

Leontopodium montisganeshii, a New Species of Asteraceae
from Ganesh Himal, Central Nepal

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Abstract A new species, *Leontopodium montisganeshii* (Asteraceae), is described from Ganesh Himal, Central Nepal. It is similar to *L. himalayanum* DC., but differs by having linear cauline leaves.

Key words: *Leontopodium*, Ganesh Himal, Himalaya, alpine flora.

The genus *Leontopodium* was revised by Handel-Mazzetti (1927). Kitamura (1982) recognized eight species of *Leontopodium* in Nepal. Two of them have glandular hairs on the stems and leaves; three of them are small plants with stems less than 5 cm long and with few capitula (1–5); the remaining three, *L. himalayanum* DC., *L. brachyactis* Gand. and *L. jacotianum* Beauv. have rather tall stems (6–20 cm long) and many capitula (more than 5), but the latter two are stoloniferous.

A new *Leontopodium*, which matches none of these species, was collected during our field research in Ganesh Himal in Nepal Himalaya at 3490 m above sea level in 1994.

The new *Leontopodium*, *L. montisganeshii*, is similar to *L. himalayanum* in having usually solitary (or caespitose) stems without glandular hairs and prominent radiating leaves with long, white, densely woolly pubescence, but differs in having linear leaves, usually 5 radiating leaves, ca. 16 (versus ca. 30) pappus bristles, and always papillose achenes (including sterile ones).

This species also resembles *L. ochroleucum* Beauv., which ranges from Sikkim to Mongolia, C Asia and Siberia through Tibet, Xinjiang, Qinghai (Ling, 1979), but differs by the linear cauline leaves and the radiating leaves with dense, white (not yellow), long, woolly pubescence.

Differences separating *Leontopodium montisganeshii* from *L. himalayanum* and *L. ochroleucum* are summarized in Table 1.

***Leontopodium montisganeshii* S. Akiyama, sp. nov.** [Figs. 1 & 2]

Ex affinitate *L. himalayano* DC. et *L. ochroleuco* Beauv., ab hoc foliis linearibus et achaeniis semper papillatis, ab illo involucro pubescenti, caulium foliis linearibus, bracteae foliis dense albo-pubescentibus bene differt.

