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Two new taxa of Impatiens L. (Balsaminaceae) from Western Ghats of India

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Abstract

Two new taxa of *Impatiens* (Balsaminaceae), *viz., I. sasidharanii* sp. nov. and *I. sasidharanii* var. *hirsuta* var. nov. are described and illustrated from the southern Western Ghats of India. Detailed notes on description, ecology, distribution, morphological variations and IUCN status are provided along with illustrations.

Key words: Anamalai, Impatiens, India, Kerala, Nelliyampathy, new species, new variety, Western Ghats

Introduction

The family Balsaminaceae comprises about 1000 species under two genera, *viz. Hydrocera* Blume (1825: 241) ex Wight & Arnott (1834: 140) and *Impatiens* Linnaeus (1753: 937) (Mabberley 2008; Bhaskar 2012). In India, the genus is represented by more than 210 taxa mainly distributed in the Eastern Himalayas, the neighbouring North-Eastern states and the Western Ghats, which are the major centres of diversity, and with each area being characterized by its own species group (Hooker 1908, Gamble 1915, Vivekananthan *et al.* 1997, Augustine *et al.* 1999, Bhaskar 2012, Narayanan *et al.* 2013, Prabhu *et al.* 2015a). Among this, more than 106 species of *Impatiens* are endemic to the Western Ghats (Bhaskar 2012) including 30 scapigerous species (Prabhu et *al.* 2015a). The recent assessment by Bhaskar (2012) has revealed that, of the 106 species and 13 varieties of *Impatiens* in South India, nearly 90 taxa are endangered; *viz.* 37 taxa fall under the category 'Critically Endangered', about 36 taxa under 'Endangered' and 17 species under Vulnerable status.

The Palakkad district of Kerala is an area with a rich biodiversity in which, Silent Valley, Nelliyampathy and Dhoni hill ranges are situated. Many endemic and endangered species such as. *I. denisonii* Beddome (1864: 41), *I. gardneriana* Wight (1846: t 1050), *I. munronii* Wight (1840: 160) have been reported from here so far (Bhaskar 2012, Sasidharan 2004, 2013). Recently two more balsams are described from Nelliyampathy and Silent Valley forests viz. *I. neo-modesta* Hareesh *et al.* (2015: 231) and *I. sahyadrica* V. B. Sreek. *et al.* (2015: 291) and rediscovered presumed extinct *I. concinna* Hook. f. (1874: 449) from Palamala hill of Dhoni forest (Prabhu *et al.* 2015b). While working on the floristic diversity of the Nelliyampathy forest, Palakkad District, Kerala during 2011–2014, the authors collected two interesting specimens of *Impatiens* from the rocky grasslands of Minnampara and Mattumalai regions. Detailed taxonomic studies with the perusal of relevant literature (Chandrabose 1979; Bhaskar 1981; Bhaskar & Razi 1983, Chandrabose *et al.* 1984, Viswanathan & Manikandan 2003, Dessai *et al.* 2009, Dessai & Janarthanam 2011, Bhaskar 2006 & 2012, Narayanan *et al.* 2013, Hareesh *et al.* 2015, Prabhu *et al.* 2015) showed these taxa are hitherto unknown to science. They are described and illustrated here.