



Typifications and nomenclatural notes on Indian Myrtaceae

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Abstract

We discuss typification and present other nomenclatural notes for 44 taxa of Indian Myrtaceae. Lectotypes are designated for 28 species plus 6 synonyms in *Syzygium* and 6 species in *Eugenia*. A new combination, *Syzygium coarctatum*, and new synonyms of *Syzygium bifarium* and *Syzygium stocksii* are also recognised.

Key words: *Syzygium*, *Eugenia*, lectotypification, synonymy

Introduction

The Myrtaceae of India were last revised as a whole by Duthie (1878–9) in Hooker's *Flora of British India*, where 134 native species were enumerated in four genera, which remains the only thorough treatment of Indian Myrtaceae. The largest genus *Eugenia* Linnaeus (1753: 470), with 131 Indian species, has been split into genera *Eugenia* and *Syzygium* Gaertner (1788: 166), with the majority of Indian species now placed in the latter genus. Several authors adopted a broad concept of *Eugenia*, including Bentham & Hooker (1865), Duthie (1878–9) and Henderson (1949), in which *Syzygium* was considered to be a section. The more recent anatomical work of Schmid (1972) and molecular data by various authors (Wilson *et al.* 2001, 2005, Sytsma *et al.* 2004, Biffin *et al.* 2010) have shown that *Eugenia* and *Syzygium* represent independent lineages and in different tribes (Wilson *et al.* 2001, 2005).

Despite the historical division between *Eugenia* and *Syzygium*, Indian species are usually easily placed in one of the genera. Indian species of *Eugenia*, as presently recognised by most authors, are characterised by usually tomentose branchlets (at least when younger) and leaves and/or inflorescences; conspicuously pedicellate axillary flowers; and persistent bracteoles and calyx lobes in fruit. In contrast, the branchlets, leaves and inflorescences are always glabrous in *Syzygium*; its flowers are in terminal or axillary inflorescences with reduced to absent bracteoles; the calyx lobes are usually inconspicuous in fruit, and the petals are free or calyptrate (Duthie 1978–9).

In recent decades several state and provincial treatments for India have been completed (e.g. Balakrishnan 1981, Deb 1981, Haridasan & Rao 1985, Kulkarni 2001, Singh *et al.* 2001, Mohanan & Sivadasan 2002, Nayar *et al.* 2006, 2014) and new Myrtaceae species have been described recently (e.g. Saldanha 1996, Viswanathan & Manikandan 2008, Shareef *et al.* 2012, 2013, 2014). However, many of these works suffered from a lack of access to type material and consequently included errors through misidentification of material, misapplication of names, or confusion of synonymy (but see Santhosh Kumar *et al.* 2014). This confusion is particularly acute with *Syzygium* due to the large number of accepted names and their synonyms for widespread Asian species (WCSP 2015).

The authors became aware of a number of specific epithets that needed lectotypification whilst reviewing a checklist of Myrtaceae for the Flora of India project for the Tropicos® website (<http://www.tropicos.org/Project/India>) and preparation of a synoptic revision with identification keys for Indian *Syzygium* (Byng in prep.). That preliminary checklist was reviewed extensively after consulting regional floras (e.g. Duthie 1878–9, Gamble 1919, Kanjilal *et al.* 1938, Chithra 1983, Saldanha 1996, Mohanan & Sivadasan 2002, Nayar *et al.* 2006 and 2014), protologues, and Indian and southeast Asian Myrtaceae specimens from ABD, BM, CAL, E, K, L M, P and U (abbreviations following Thiers 2015). Some Indian *Syzygium* taxa have recently been lectotypified (e.g. Shareef 2014, 2015a, 2015b) but there are a large number of taxa still to be typified.