



A taxonomic revision of the genus *Canscora* in South India, and the erection of the new genus *Canscorinella* (Canscorinae, Gentianaceae) with two new combinations

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Abstract

The genus *Canscora* in South India is revised based on field and herbarium studies and in consultation with types and protologues. *C. pauciflora*, which was previously treated as conspecific to *C. diffusa* is reinstated while *C. sanjappae* and *C. devendrae* are synonymised under *C. diffusa* and *C. stricta* (= *Canscorinella stricta*) respectively. The present study supports the exclusion of two species of *Canscora* i.e., *C. stricta* and *C. bhatiana* resulting in the establishment of the new genus *Canscorinella* and two new combinations: *Canscorinella stricta* and *Canscorinella bhatiana*. The new genus *Canscorinella* is characterized by the presence of actinomorphic corolla and isomorphic stamens. This brings the number of species currently recognized for the genus *Canscora* to eleven worldwide, six (55 %) of which occurring in South India. Descriptions, photo plates and keys to the South Indian species of *Canscora* and *Canscorinella* are provided here.

Key words: *Canscora*, *Canscorinella*, new genus, actinomorphic corolla, isomorphic stamens

Introduction

The genus *Canscora* was first established by Lamarck (1785: 601) to include a single species, *C. perfoliata* Lamarck (1785: 601). The diagnostic characters as given by Lamarck include branched, angular stem, oval-pointed leaves, 2–3-flowered inflorescence, rounded and perfoliate bracts, 4 unequal petals (2 larger and 2 smaller), and 4 unequal stamens.

Subsequently, a few more species were transferred to *Canscora* (viz., *C. heteroclita* (Linnaeus) Gilg (1895: 76) (= *Gentiana heteroclita* Linnaeus (1771: 560), *C. diffusa* (Vahl) Brown ex Roemer & Schultes (1818: 301) (= *Gentiana diffusa* Vahl (1794: 47), *C. alata* (Roth) Wallich (1831: 4363) (= *Pladera decussata* Roxburgh (1820: 418). Clarke (1885) divided the genus into three subgenera, namely, subgen. *Canscora* Lamarck (1785: 601) (as 'Eucanscora'), *Heterocanscora* (Clarke) Clarke (1885: 105) and *Phyllocyclus* (Kurz) Clarke (1885: 105). One more subgenus, viz., subgen. *Pentanthera* Clarke (1906: 86) was subsequently recognized under this genus. The subgen. *Canscora* and *Heterocanscora* have typical zygomorphic corolla and anisomorphic stamens and belong to the present day circumscription of *Canscora* while subgen. *Phyllocyclus* is treated as a distinct genus and subgen. *Pentanthera* is placed under the synonymy of *Duplipetala* Thiv (2003: 25). In his recent classification of the tribe Canscorinae, Thiv (2003) circumscribed *Canscora* as monophyletic, characterized by zygomorphic corolla and anisomorphic androecium, represented by 9 species and without any infrageneric taxa.

Since then, four species have been added, three from India, namely *C. sanjappae* Diwakar & Singh (2009: 337), *C. devendrae* Singh & Diwakar (2011: 249) and *C. bhatiana* Prasad & Raveendran (2012: 155) and one from Vietnam, i.e., *C. bidoupensis* Hul (2010: 155). *C. stricta* Sedgwick (1921: 126), earlier considered as a doubtful species by Thiv (2003) was recently rediscovered and reinstated by Bhat and Viswanatha (2009) and Diwakar and Singh (2010). The present study, in consultation with type and protologue, revealed that *C. stricta* and *C. devendrae* are conspecific and hence treated as synonymous. Similarly, *C. pauciflora* Dalzell (1850: 136) considered conspecific to *C. diffusa* (Vahl) Brown ex Roemer & Schultes (1818: 301) by Thiv (2003) is reinstated here, as the former species possesses sufficient characters to separate it from the latter (see notes under *C. pauciflora*).

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