

A NEW SPECIES OF *POTENTILLA* SECT. *LEPTOSTYLAE* FROM CENTRAL BURMA

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A new species of *Potentilla* sect. *Leptostylae* (Rosaceae), *P. montisvictoriae*, endemic to Mt Victoria, C Burma, is described. *Potentilla montisvictoriae* differs from *P. leuconota* D. Don in having free auricles on the stipules of the radical leaves, patent or descending hairs on the rachis and peduncles, obovate petals, styles longer than ovaries and entire or shallowly incised auricles on the stipules of the cauline leaves.

INTRODUCTION

Mount Victoria, an isolated volcano located at 21°12'N 93°35'E, is the highest mountain (3053m) in the tropical zone of central Burma. Kingdon Ward (1958) discussed the vegetation and flora of the mountain and reported the presence of numerous species which have their main range in the Sino-Himalayan region, covering the area from Himalaya to SW China through Tibet and north Burma. During our investigations of Himalayan plants we have studied some specimens collected from Mt Victoria (Ohba 1975, 1981).

A single species of *Potentilla* was collected from Mt Victoria by R. E. Cooper in 1924, R. Unwin in 1926, Kingdon Ward in 1956 and others. This *Potentilla* belongs to sect. *Leptostylae* and is close to *P. leuconota* D. Don which is widely distributed from the Himalayan range through SW China to Taiwan, but apparently differs from *P. leuconota* in having free auricles on the stipules of the radical leaves, patent or descending hairs on the rachis and peduncles, obovate petals, styles longer than ovaries and entire or slightly incised auricles on the stipules of the cauline leaves (Table 1). The degree of the connation of the stipules of the radical leaves of *Potentilla*, especially sect. *Leptostylae* and allied taxa, is important and is useful for distinguishing related species (Soják, 1988; Ikeda & Ohba, 1993). *Potentilla montisvictoriae* as proposed here is based mainly on these differences. As Kingdon Ward (1958) pointed out, the alpine plants of Mt Victoria are scarcely thought to be invaders, but rather relicts of a former extension during the last ice age, and subsequently isolated by several geographical barriers. As in the case of *Sedum* (Ohba, 1975, 1981), speciation in *Potentilla* is rapid and gives rise to many, well-differentiated local species.

TAXONOMIC TREATMENT

***Potentilla montisvictoriae* H. Ikeda & H. Ohba, sp. nov. Figs 1, 2.**

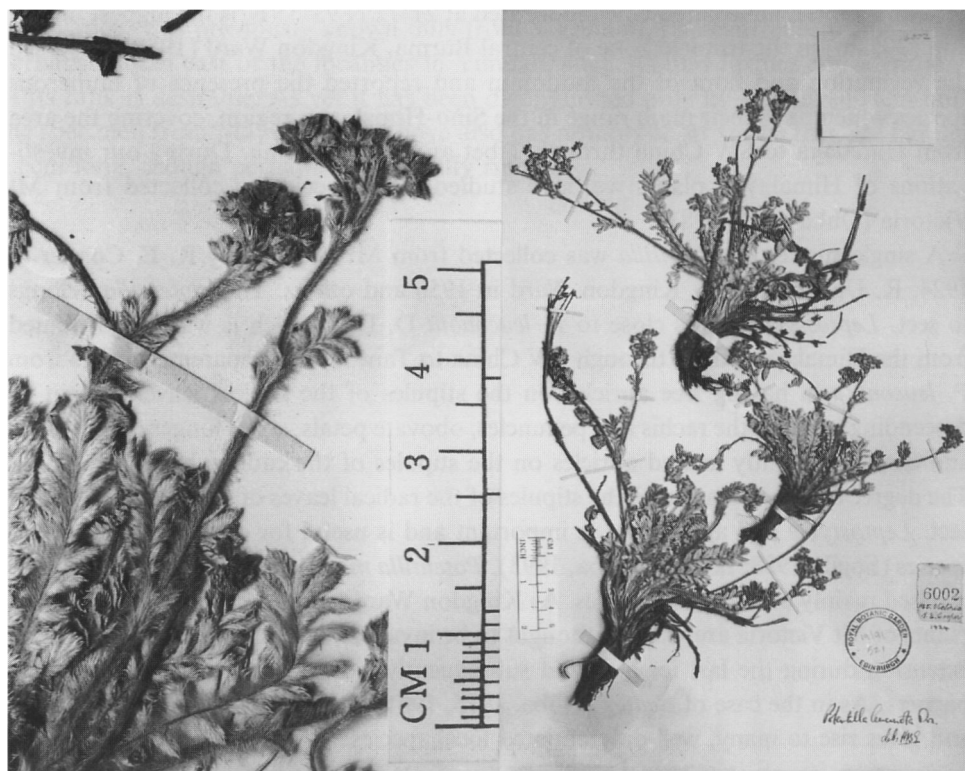
Potentillae leuconotae D. Don primo aspectu maxime similis, sed stipularum auriculis foliorum radicalium haud connatis, illis caulinorum integris vel leviter incisiss,

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TABLE 1. Comparison of *Potentilla montisvictoriae* and *P. leuconota*.

	<i>P. montisvictoriae</i>	<i>P. leuconota</i>
Auricles on stipules of radical leaves	Free	Connate in basal part
Hairs of rachis and peduncles	Patent or descending	Appressed or ascending
Petals	Obovate	Elliptic to round
Length of style relative to ovary	Longer	Shorter
Auricles on stipules of cauline leaves	Entire or shallowly incised	Deeply divided
Distribution	C Burma (Mt Victoria)	NW India, Nepal, Sikkim, Bhutan, SW China, Taiwan

FIG. 1. *Potentilla montisvictoriae* H. Ikeda & H. Ohba (Cooper 6002, holo. E).

rachidibus pedunculisque pilis patentibus descendentibusve obtegentibus, petalis obovatis et stylo ovario longiore.

