

Impatiens rosea (Balsaminaceae)- A new record for Odisha, India

Kothareddy Prasad¹✉, Alok Ravindra Chorghe², Pathi Venkata Krishna Reddy⁴ and Siddamurthy Rajagopal Reddy³

¹Andhra Pradesh State Biodiversity Board, Opp. Nagarjuna University, Guntur-522510, Andhra Pradesh, India
✉]prasad.orchids@gmail.com

²Rajiv Gandhi Regional Museum of Natural History, Sawai Madhopur - 322001, Rajasthan, India

³Department of Botany, Yogi Vemana University, Kadapa - 516005, Andhra Pradesh, India

⁴Department of Botany, Govt. College for Men (A), Kadapa - 516004, Andhra Pradesh, India

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ABSTRACT

Impatiens rosea Lindl., an Indian endemic species of family Balsaminaceae, collected from Mahendragiri hills of Odisha state (Eastern Ghats), is reported here for the first time from the state. A detailed description and photographs are provided for easy identification of the species.

INTRODUCTION

The genus *Impatiens* L. (Balsaminaceae) is distributed in the tropical and subtropical regions of the Old World and northern temperate regions, comprising about 1,000 species (APG IV, 2016; Mabberley, 2017). Main centers of diversity of the genus are in tropical Africa, Madagascar, Southern India, Sri Lanka, the Eastern Himalaya and Southeast Asia (Gogoi et al., 2018). In India, the genus *Impatiens* is represented by more than 210 species with high concentration of species in Eastern Himalaya and Western Ghats (Gogoi et al., 2018). During the recent botanical explorations in Mahendragiri hills of Eastern Ghats of Odisha state, the authors collected some curious specimens of *Impatiens* from the high-altitude areas of Gajapati district. After critical study, the collected

specimens were identified as *Impatiens rosea* Lindl. The perusal of relevant literature (Gamble, 1915; Pullaiah & Muralidhara, 2002; Saxena & Brahmam, 1994) revealed that this species has not been reported from Odisha to date. A detailed botanical description, phenology, distribution pattern and photographs are provided here for easy identification. The collected materials have been deposited in the herbarium of BSI, Deccan Regional Centre, Hyderabad (BSID).

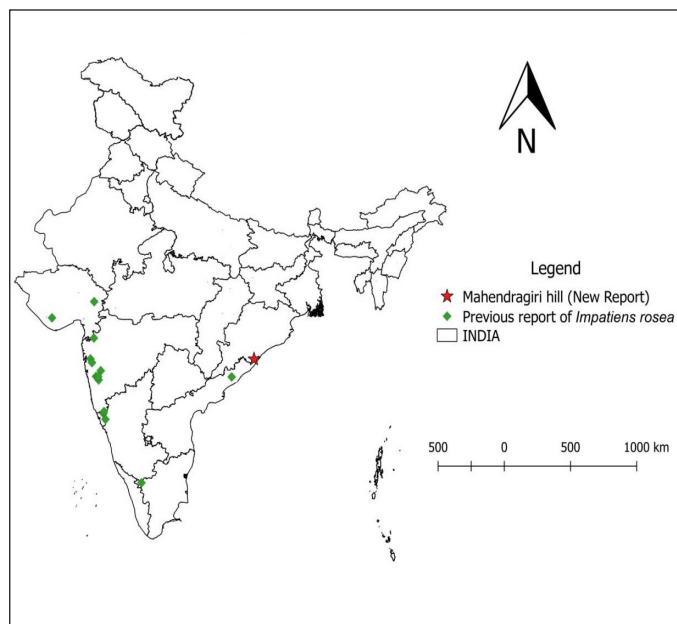
Description

Impatiens rosea Lindl. in Edwards's Bot. Reg. 27(Misc.): 6, t. 27. 1841. *I. trichocarpa* Hook.f., Hooker's Icon. Pl. 30: t. 2914. 1910; Gamble, Fl. Pres. Madras 1: 142. 1915; Vivekananthan et al. in Hajra et al., Fl. India 4: 218. 1997. *I. balsamina* L. var. *rosea* (Lindl.) Hook. f., Fl. Brit. India 1: 454. 1874. (Fig. 1).

Herbs, about 40 cm high. Roots many, filiform. Stem terete, smooth, pale green. Leaves alternate, linear-lanceolate or linear-oblongate, 4-8 × 0.5-1 cm, acuminate at apex, attenuate at base, serrate at margins; petioles 0.5-1 cm long, with 2-5 pairs of glands. Flowers 1-3 per axil, 1.5-2 cm across, pink with yellow patches on throat. Bracts small, triangular, 1-1.5 mm long, hairy; pedicels 8-10 mm long, puberulous or glabrous, pale green or pink. Lateral sepals ovate-lanceolate, 2-2.5 × 1 mm, acute at apex, hairy at margins. Standard petal concave, horned, orbicular, 0.8-1 cm long, sparsely hairy on dorsal surface; horn 2.5-3 mm long, green; wing petals 1.6-1.8 × 0.9-1 cm, 2-lobed; auricle curved, rounded; basal lobe obovate,



Figure 1. *Impatiens rosea* Lindl.- A. Habitat, B. Habit, C. Close up of flower, D. Side view of flowers with short spur, E. Young capsule



Map 1. Distribution map of *Impatiens rosea* from India.

6-8 × 3.8-4 mm, obtuse at apex; dorsal lobe irregularly obovate, 9-10 × 6-8 mm; lip boat-shaped, horned, 1-1.2 × 4-6 mm, c. 4 mm deep, acuminate at apex, hairy; horn 1.8-2 mm long, green; spur slightly hooked, cylindrical, 6-8 mm long, rounded, pale green. Column c. 6 × 3 mm, white; filaments 5.5-6 mm long. Anthers 1 mm long, pinkish-white. Pistil 4.6-5 mm long, curved; ovary elliptic-lanceolate. Capsules ellipsoid, 1-1.2 cm long, tomentose; pedicels 1-1.5 cm long; seeds globose.

Flowering & Fruiting: July-December.

Habitat: It grows on large rock surfaces at elevation between 1390-1400 m above msl. The present population was found to have about 300 mature individuals.

Distribution: Northern Himalaya, Andhra Pradesh, Goa, Gujarat, Karnataka, Maharashtra, Odisha and Tamil Nadu. (Map 1.)

Specimens examined: India, Odisha, Gajapati district, Mahendragiri hills, N 18°58'05.3" and E 84°22'08.6", 1395 m, 17-09-2014, K. Prasad & Alok Chorgha 4216 (BSID).

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