

retuse to shallow notched at apex, scarious along margins (the inner ones), hirsute on midrib outside, ciliate at apex. Receptacle convex, necked; florets 14-15 mm long, yellow; tube slightly shorter than the ligule; ligule unequally 5 fid at apex with blackish tip; anthers 2.5-3 mm long, tailed, blackish; pollen spherical, echinate; style 12-13 mm long, glabrescent; stigmatic branches equal to floret length, somewhat flattened, ca 1 x 0.3 mm; barbs on outer surface numerous, blackish. Achenes narrowly oblong, ca 7 x 1 mm, subcompressed to triangular, narrowed at both ends, contracted at the neck above, strongly 10-ribbed; ribs hispid towards apex; yellow with dense blackish-brown patches. Pappus biseriate, 11-13 mm long, dull brown at base, shining white elsewhere, barbate-bristly, persistent.

Flowering & Fruiting : July-October.

Habitat : The species grows on the open alpine rocky slopes between 4000-4200 m. altitudes.

SYSTEMATIC TREATMENT

1. ***Lactuca pseudo-umbrella*** D. Maiti et G.G. maiti var. ***pseudo-umbrella***.

Specimen examined : INDIA : Sikkim : Muguthang, 31 Aug. 1991, Maiti & Sinha 22485A (CAL-Holotype); *ibid*, Maiti & Sinha 22485 B&C (BSHC-Isotypes).

2. ***Lactuca pseudo-umbrella*** D. Maiti & G.G. Maiti var. ***chauhani*** D. Maiti et G.G. Maiti var. **nov.** *Lactuca cooperi sensu*, Maiti, Shukla et Sinha (*Ind. Jour. For* 22(2) : 91-92. 1999). non Anthony (Notes Royal Bot. Gard. Edinburgh 18 : 198. 1934).

a typo differt magnitudine parviore, 6-7 cm diam., et capitulis paucis (10-20). (HOLOTYPUS : G.P. Sinha & B.K. Shukla 20455 A (CAL) et. ISOTYPI G.P. Sinha & B.K. Shukla 20455 B & C (BSHC).

Differs from the typical one by its smaller size (6-7 cm across), and few capitula (10-20).

Specimens Examined : INDIA : Sikkim : Kupup, 17 Sept, 1998, B.K. Shukla & A. Maiti 18900 (BSHC); Kupup, 17 Sept. 1998, G.P. Sinha & B.K. Shukla 20455 A (CAL- Holotype); *ibid* G.P. Sinha & B.K. Shukla 20455 B&C (BSHC-Isotypes); Kupup, 20 Sept. 1986, S.K. Rai 7356 (BSHC); Kupup, near Beland chu lake, 13 Sept. 1985, D.C.S. Raju 4421 (BSHC).

Key to the varieties :

- 1a. Plant larger (10-15 cm in diam), capitula numerous (more than 30) var. *pseudo-umbrella*
 1b. Plant smaller (6-7 cm in diam.), capitula few (up to 20) var. *chauhani*.

Notes : The specific delimitation of *Lactuca* and some allied genera is determined by the size and number of involucre bracts, number of florets per capitulum and different characters of cypselas, cypselar beak including the number of ribs. These new taxa are closely related to *L. cooperi* Anthony (1934 l.c.) but can be easily differentiated by the characters of leaves, involucre bracts, florets and achenes. The ribbed and necked achenes is quite distinct to fall it under the genus *Lactuca* (Bremer, 1994). Moreover, *L. cooperi* Anthony is described with ca 6 involucre bracts which is quite unnatural and unusual to the genetic characters of *Lactuca*.

The specific epithet is adopted due to its similar appearance with the taxon *Soroseris umbrella* Stebbins.

The varietal epithet is adopted based on the name of Dr. A.S. Chauhan, Scientist E, Botanical Survey of India, Sikkim Himalayan Circle for his contribution to the floristic study of North East India.

