

A New Record of *Impatiens* (Balsaminaceae) in Honshu, Japan

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Abstract *Impatiens capensis* Meerb. is naturalized in Honshu, Japan. It is North American species and known to be cultivated and naturalized in Europe.

Key words: *Impatiens*, naturalized species

In Japan there are three indigenous species of *Impatiens*: *I. noli-tangere* L. (Fig. 1 middle left & right), *I. texitorii* Miq. and *I. hypophylla* Makino (including var. *microhypophylla* (Nakai) H. Hara) (Akiyama 1999). One species, *I. balsamina* L., widely cultivated in gardens, occasionally escapes and is naturalized. Further two species, *I. glandulifera* Royle (Fig. 1 bottom left) and *I. balfourii* Hook.f. (Fig. 1 bottom right), are naturalized in Hokkaido, Japan. (Akiyama, 1999).

Impatiens capensis Meerb. was collected in a waste place at the riverside of Tone River, Chiba Prefecture, Honshu by Mamoru Tuchiya in 1992. *Impatiens capensis* is distributed in North America and has been cultivated and naturalized in Europe (Britton & Brown, 1913; Gleason, 1952; Hermmann, 1956; Scoggan, 1978). The epithet means “of the Cape”. It is wrongly thought by the author to have been introduced into European gardens from the Cape of Good Hope (Fernald, 1950). Though the shape and texture of the leaves and the shape of the inflorescences are similar to those of *I. noli-tangere*, this species is well characterized by the orange flowers with a bucciniform lower sepal abruptly constricted into the spur (Scoggan, 1978) (Fig. 1 top left & right).

Known four forms with different flower colour in North America, only orange colour form with crimson spots (f. *capensis*) was collected in Japan. Comparing these with the native materials in North America, I have found no significant differences between them. The shape of size of the flowers and leaves fall into the variation ranges of North American materials. The route of naturalization in Japan is uncertain but is considered to be as an escape from cultivation.

Impatiens capensis Meerb., Afb. Zeldz. Gew.: t. 10 (1775).

[Figs. 1 top left & right, and 2]

Impatiens biflora Walt., Fl. Carol.: 219 (1788).

[A description based on the naturalized plants in Japan] Leaves alternate with

petioles to 5 cm long or upper leaves subsessile; blade elliptic to ovate, to 6 cm long, to 3 cm wide, gradually smaller toward apex, apex acute, base cuneate to rounded, margins crenate or serrate, glabrous on both surfaces, upper surface green, lower surface pale and glaucous. Inflorescences 2 or 3-flowered, pedulous, in uppermost leaf axils. Flowers orange spotted with reddish brown, ca. 2.5 cm long and deep. Lower sepal yellow, bucciniform, abruptly constricted into a curved spur; spur ca. 8 mm long. Dorsal petal ca. 1 cm long and wide when flattened, without crest-like appendage. Lateral united petals, ca. 2.5 cm long. Fruits ca. 2 cm long.

Japanese name: Akaboshi-tsurifune (nov.). This species has been called 'Kēpu (Cape)-tsurifune' in Japan. As mentioned here it is not native in the Cape of Good Hope. To avoid a confusion I propose the new Japanese name.

Specimens: **Japan.** Honshu. Chiba Pref., Noda-shi. Naturalized (M. Tuchiya 6216, 5 July 1992, TNS; 6219, 5 July 1992, TI).

For the morphological observation and comparison I have examined the following specimens preserved in TNS.

U.S.A. Massachusetts. Norfolk County, Readville (S. F. Blake 6701, 11 Aug. 1917). New Hampshire. Werrucuc County (C. Bullard, 14 Aug. 1933). New York. Albany County, E. N. Huyck Preserve, Rensselaerville (N. H. Russell 7135410, 13 July 1954); Buffalo City, Chautauqua, North Lake Drive (M. Sawada 1050, 27 July 1975); Long Island, Sand Point Nature Park (N. Tanaka, 24 July 1995). Pennsylvania. Westmoreland County, Ligonier (F. H. Utech 79-342, 14 July 1979). Vermont. Windsor County, Bethel (P. Spalding, July 1916, TNS; 20 Sept. 1916). Wisconsin. Sauk County, Klondike Camp Area, 30 miles N.W. of Madison (E. R. Everhart 6, 20 Sept. 1968). **Canada.** Ontario. Elgin County, 4 miles south of St. Thomas (L. E. James 1940, 6 Sept. 1952); Carleton County, Ottawa, Billings Bridge (W. G. Dore and L. van Rens, 19 Sept. 1957); MacDiarmid Kilkenny Twp., Chief Ranger Station (C. E. Garton 7945, 2 Aug. 1960); Tichmond Hill (T. Kawasaki 1981, 1982 and 1983, 18 Aug. 1996; 2005, 6 Sept. 1996). Quebec. Cté de Montmorency, L'Ange-Gardien (R. Cayouette 57-773, 27 Aug. 1957).

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Fig. 1. *Impatiens capensis* Meerb. (top left & right: photo by T. Kawasaki on 18 Aug. 1996 in Ontario, Canada), *I. noli-tangere* L. (middle left & right: on 16 Sept. 1996 in Kyushu, Japan), *I. glandulifera* Royle (bottom left: photo by H. Igarashi on 31 Aug. 1996 in Hokkaido, Japan), and *I. balfourii* Hook.f. (bottom right: photo by H. Igarashi on 15 Sept. 1999 in Hokkaido, Japan).





Fig. 2. *Impatiens capensis* Meerb. (top: M. Tsuchiya 6219, 5 July 1992, TI; bottom: M. Tsuchiya 6216, 5 July 1992, TNS).

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