Perennial prostrate herb, 10–18cm high. *Radical leaves* forming a rosette, imparipinnate, oblanceolate, 4–12cm long, 1–5cm wide, 6–12 pairs of lateral leaflets usually

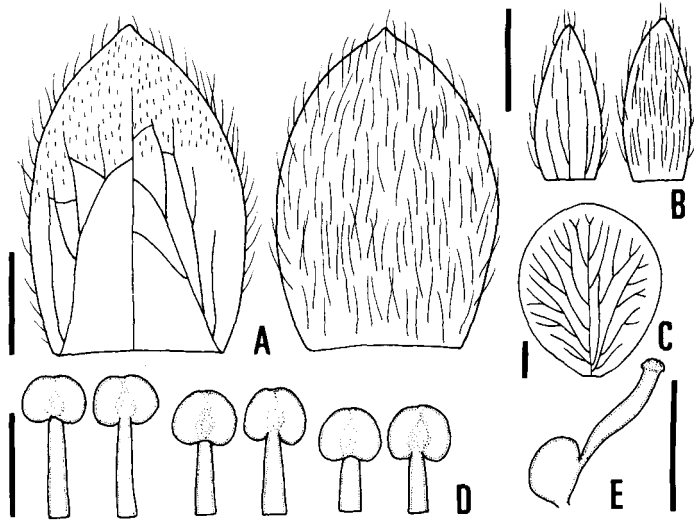


FIG. 2. *Potentilla montisvictoriae*. A, sepals, inner surface (left) and outer surface (right); B, episepals, inner surface (left) and outer surface (right); C, petal; D, three types of stamens: antisepalous (left two), between petals and sepals (middle two) and antipetalous (right two). For each pair, inner surface (left) and outer surface (right); E, pistil. Bars indicate 1mm.

with alternating small leaflets; petioles 1–3cm long; lateral leaflets gradually reduced in size towards base; base of uppermost leaflet pair decurrent; leaflets sericeous beneath, patent or descending hairs on rachis; terminal leaflet sessile, oblong to narrowly obovate, 5–8mm long, 3–4mm wide, serrate with 10–15 teeth. *Stipules* adnate to petioles in lower half; auricles on stipules free, long triangular to lanceolate with acute tips. *Peduncles* from axils of radical leaves. *Cauline leaves* with 3–7 pairs of leaflets; stipules adnate to petioles in lower half; auricles of stipules triangular to ovate, entire or with 2–3 teeth with acuminate tips. *Pedicels* 0.5–1.5cm long with patent hairs.

Flowers in a dichasium, resembling a loose umbel; hermaphrodite, actinomorphic, 8–12mm across; hypanthia 4–8mm across. *Episepals* 5, lanceolate to narrowly elliptic, 1.5–2.0mm long, 0.7–1.0mm wide, apex acute or obtuse, sparsely strigose above, sericeous beneath. *Sepals* 5, elliptic to ovate, 2.5–3.0mm long, 2.0–2.5mm wide, entire, apex acute or obtuse, lanate upper half above, sericeous beneath. *Petals* yellow, obovate with round or retuse apex, 3.0–4.0mm long, 2.6–3.3mm wide. *Stamens* 20, in 3 whorls; antisepalous ones 5, from the inner whorl longer than others, 1.2–1.4mm; antipetalous ones 5, from the middle whorl shorter than others; those located between petals and sepals 10, from the outer whorl; anthers globose to ellipsoid, sub-basal, with 4 locules, 0.4–0.5mm long, 0.4–0.5mm wide. *Ovaries* ellipsoid, smooth, 0.5–0.6mm long, 0.4–0.5mm wide; styles lateral, 0.6–1.0mm long; stigmas slightly inflated and papillate; placenta located at ventro-lateral side near style base.

Type: C Burma, Mt Victoria, 1924, *Cooper* 6002 (holo. E, iso. E).

Other specimens examined. BURMA. Mt Victoria: 8500ft, 16 iv 1926, *Unwin* 3045 (E); 9000–10,000ft, 9 iv 1956, *Kingdon Ward* 21981 (E); Chin Hills, 10,000 ft, iv 1939, *Dickason* 8524 (A, L); Mindat distr., Hilawng ridge, 8500ft, 8 xi 1962, *Gale* 9130 (E).

The species of the section *Leptostylae* are distributed continuously in the Sino-Himalayan region through Himalaya to SW China and S Tibet, and disjunctively in Taiwan and the Malesian islands, such as the Philippines, Borneo and New Guinea. All the species distributed in Taiwan and Malesia are regarded as endemic, some even restricted to a single island, e.g. *P. tugitakensis* Masamune, endemic to Taiwan, and *P. borneensis* Stapf in Borneo. *Potentilla montisvictoriae* is also an endemic and isolated species, closely related to the species in the Sino-Himalayan region.

Yü & Li (1980, 1985) proposed an infrageneric classification of *Potentilla* in China and established the series *Pedunculares* in sect. *Leptostylae*. *Potentilla leuconota* is included in series *Pedunculares*, and *P. montisvictoriae* certainly belongs there too. *Potentilla leuconota* and *P. montisvictoriae* have umbel-like inflorescences, a character unique in section *Leptostylae*, perhaps indicating a natural group in the genus *Potentilla*, and *P. montisvictoriae* is, perhaps, derived from *P. leuconota* through long isolation after the last ice age.

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