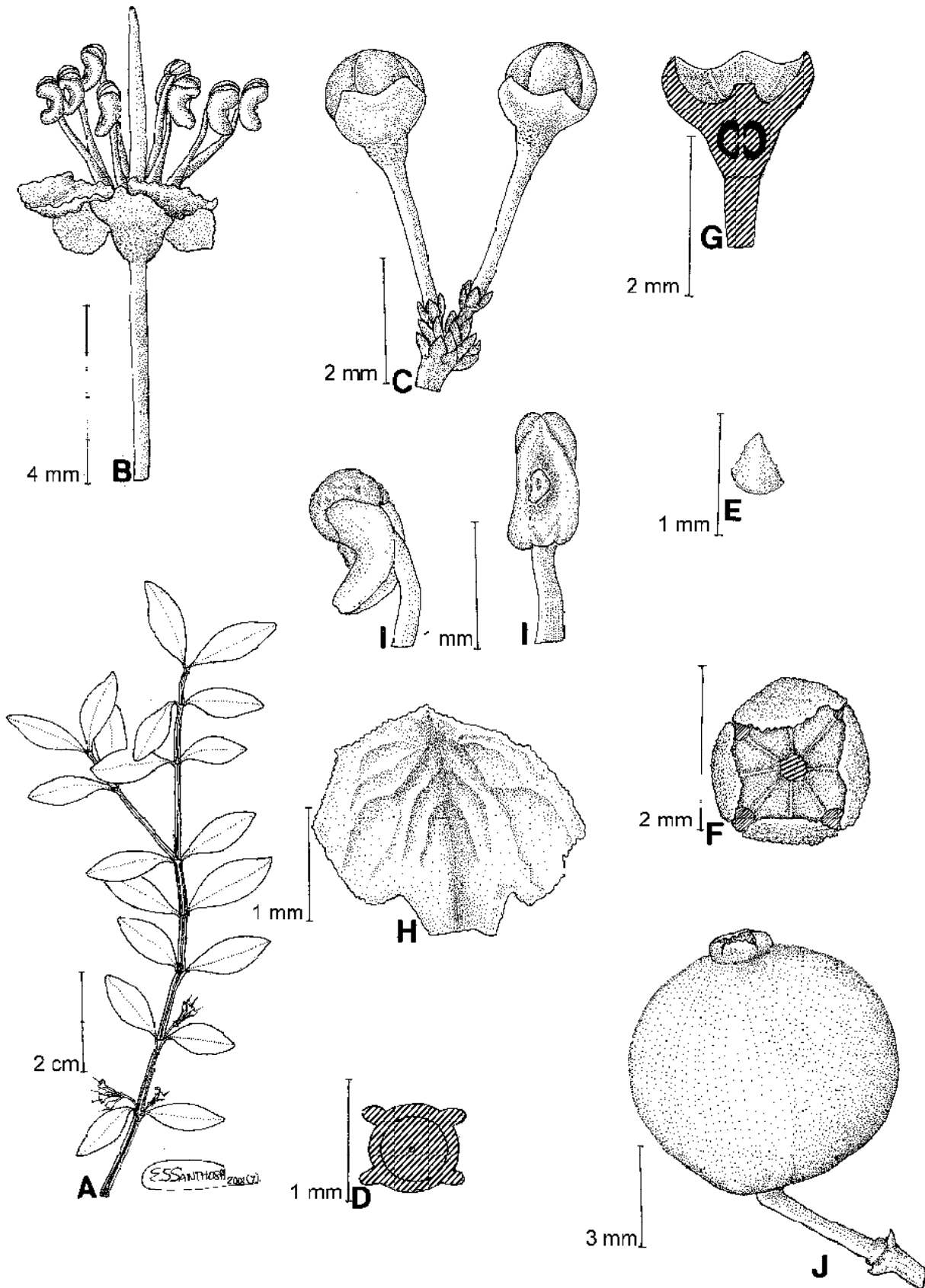
*Phenology.* Flowering commences during June, and fruits are seen during August- September.

*Etymology.* The specific epithet refers to the type locality, the renowned biological "hot spot" of the Agastyamalai Hills.

*Distribution.* Known only from the type locality, Bonaccord in the Agastyamala Hills, at an altitude of 850 m.

*Relationships.* *Memecylon agastyamalaianum* is closely allied to *M. manickamii* C. Murugan, Sundaresan et Jothi., but is clearly distinguished by its few-flowered, axillary, short - peduncled (to 0.5 cm long) inflorescence; acute 4-angular branchlets; terete peduncles; and fairly long pedicels. *Memecylon manickamii*, in contrast, bears

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**Figure 1.** *Memecylon agastyamalaianum* Santhosh, Raju et Shanavas. A, Habit; B, A flower; C, Flower buds; D, Cross section of branchlet; E, Bract; F, Calyx, view from above; G, Calyx cup with ovary, longitudinal section; H, A petal; I, Stamens, lateral and frontal view; J, A fruit.

many-flowered terminal or subterminal long-peduncled (1-1.8 cm long) inflorescences, 4-angular peduncles, grooved branchlets, and shorter pedicels.

This species also resembles *Memecylon varians* Thw., an endemic species of Sri Lanka, but clearly differs in the smaller leaves with obtuse or emarginate apex, flowers with distinct pedicels, longer than the receptacle, and anthers with in size a well-developed gland. In *M. varians*, leaves are larger with acuminate-caudate apex, flowers with short pedicels, always much shorter than the receptacle, and anthers with or without a rudimentary gland.

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## 印度產野牡丹科羊角扭屬一新種植物： *Memecylon agastyamalaianum*

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本文發表產於印度之野牡丹科羊角扭屬一新種植物：*Memecylon agastyamalaianum* Santhosh, Raju & Shanavas, 並提供線繪圖。此新種之近緣植物為 *M. manickamii* C. Murugan, Sundaresan et Jothi.

關鍵詞：印度；Kerala；野牡丹科；*Memecylon agastyamalaianum*；新種。