Perennial herbs with short rhizomes, usually gynodioecious; stems solitary (or

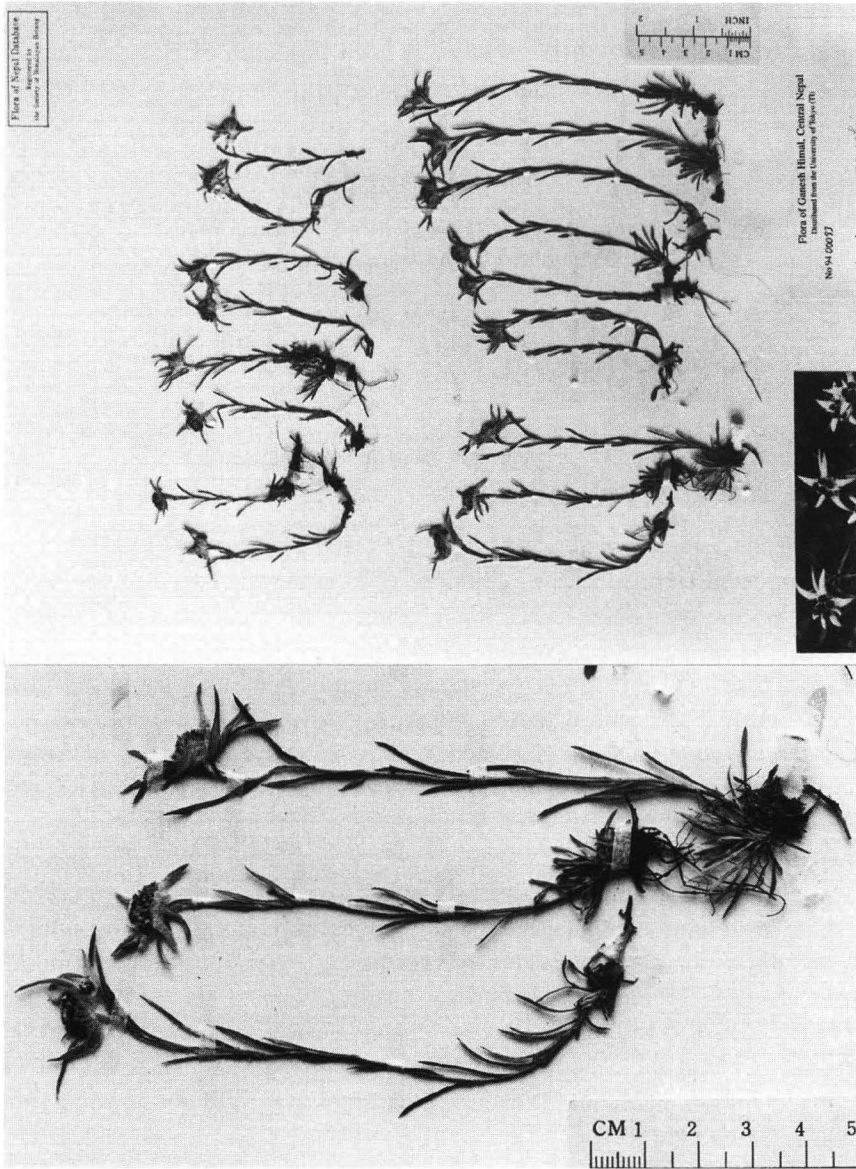


Fig. 1. Holotype of *Leontopodium montisganeshii* S. Akiyama.

caespitose), 6–12 cm tall, loosely leafy throughout. Basal leaves of innovation shoots congested, linear, 1–2 cm long, ca. 1 mm wide, apex acute to obtuse with a mucro, base attenuate, margins entire and slightly revolute, green and long white densely woolly pubescent on upper surface, more densely pubescent on lower surface; cauline

