



## *Impatiens theuerkaufiana* (Balsaminaceae), a new scapigerous species from the Western Ghats, India

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### Abstract

*Impatiens theuerkaufiana*, a new scapigerous species of *Impatiens* (Balsaminaceae) from Wayanad district, Kerala, India is described and illustrated. It differs from *I. dendricola* by having entire lateral sepals, a transversely elliptic, bilobed dorsal petal with wavy margins, a short straight spur less than 5 mm long, and tuberculate seeds; from *I. agumbeana* by having pendulous linear lanceolate leaves, shorter pedicels up to 3.5 cm long, non-auricled lateral united petals, and an ellipsoid capsule; and from *I. stocksii* by having long petioles of 5–8 cm, an elliptic lanceolate leaf lamina, long pedicels of 2.0–3.5 cm, and a pouch-like short spur.

**Key words:** Endemic species, Kerala, new species, Wayanad

### Introduction

The family Balsaminaceae comprises about 1000 species under only two genera, viz. *Hydrocera* Blume ex Wight & Arnott (1834: 140) and *Impatiens* Linnaeus (1753: 937) (Mabberley 2008). The genus *Hydrocera* is monotypic, and all other species belong to *Impatiens* which is primarily an Old World genus distributed throughout much of tropical Africa, India, SouthEast Asia and Japan (Grey-Wilson 1980). 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 characterised by its own species group (Hooker 1908, Gamble 1915, Vivekananthan *et al.* 1997, Augustine *et al.* 1999). As far as this genus is concerned, the Western Ghats region is the main area of speciation in India. Interestingly, more than 90 species of *Impatiens* are endemic to the Western Ghats including the new species described by Chandrabose (1979), Bhaskar & Razi (1983), Chandrabose *et al.* (1984), Kumar & Sequiera (1996, 2001), Bhaskar (2006), and Dessai *et al.* (2009). In India, there are about 20 known scapigerous species of *Impatiens* and are restricted to the same area which belongs to the Western Ghats-Sri Lanka Biodiversity Hotspot (Vivekananthan *et al.* 1997, Viswanathan & Manikandan 2003, Bhaskar 1981, 2006, Narayanan *et al.* 2011). Brief accounts on the history of studies of Indian species of *Impatiens* have been provided by Narayanan *et al.* (2011) and Dessai & Janarthanam (2011).

The Wayanad district of Kerala is a biodiversity rich area in the Nilgiri Phytogeographical region of the Western Ghats which harbours several endemic species (Sivadasan & Balakrishnan 1989, Sivadasan & Jaleel 2002, Narayanan *et al.* 2010a, 2010b, 2011, 2012). During the floristic study of Wayanad district, 21 species of *Impatiens* were collected from various habitats (Narayanan 2010). Two collections from high altitude evergreen forest of the district were found to be quite distinct from the hitherto known scapigerous species, and detailed studies revealed their novelty. It is described and illustrated as a new species here.