REFERENCES

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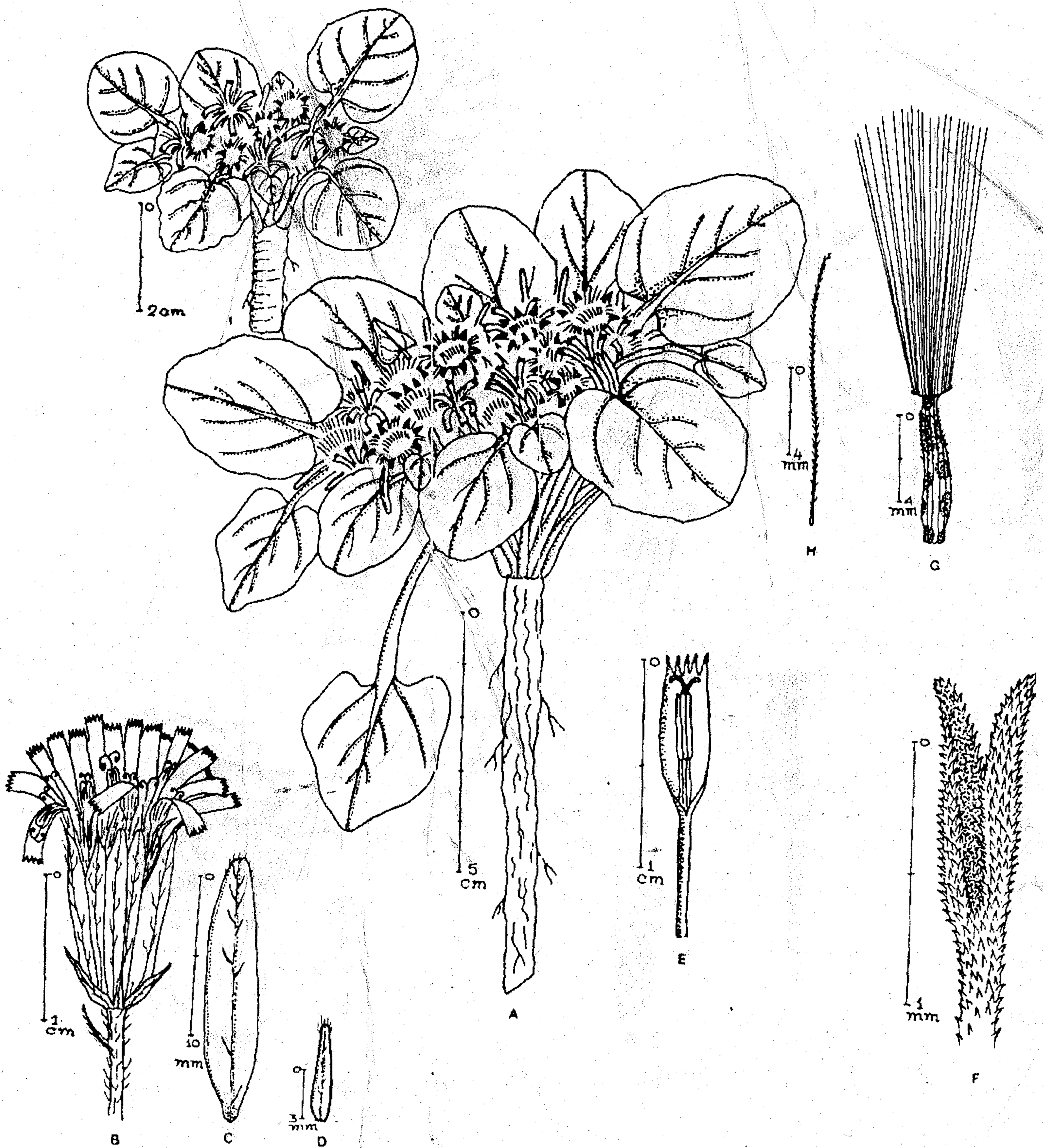


Fig 1 (A-H). *Lactuca pseudo-umbrella* D.Maiti & G.G. Maiti var. *pseudo-umbrella*;
A-habit; **B**-capitulum; **C**-inner bract (dorsal face); **D**-outer bract (dorsal face); **E**-floret; **F**-stigmatic
 braches; **G**-cypsela; **H**-pappus hair (Drawn by D. Maiti from Maiti & Sinha 22485);

Fig. 1. **I**-habit of *Lactuca pseudo-umbrella* D. Maiti & G.G. Maiti var. *chauhani*
 D. Maiti & G.G. Maiti

(Drawn by D. Maiti from Sinha & Shukla 20455).