Lectotypification of *Impatiens duclouxii* Hook. f.,
A NEW ADDITION TO THE FLORA OF INDIA FROM ARUNACHAL PRADASH

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LECTOTYPIFICATION OF *IMPATIENS DUCLOXII* Hook.f., A NEW ADDITION TO THE FLORA OF INDIA FROM ARUNACHAL PRADESH

Rajib Gogoi1, Umeshkumar L. Tiwari2& Bladimir Bajur Theodore Tham3

1Botanical Survey of India, Central National Herbarium, P.O. Botanic Garden, Howrah, West Bengal 711103, India.
2–4Botanical Survey of India, Arunachal Pradesh Regional Centre, Senki View, Itanagar, Arunachal Pradesh 791111, India.
1rajibbsi@yahoo.co.in, 2tigerumeshe11@gmail.com (corresponding author), 3souravjyotiborah@gmail.com, 4damirtham@gmail.com

The floristic diversity of the northeastern region of India is not well-documented due to its inaccessibility and difficult terrain. *Impatiens* is one such floristic genus that is not well-documented from the state of Arunachal Pradesh, a part of the eastern Himalaya. The genus is represented in India by more than 210 species (Bhaskar 2012), of which 137 are endemic (Vivekananthan et al. 1997; Swaminathan et al. 2001). In the recent past, however, many new species of *Impatiens* were discovered (Gogoi & Borah 2013a, 2014, 2015a,b,c,d,e; Gogoi et al. 2013, 2015; Gogoi et al. 2011; Bhaskar 2012; Gogoi & Borah 2013a,b, 2014, 2015a,b,c,d,e; Gogoi et al. 2013, 2015; Ruchisansakun et al. 2014; Borah et al. 2015), the species was identified to be *Impatiens duclouxii* Hook.f. (Balsaminaceae). A perusal of literature revealed that the species was not reported from India so far. Hence, it is reported here for the first time with descriptions and colour illustrations for easy identification in the field.

*Impatiens duclouxii* Hook.f.

Nouv. Arch. Mus. Hist. Nat., sér. 4, 10: 245 1908; Chen et al., Fl. China, 12: 64. 2007.

Lectotype (designated here): China, Yunnan, 5,000ft, 1900, A. Henry 12559 K (K000694008), image; isolecotype: China, Yunnan, 5,000ft, 1900, A. Henry 12559 E (EOO313630) (Images 1 & 2).

Perennial, sparsely branched, up to 100cm tall. Stem terete, slightly ridged, hairy. Leaves confined to the upper part of the stem, alternate, petiole up to 5.5cm long, with glands, stipule absent; lamina elliptic to ovate, dorsally glabrous, base cuneate to obtuse, apex acute to acuminate, margin serrate, setose between teeth, lateral veins to 11 pairs, subopposite. Inflorescence axillary, 3–5 flowered, peduncle up to 2.5cm long, colour illustrated for easy identification in the field.
Impatiens duclouxii - new addition to the flora of India

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Flowering & fruiting: July–November

Habitat: The species was found growing in a moist habitat at 30–45 °C in a gentle slope along a small stream in Jamiri area in West Kameng District. It was later collected from Richikurung of East Kameng District, where the area is dominated by *Terminalia myriocarpa*, *Ficus semicordata*, *Bauhinia purpurea*, *Saurauia*...
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Chen, Y.L., C.S. Akiyama & H. Ohba (2008). Borah, S., R. Gogoi, P. Satyanarayana & S.-X. Yu (2015). Trevesia palmata, Bambusa pallida, Melastoma normale, Alpinia nigra, Musa acuminata, Kydia calycina, Impatiens roxburghii, Impatiens rugosipetala, and Strobilanthes paniculata.

**Distribution:** China and India (West Kameng District in Jamiri, Arunachal Pradesh).

**Conservation status:** Chen et al. 2008 mentioned neither the distribution of the species in Yunnan in China nor its population. Herbarium records show that this species is represented by ca. 120-year-old collections. Therefore, it could have an extended distribution and new species record in India. Based on the distribution records, the authors would like to assess the species as Indeterminate (I) due to insufficient information on its distribution. Intensive explorations are required in similar habitats in adjacent areas for the possible location of the species. During the present survey, only 12 mature individuals were located, which were growing as undergrowth in a semi-evergreen forest along a stream.

**Lectotypification:** While describing this species, Hooker (1908) referred to three herbarium sheets of *I. duclouxii* as held at P, E & K (P - Herbarium, Muséum National d'Histoire Naturelle, Paris France; E - Herbarium, Royal Botanic Gardens, Edinburgh, EH3 5LR, Scotland, UK; K - Herbarium, Royal Botanic Gardens, Kew, Richmond Surrey, TW9 3AE, UK. LWG). Among these, one sheet, A. Henry 12559 (K000694008) (Image 2), was selected as the lectotype. This sheet was examined by Hooker and found to closely match the protologue. Since the other sheets with the same collection number by A. Henry 12559 (EO0313630) are regarded as part of the original gathering and match the protologue, it is here designated as an islectotype.

Other specimens examined: 21969 (CAL), 27.x.2014, India, Arunachal Pradesh, West Kameng District, Jamiri, 1,200m, coll. R. Gogoi & B.B.T. Tham; 47947 (ARUN), 08.x.2017, East Kameng District, Palejee (Sube) on the way to Richikurung, 27.353°N & 92.770°E, 1,103m, coll. U.K. Tiwari.

**Reference**

Bhaskar, V. (2012). Taxonomic Monograph on *Impatiens* L. (Balsaminaceae) of Western Ghats, south India: The Key Genus for Endemism. Centre for Plant Taxonomic Study, Bangalore, 233pp.

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Gogoi, R. & S. Borah (2015e). *Impatiens pathakiana* (Balsaminaceae), a new species from Arunachal Pradesh, northeastern India. *Telopea* 18: 121–125; https://doi.org/10.7751/telopea8484

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Image 2. Lectotype of *Impatiens duclouxii* (designated here). Source: http://apps.kew.org/herbcat/getImage.do?imageBarcode=K000694008

**Distribution:** China and India (West Kameng District in Jamiri, Arunachal Pradesh).

**Conservation status:** Chen et al. 2008 mentioned neither the distribution of the species in Yunnan in China nor its population. Herbarium records show that this species is represented by ca. 120-year-old collections. Therefore, it could have an extended distribution and new species record in India. Based on the distribution records, the authors would like to assess the species as Indeterminate (I) due to insufficient information on its distribution. Intensive explorations are required in similar habitats in adjacent areas for the possible location of the species. During the present survey, only 12 mature individuals were located, which were growing as undergrowth in a semi-evergreen forest along a stream.

**Lectotypification:** While describing this species, Hooker (1908) referred to three herbarium sheets of *I. duclouxii* as held at P, E & K (P - Herbarium, Muséum National d'Histoire Naturelle, Paris France; E - Herbarium, Royal Botanic Gardens, Edinburgh, EH3 5LR, Scotland, UK; K - Herbarium, Royal Botanic Gardens, Kew, Richmond Surrey, TW9 3AE, UK. LWG). Among these, one sheet, A. Henry 12559 (K000694008) (Image 2), was selected as the lectotype. This sheet was examined by Hooker and found to closely match the protologue. Since the other sheets with the same collection number by A. Henry 12559 (EO0313630) are regarded as part of the original gathering and match the protologue, it is here designated as an islectotype.

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