

SHORT COMMUNICATION

***Impatiens siculifer* (Balsaminaceae): a New Record for the Flora of Vietnam**

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Impatiens siculifer Hook. f. (Balsaminaceae), discovered in Muong La Nature Reserve, Son La Province, northwest Vietnam, is reported as new for the flora of Vietnam.

Key words: Balsaminaceae, flora, *Impatiens siculifer*, new record, plant diversity, Vietnam

Impatiens L. (Balsaminaceae) includes ca. 900 species (Chen *et al.* 2007) widely distributed in tropical, subtropical and temperate areas of the Old World and North America (Grey-Wilson 1980, Vivekananthan *et al.* 1997, Chen *et al.* 2007).

The Indochina region should be an area of diversity for *Impatiens* in Southeast Asia, but many species are still undescribed, since the family has attracted little attention during the more than seventy years since it was last inventoried by Tardieu (1944). Previous studies recorded 9 species in Cambodia (Hooker 1911, Cho *et al.* 2016, 2017) and 18 from Laos (Hooker 1911, Tardieu 1944, Newman 2008, Souvannakhoummane & Suksathan 2015). Forty five species have been recorded for Vietnam (Hooker 1911, Tardieu 1944, Nguyen & Kiew 2000, Pham 2003, Chen *et al.* 2007, Shui *et al.* 2011, Chinh *et al.* 2015, Hoang *et al.* 2015, 2016).

During recent botanical explorations in the Muong La Nature Reserve in northwestern Vietnam, unfamiliar plants of *Impatiens* were collected. After laboratory analysis and a search through the relevant literature, the specimens were identified as *Impatiens siculifer* Hook. f.. *Impatiens sic-*

ulifer has been recorded from China (Hooker 1908, Chen *et al.* 2007) and India (Gogoi & Borah 2013). *Impatiens siculifer* is similar to *I. stenantha* Hook. f. in having an erect, glabrous stem, elliptic-lanceolate leaf blade, coarsely crenate leaf margin, 3–5 flowered axillary inflorescences, yellow flowers, and long curved spur, but distinct in having persistent floral bracts, narrowly oblong lateral sepals, and a thickened abaxial midvein on the upper petal (Chen *et al.* 2007, Gogoi & Borah 2013). *Impatiens siculifer* was not previously recorded from Vietnam; this is the first report of its presence in the flora of Vietnam.

Impatiens siculifer Hook. f. in Nouv. Arch. Mus. Hist. Nat. sér. 4, 10: 246 (1908); Chen *et al.* in Z.-Y. Wu, P. H. Raven & D. Y. Hong (eds.), Fl. China 12: 68 (2007); Gogoi & Borah in Taiwania 58: 146–150, f. 1A–I (2013).

Types: China. Yunnan, Mengtze, sylvis alt. 5,000 ped., A. Henry, no. 10030AB (K! syn-); Kwei-Tcheou [Guizhou], Moope tou chan, R. P. Bodinier, no. 2335 (P! syn-).

