Notes of Impatiens from West Nepal

Shinobu Akiyama\textsuperscript{a} and Hideaki Ohba\textsuperscript{b}

\textsuperscript{a}Botanical Gardens, Faculty of Science, University of Tokyo
3-7-1 Hakusan, Bunkyo-ku, Tokyo 112, JAPAN;
\textsuperscript{b}Department of Botany, University Museum, University of Tokyo
7-3-1 Hongo, Bunkyo-ku, Tokyo 113, JAPAN

(Received on January 9, 1993)

A new species, \textit{Impatiens bajurensis}, is described from far west Nepal. Floral features of \textit{I. glauca} are described for the first time.

According Hara (1979), 15 species of \textit{Impatiens} are known from west Nepal. Among these, \textit{I. racemosa}, \textit{I. radiata}, and \textit{I. bicornuta} are common throughout Nepal without any considerable geographical variations. \textit{Impatiens racemosa} is distributed in Himalaya from Kashmir to Assam and S. Tibet. \textit{Impatiens serrata} occurs between Kumaon and Bhutan while \textit{I. bicornuta} Kumaon to Arunachal Pradesh. \textit{Impatiens laxiflora} and \textit{I. scabrida} are Kashmir to Nepal or eastward. Only two species, \textit{I. bicolor} and \textit{I. glauca} are distributed in west Himalaya westward west Nepal to Kashmir. It is concluded that the \textit{Impatiens} flora of west Nepal intermingles the west Himalayan elements with the elements of a common floristic area including Kumaon, Nepal and its eastward.

A botanical research was made in far west area of Nepal in 1991 (Suzuki 1992), and Drs. Futoshi Miyamoto and Nobuhira Kurosaki have collected 50 numbers of \textit{Impatiens} from this area. We have studied the specimens including bottled flowers, and recognized 11 species. \textit{Impatiens sunkoshiensis} S. Akiyama, H. Ohba et Wakabayashi is collected in west Nepal for the first time. \textit{Impatiens glauca} Hook f. et Thoms. is collected at flowering. A new species, \textit{I. bajurensis}, is found in their collection. This is the first \textit{Impatiens} endemic to west Nepal.

\textit{Impatiens bajurensis} is well characterized by the axillary, 1–3 flowered racemes with a narrow bract near the middle of the pedicel, the larger whitish yellow flowers attaining 5.5 cm long with a large saccate-bucciniform lower sepal 2–2.5 cm long and 2.2–2.5 cm deep with a curved 1.2–1.5 cm
long spur, and the crested dorsal petal. The species is similar to *I. scabrida* in having the same type of inflorescence and crested dorsal petals, but differs greatly in the size of the flower and the shape of lower sepal. The shape of the lower sepal, saccate-bucciniform, is unique in the Himalayan *Impatiens*.

Hooker and Thomson (1860) described *I. glauca* without any description of flowers from Kumaon, which was characterized by the glaucous secretion. Hooker (1875, 1904) noted it, but never mentioned the floral features.

The terms and measurement follow Akiyama et al. (1991).

**Taxonomic treatment**

*Impatiens bajurensis* S. Akiyama et H. Ohba, sp. nov.

Species seamless *Impatiens scabridae* DC. eodem typo inflorescentiae et cristato dorsali petalo, sed hac valde differt et floribus multo majoribus ad 5.5 cm longis et infimo-sepalo saccato-bucciniformi. Forma infimi-sepali, saccato-bucciniformis, unica inter speciebus himalensibus.

Plants ca. 50 cm tall. leaves alternate, evenly distributed throughout, with petioles 2–5 cm long, lamina elliptic, 10–12 cm long, 4–5 cm wide, apex attenuate-acuminate, base attenuate, margin crenate-serrate, sparsely scabrid hairy on both surfaces.

Inflorescence very short racemose, 0.8–1.5 cm long, axillary, with 1–3 flowers. Pedicel slender, 15–20 mm long, scabrid hairy, with a bract at middle part. Bracts lanceolate with acute apex, ca. 6 mm long.

Flowers 5.2–5.5 cm long, 4.2–4.6 cm deep, whitish yellow. Lateral sepals 2, widely ovate, 13–15 mm long, 8–9 mm wide, apiculate. Lower sepal saccate-bucciniform, 2–2.5 cm long, 2.2–2.5 cm deep (excluding the spur), with brownish stripes, base constricted into a incurved spur; spur 1.2–1.5 cm in overall length. Dorsal petal 2.4–2.7 cm long and wide when flattened, dorsally with a keel-like conspicuous crest, crest 4–6 mm high. Lateral united petals 3.5–3.8 cm long, upper lobe oblong, 2.1–2.3 cm long, 1.2–1.3 cm wide, lower lobe narrowly oblong with round apex, 2.2 cm long, 0.8–1 cm wide. Stamens 5, anthers without appendage. Fruits 2.5–3 cm long.


[Description of flower] Flowers 3.1–3.5 cm long, 3.9–4.1 cm deep, pink. Lateral sepals 2, widely ovate, 9–11 mm long, 7–8 mm wide, shortly apiculate. Lower sepal whitish, bucciniform, 1.6–1.9 cm long, 1.9–2.1 cm deep (excluding the spur), base abruptly constricted into a short spur; spur 5–6 mm long, straight. Dorsal petal pink, 1.3–1.5 cm long, 1.4–1.6 cm wide when flattened, cucullate, dorsally with a keel-like inconspicuous crest, crest 2–3 mm high. Lateral united petals deep pink, 2.7–2.9 cm long, upper lobe oblong, 1.2–1.3 cm long, 0.5–0.6 cm wide, lower lobe triangular-ovate with attenuate apex, 1.7–1.9 cm long, 1.0–1.2 cm wide. Stamens 5, anthers without appendage. Fruits 2.5–3 cm long.

We are indebted to Drs. Futoshi Miyamoto, Tokyo University of Agriculture, and Nobuhira Kurosaki, Shoei Junior College, Kobe, for supplying the materials. This study was supported by a Grant from the Monbusho International Scientific Research Program (Field Research), No. 03041035 (to M. Suzuki), in 1991 & 1992, and No. 04041038 (to H. Ohba), in 1991, from the Ministry of Education, Science and Culture, Japan.

References
(Others in the taxonomic treatment)

