



## *Syzygium sahyadricum* (Myrtaceae), a new tree species from India, and notes on the distribution of *S. spathulatum* Thwaites

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### Abstract

A new species of the tree genus *Syzygium* (Myrtaceae), *S. sahyadricum* is described and illustrated from the Montane Shola forests of Anamalai and Palni Phytogeographical region of Western Ghats. Although phenotypically closely similar to *S. spathulatum* and *S. malabaricum*, the new species is easily recognizable by the pale yellow coloured tender leaves with horizontal secondary nerves and white flowers in reduced metabotryoid, pedunculate inflorescence, which are flattened towards the apex. Scanning the *Syzygium* collections in various herbaria revealed that similar specimens from various localities of this phyto-region are available and most of them with erroneous ascriptions. The report of *S. spathulatum* Thwaites, a Sri Lankan endemic species in India, was due to misinterpretation of Beddome's collection. In this paper taxonomic peculiarities of the new species and allied taxa are discussed for better understanding.

**Key words:** Anamalai-Palni hills, New species, Shola forests, *Syzygium*, Western Ghats

### Introduction

Montane Shola forests of southern Western Ghats are the home of several rare and threatened trees. Shola forests in Anamalais, sandwiched between the rolling grasslands above 1,500 m elev. create an ideal location for many habitat-specific trees. Compared to other groups, laurels and myrtles dominate in this habitat with high rate of endemism. Among the myrtles, *Syzygium* Gaertner (1788:166), an Old World tropical tree genus, dominates over other taxa. Though there are around 1,200 taxa of *Syzygium* distributed from Africa eastwards to the Hawaiian Islands and from India and southern China southwards to Australia and New Zealand, the Indo-Malaysian region forms the centre of diversity of the genus (Govaerts *et. al.*, 2008; Parnell *et. al.*, 2007). In India, North-eastern region and Western Ghats stand as potential centers. Systematic studies in various floristic regions resulted in new distribution records and the discovery of several new taxa of *Syzygium*, revealing the peculiarity of the region with respect to its diversity (Duthie, 1878-1879; Gamble & Fischer, 1935; Chithra, 1983; Manilal & Sabu, 1984; Mohanan & Henry, 1987; Ravikumar, 1999; Sasidharan & Jomy, 1999; Murugan *et. al.*, 2002; Vinod Kumar, 2003; Viswanathan & Manikandan, 2008; Shareef *et. al.*, 2010; Shareef *et. al.*, 2012; Sujanapal *et. al.* 2013; Sasidharan, 2013). Several species of *Syzygium* are associated with medicinal and other economic importance. Phytochemical studies, particularly on endemic taxa of *Syzygium* have described the rich essential oils and other phytochemical compounds (Kiruthiga *et.al.* 2011, Saranya *et. al.* 2012, Eganathan *et.al.* 2012a, Eganathan *et.al.* 2012b, Gayathri *et.al.* 2012, Deepika *et.al.* 2013, Vignesh *et.al.* 2013).

During floristic explorations in the Western Ghats, specimens of *Syzygium* resembling *S. spathulatum* Thwaites (1859:118) were collected from Anamudi Shola National Park and Eravikulam National Park. Later similar specimens were collected from Yellappetty and Silent valley (Munnar) region of Idukki district of Kerala. A survey of collections of *Syzygium* in herbaria like MH, RHT, CALI and BSI revealed that similar specimens from southern Western Ghats are available in all these herbaria, however most of the specimens are labeled as *Syzygium caryophyllatum* (Linnaeus 1753: 42) Alston (1931:116) or *Syzygium spathulatum* Thwaites. The former is a common species in the lowlands and midlands of Kerala and is distinguished by the broadly ovate or ovate-oblong leaves and terminal panicle inflorescences. The latter is a Sri Lankan species with narrow leaves and terminal or subterminal axillary inflorescences. Systematic studies (Duthie, 1878-1879; Gamble, 1919, Vinod Kumar, 2003, Sasidharan, 2013), phytogeographical evaluation and

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