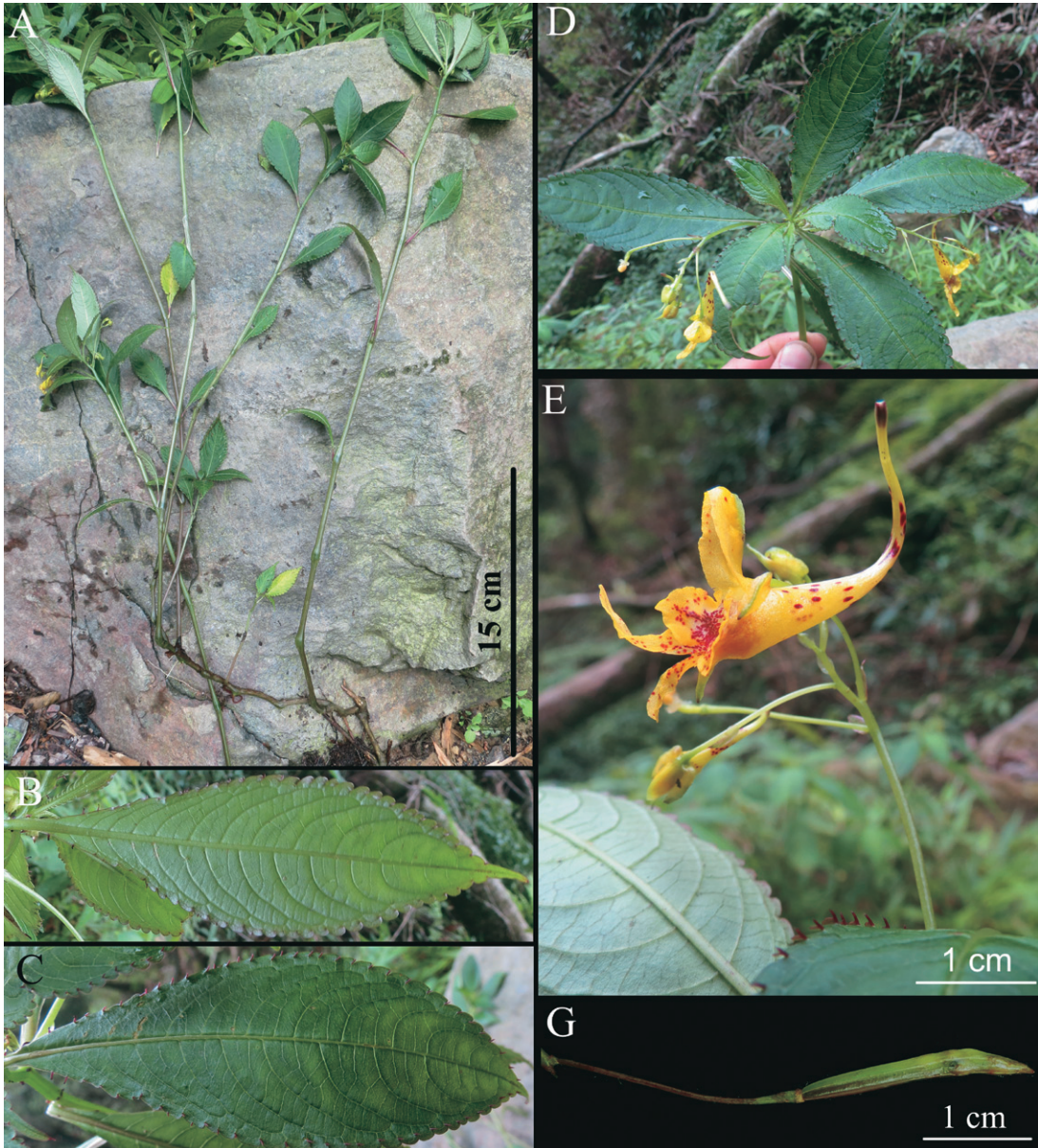


FIG. 1. *Impatiens siculifer* Hook. f. A: whole plant. B: abaxial surface of leaf. C: adaxial surface of leaf. D: inflorescences. E: flowers. F: immature fruit.

Description. Herbs, terrestrial, perennial, to 1.2 m tall, glabrous except leaves. Stem slender, erect, usually solitary, sometime branched from base, with distinctly swollen nodes; internodes ca. 6 cm long. **Leaves** alternate, crowded on upper part of stem, with stipular glands; petiole to 2.4 cm long, shorter in upper leaves; blade ellip-

tic, $9.2\text{--}14.3 \times 3.5\text{--}4.9$ cm, base cuneate or more or less attenuate, margin crenulate, apex acuminate or short caudate, purple or dark purple, strigose between teeth, hairs to 1 mm long; venation distinctly reticulate, prominent on both surfaces, lateral veins 10 or 11 pairs. **Inflorescences** axillary, racemose, near stem apex, with 3–5 flowers;

peduncle 5.5–7 cm long. **Flowers** bright yellow, ca. 0.5 cm in diam.; pedicel slender, ca. 2.5 cm long, bracteate at base; bracts lanceolate, 3.7 × 0.5 mm; lateral sepals 2, narrowly oblong, ca. 5 mm long; lower sepal funnel-form, tapering into long recurved spur, with scattered reddish spots on both surfaces, 3.5–3.8 cm long including spur; upper petal suborbicular or orbicular, 1.0 × 1.2 cm, abaxial midvein thickened, narrowly winged; wing bright yellow; lateral united petals not clawed, bilobed; basal lobe subtriangular, with scattered reddish spots on adaxial surface; distal lobe lorate, apex acuminate, with dense reddish spots at base of adaxial surface. **Capsule** clavate, immature fruits 2.2 cm long, 3.5 mm in diam.; immature seeds (0.5–)0.8–1.5 mm long. Flowering and fruiting in October – November. (Fig. 1).

Specimens examined. Vietnam, Son La Province, Muong La Nature Reserve, alt. 1,900 m, 21°38'N, 103°35'E, 27 Oct. 2016, T. T. Pham, T. T. Nguyen. V. T. Do 161027031 (VNF!, VNMN!).

Distribution. China (Fujian, Guangxi, Guizhou, Hubei, Hunan, Jiangxi, Sichuan, Yunnan), India (Salangam to Hawa Camp, Lohit District), Vietnam (Son La).

Habitat and Ecology in Vietnam. wet places along stream in forest at ca. 1,900 m alt.; with such species as *Acorus calamus* L., *Poilannamia incisae* C. Hans., *Rubus ferox* Focke, *Pteridrys syrmatia* C. Chr. & Ching, *Cyrtococcum patens* (L.) A. Camus and *Bonia parvifloscula* (W. T. Lin) N. H. Xia.

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