

# New distributional record of *Impatiens pseudo-acaulis* Bhaskar (Balsaminaceae) - from Western Ghats of Kerala

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## Abstract

*Impatiens pseudo-acaulis* Bhaskar an endemic scapigerous perennial balsam was collected from Silent Valley National Park which is the first distribution record of this taxon to the angiosperm flora of Kerala. Taxonomic descriptions, phenology, distribution and ecology along with colour photograph are provided.

## Introduction

Balsams often called as Jewel weeds, are handsome plants bearing curious and variably coloured flowers coming under the family Balsaminaceae consists of two genera, the monotypic genus *Hydrocera* and *Impatiens*. The genus *Impatiens* has over more than 1000 species (Grey-Wilson, 1980) which are mostly distributed in five distinct diversity hotspots, viz., Tropical Africa, Madagascar, Southern India and Sri Lanka, Eastern Himalaya and Southeast Asia (Grey-Wilson, 1980; Mabberly, 2008). In India, the genus is mainly concentrated in two biodiversity hotspots viz., Himalaya and Western Ghats with 210 species (Bhaskar, 2012), among them 80 species are so far reported from Kerala part of Western Ghats (Sasidharan, 2013). While conducting the floristic inventories, the authors could collect an interesting specimen of *Impatiens* from Silent Valley National Park, Palakkad District, Kerala. On critical examination with types and literature (Bhaskar, 2012) the plant was identified as *Impatiens pseudo-acaulis* Bhaskar an endemic taxon which is described and colour photographs are provided for easy identification.

## *Impatiens pseudo-acaulis*

Bhaskar in Tax. Mono. *Impatiens* W. Ghats, S. Ind. 77. 2012; *I. scapiflora* var. *pseudo-acaulis* Bhaskar & Razi Indian J. Forestry 1(1): 68. 1978; *I. acaulis* Arn. Fyson, Fl. S. Ind. Hill. Stn, 1: 84. t.58. 1932.



Fig 1. *Impatiens Pseudo-acaulis* from Silent Valley National Park, India

Epiphytic, scapigerous, perennial herbs, 20-26 cm tall. Leaves 1-3, radical, petiolate; petiole 5-8 cm long, glabrous, pink; lamina 2.5-5 × 1.8-3 cm, ovate or oblong to orbicular, glabrous, green or greenish brown, obtuse at apex, rounded or sub cordate at base, shallowly toothed; nerves 6, opposite. Inflorescence scapose, peduncle 20-26 cm long, slender, terete, glabrous, pink, 6-8 flowered; pedicels 1-2.5 cm long, slender, glabrous, pale pink; bract 4-4.5 mm long, ovate, convex, glabrous, dark pink. Flowers 3.8 × 3 mm long, pale pink, distal; standard 6-7 × 7-9 mm, broadly obovate, glabrous, pale purple; lateral sepal 2-2.5 × 1-1.5 mm, ovate lanceolate, obtuse, glabrous, pale pink; wings 3 lobed, 17-20 × 10-11 mm; basal 7-9 × 2 mm; middle 11 × 4-4.5 mm; distal 11-16 × 2.5-3 mm; lip 5-6 × 3-3.5 mm, cymbiform, obtuse, glabrous, white; spur 2.6-4.2 cm long, cylindrical, slightly curved, glabrous, white. Column 3-3.5 × 2-2.5 mm, connate; anther 1 mm long, yellow; stalk 2-2.5 mm long.

Pistil 2-2.5 × 1-1.5 mm, broadly ellipsoid, acute, pale green, pale pink streaked at tip. Capsules 1-1.5 cm, ovate-oblong, glabrous; seeds brown, covered with short and stout hairs all over the surface.

**Specimen examined:** 288536 (Kerala Forest Research Institute, Peechi, Thrissur (KFRI)), 02.10.2013, ±2000 m, Sispara, Silent Valley, Palakkad district, Kerala, India, V.S. Hareesh & V.B Sreekumar.

**Phenology:** August-November.

**Distribution:** Endemic to North-East monsoon zone of South in Nilgiris near Naduvattam, Kundahs, Mukurthi of Tamil Nadu. In Silent Valley the distribution of

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*I. pseudo-acaulis* is restricted to evergreen patches in Sispara.

**Ecology and habitat:** Silent Valley National Park is situated in the Mannarkkad forest Division of Palakkad district, Kerala extending over 8952 hectares at south-western corners of the Nilgiris. The vegetation is characterized by tropical evergreen, shola and high altitude grasslands. It harbours a large number of rare, endangered and endemic species of flora and fauna. Sispara is at the south-east region of the valley and is the floristically one of the important region in which seventeen new taxon were reported from the region itself. *I. pseudo-acaulis* grows in the wet rocky areas with an altitudinal gradient range between 1950-2050 m.

**Notes:** This species so far known only from the evergreen forests in North-East monsoon zone of South in Nilgiris near Naduvattam, Kundahs, Mukurthi of Tamil Nadu (Bhaskar, 2012). The present collection from Sispara forests of Silent Valley National Park, Palakkad district is the extended distributional record for this taxon to the angiosperm flora of Kerala.

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