A New Species of Sibbaldia, *S. emodi* (Rosaceae) from East Nepal

Hiroshi Ikeda a and Hideaki Ohba b

a Division of Phylogenetics, Museum of Nature and Human Activities, Yayoigaoka 6, Sanda, Hyogo, 669-13 JAPAN;
b Department of Botany, University Museum, University of Tokyo, Hongo 7-3-1, Bunkyo-ku, Tokyo, 113 JAPAN

(Received on January 5, 1996)

A new species of *Sibbaldia, S. emodi* (Rosaceae), collected near Mera La, Solukhumbu District, east Nepal, is described. This species is close to *S. micropetala* (D. Don) Hand.-Mazz., but differs in having connate auricles of stipules of radical leaves against divided auricles of *S. micropetala*.

An undescribed species of *Sibbaldia* was found in the collection obtained from a heavily grazed alpine grassland near Mera La Pass, Solukhumbu District in east Nepal. This, named *S. emodi*, is related to *S. micropetala* (D. Don) Hand.-Mazz. in having the reptant stems, interrupted-pinnate leaves, and achenes with swollen appendages of spongy tissues, but differs in stipules. In *Sibbaldia*, the stipules of radical leaves are adnate with the petioles in the lower half and free from them in the upper part. The free part of the stipules is called auricle. In *S. emodi* and *S. micropetala*, auricles are adaxial. The auricles of *Sibbaldia emodi* are connate though those of *S. micropetala* are free.

*Sibbaldia emodi* and *S. micropetala* often grow sympatrically, but they are distinguished by the auricles of leaves and the colour of petals, that is, *S. emodi* has deep red petals while *S. micropetala* usually yellow.

*Sibbaldia emodi* H. Ikeda & H. Ohba, sp. nov. (Figs. 1, 2)

In habitu *Sibbaldia micropetala* (D. Don) Hand.-Mazz. maxime similis, sed ab illa stipulae foliorum radialium auriculis vero connatis vene differt.

Rosulate herb with reptant flowering stems. Radial leaves interrupted-imparipinnate, 3–6 cm long, 1.2–2.4 cm wide; lateral leaflets 3–8-pairs, sparsely hairy above, sericeous beneath; terminal leaflet 0.8–1.4 cm long, 0.5–0.8 cm wide, serrate with 5–9 teeth; auricles membranaceous, connate, apex round or 2–3-divided. Flowering stems axillary from radical leaves; cauline leaves 3–5-foliate, sparsely hairy above, sericeous beneath.

Flowers solitary, terminal; pedicels 2–8 mm long, hairy with appressed white hairs. Episepals 1.5–3.0 mm long, 1.0–1.3 mm wide, lanceolate to ovate, densely sericeous outside, sparsely sericeous with stigrose hairs inside. Sepals ovate to triangular, 1.8–3.1 mm long, 1.2–1.9 mm wide, apex obtuse, sericeous outside with long and minute hairs (long hairs 1.0–1.8 mm long), glabrous inside but densely pilose in upper half. Petals lanceolate, 1.5–2.0 mm long, 1.0–1.5 mm wide. Stamens 5, filaments 0.4–0.6 mm long, pale red; anthers globose, 0.3–0.5 mm in diameter, dark yellow before dehiscence. Ovaries globose to ovoid, 0.5–0.8 mm long, 0.3–0.5 mm wide, with short appressed multicellular stalked glands, pale green; styles subbasal, 0.8–1.1 mm long, pale green; stigmas inflated and papillate; ovules single. Achenes pale to
Fig. 1. *Sibbaldia emodi* H. Ikeda & H. Ohba. Holotype.

Fig. 2. *Sibbaldia emodi* H. Ikeda & H. Ohba. a: Sepals, inner surface (left) and outer surface (right). b: Episepals, inner surface (left) and outer surface (right). c: Petal. d: Stamens, inner surface (left) and outer surface (right). e: Pistils. f: Stipule of radical leaf. Bars indicate 1 mm.
dark brown, 1.8–2.2 mm long, rugose with swollen appendages of spongy tissue, 1-seeded. Seeds smooth.

**Type.** E Nepal: Sagarmatha Zone, Solukhumbu Distr., Tangna – Dik Kharka, 4015 m alt. (Miyamoto & al. 9588122, Aug. 6, 1995, TI-holo; KATH, BM, E, GH, HYO-iso).


This study was supported by a Grant from the Monbusho International Scientific Research Program (Field Research), No. 06041030 (to H.O.), in 1995, from the Ministry of Education, Science, Sports and Culture, Japan.