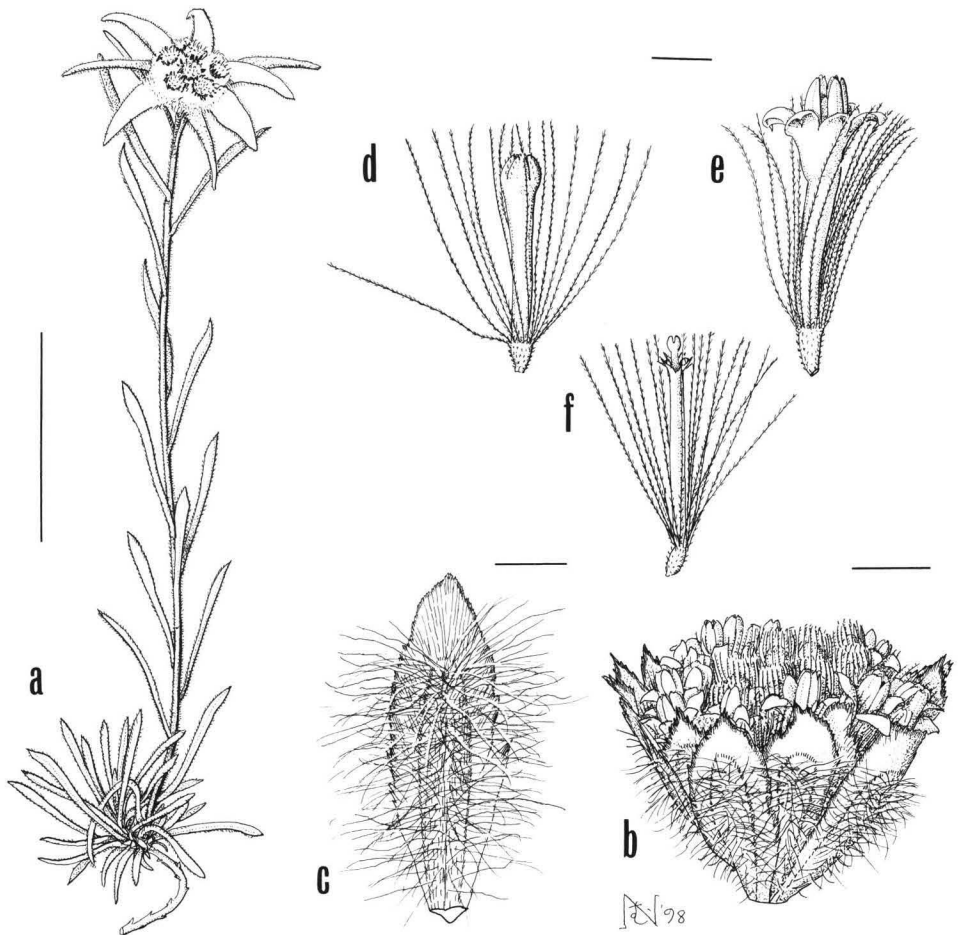


Fig. 2. *Leontopodium montisganeshii* S. Akiyama (type). a: Habit. b: Capitulum. c: Involucral bract. d & e: Hermaphrodite (and staminate) floret. f: Pistillate floret. Bar=3 cm (a); 1 mm (b–f).

leaves same as basal ones of innovation shoots but longer, linear, 1.5–2.8 cm long, ca. 1 mm wide. Radiating leaves usually 5 (or 6), rarely with one or two short radiating leaves (0.3–0.9 mm long), prominent, subtending a capitulum, lanceolate, 1–1.8 cm long, 1.5–2 mm wide, apex acute, mucronate. Capitula disciform, in a flat topped terminal corymb, marginal capitula usually 5, central capitulum largest, 5–8 mm in diam., involucral bracts brownish scarious on margins, rhombic, ca. 3 mm long, ca. 1 mm wide, apex and margins incised, central part white, navicular, densely long white woolly on outer side.

Corolla of pistillate florets tubular (not broadening upward), 2- or 3- (or 4-) lobed; lobes papillate on abaxial surface. Corolla of hermaphrodite (and staminate)

Table 1. Comparison of *L. himalayanum*, *L. ochroleucum* and *L. montisganeshii*.

	<i>L. himalayanum</i>	<i>L. ochroleucum</i>	<i>L. montisganeshii</i>
Basal leaves	narrowly lanceolate, apex acute	oblong, spatulate or lanceolate, apex obtuse	linear, apex acute
Radiating leaves	usually 6–8, narrowly lanceolate, with silver hairs	few, elliptic or oblong-lanceolate, with yellow hairs	usually 5, lanceolate, with white hairs
Involucral bracts	lanceolate, acute or rotundate, often deeply incised	lanceolate, apex rounded or subacute	lanceolate, apex and margins incised
Achenes	glabrous or moderately papillose or intensely hirsute and sterile ovaries glabrous	glabrous or papillose	papillose

florets tubular but slightly broadening upward, usually 5-lobed; lobes triangular-ovate, spreading, apex acute; stamens slightly exerted at anthesis, filaments entire, anthers acute at apex, sagittate at base. Achenes (immature stage) oblong-obovate, $\pm$ flattened, ca. 0.7 mm long, densely to moderately papillate; papillae oblique; pappus bristles ca. 16, short-setulose.

Type: C Nepal: Bagmati Zone, Rasuwa Distr., Lipchet Kharka–Makgan Kharka, 3490 m (F. Miyamoto *et al.* 9400093, TI-holo, KATH and TNS-iso).

Note: This species has a few short radiating leaves 0.3–0.9 mm long. The short radiating leaves are interpreted as being the lowest involucral bracts of the outermost capitula.

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