

**LEPTODERMIS VIRGATA EDGEW. EX HOOK. F. (RUBIACEAE) — A RARE PLANT FROM MANDI DISTRICT ( HIMACHAL PRADESH )**

During identification of the old collections of Himachal Pradesh from Mandi district an interesting species of Rubiaceae was noticed, gathered from Aut (1400 m) in the Beas valley. There was no matching specimen of the material at BSD and after critical study its identity has now been confirmed as *Leptodermis virgata* Edgew. ex Hook. f.

The species is very rare and distributed only in N. W. Himalaya. Though the species has been reported from Muree to Kulu including salt range 1200-2000 m by Hooker (1881), Brandis (1902), Bamber (1916) and Parker (1956), its herbarium record is very poor. Stewart (1972) collected the specimen from Kashmir but the materials are not preserved in any Indian Herbarium. Collections from Kashmir by Duthie in 1883 and Lambert in 1926 are housed in CAL and DD herbarium respectively, which are the only recent collections from N. W. Himalaya. Brandis (l. c.) and Dunn (1911) mentioned its occurrence in China but this distribution has not been indicated in Index Kewensis (1895).

As the species is rare and found only in the distributed areas of Beas Sutlej Link Project, require attention for conservational measure.

The specimens identified for this study are deposited in the Herbarium of Botanical Survey of India, N. C., Dehra Dun (BSD).

***Leptodermis virgata*** Edgew. in Aitchison Cat. Punjab Pl. 70. 1869 (nom. nud) Hook. f. Fl. Brit. India 3 : 198. 1881.

A slender rigid, excessively branched low shrub, branches erect or divaricate, white with spreading pubescens. Leaves 0.62-1.25 cm by 0.20-0.31 cm, fascicled straight or somewhat falcate, margins flat or recurved

pale beneath nerves obscure, stipules triangular with rigid long pungent points and thickened margins, white. Bracts often equalling the capsule, calyx glabrous, teeth



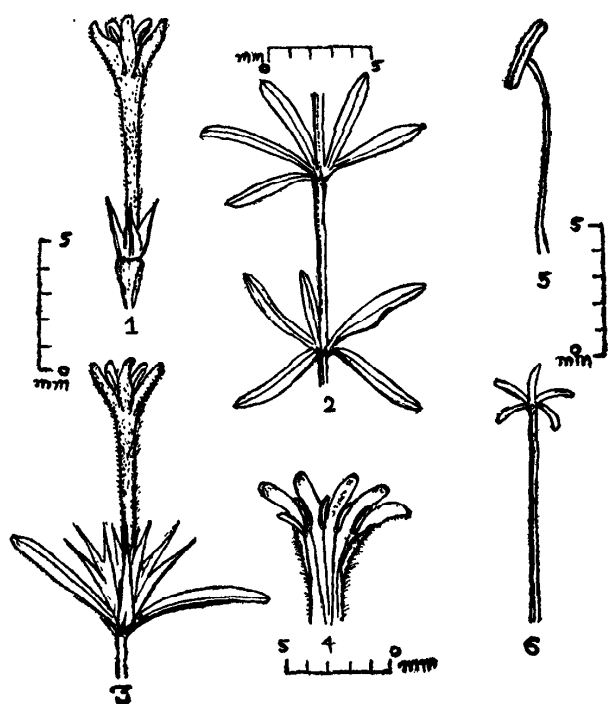
*Leptodermis virgata* Edgew. ex. Hook. f.

lanceolate long ciliate, corolla 0.83 cm long, pubescent, light purplish or white. Capsule 0.31 cm subcylindric. Seed with a few free fibres attached to the integuments.

**Flowers and Fruits :** July-August.

**Distribution :** Muree Salt Range. Kashmir to Himachal Pradesh, 1400-2100 m.

Occasional on dry rocky exposed slopes. North China.



*Leptodermis virgata* Edgew.

Figs. 1-6 : 1. A complete flower. 2. Part of branch showing fascicled leaves. 3. A flower. 4. Flower split open. 5. Stamen. 6. Style and lobed stigma.

*Specimens examined* : Kulu, Brandis 33729 (CAL); Clarke 31416 (CAL) 1876; Reporter on Economic Products to Govt. of India, 13446 (CAL) 1894; Hazara, Duthie 7491 (DD) 1888; Kashmir, Inyat 19634 (DD) 1896; Lambart 43016-43020 (DD) 1926; Swajan Pulga, Kirat Ram 13750 (DD); Aut 1400 m, Mandi (H. P.), Murti & Prasad, 62122 (BSD) 1977.

#### ACKNOWLEDGEMENTS

Thanks are due to the authorities of the Forest Research Institute (DD) and the Deputy Director, Northern Circle, Botanical Survey of India, Dehra Dun for facilities and encouragement.

D. BASU

Botanical Survey of India, Dehra Dun

#### REFERENCES

- BAMBER, C. J. Plants of the Punjab. 49. 1916.  
 BRANDIS, D. Indian Trees. 39. 1906.  
 HOOKER, J. D. Flora of British India. 3 : 198. 881.  
 PARKER, R. N. A Forest Flora for the Punjab with Hazara and Delhi.

### *LISTERA TENUIS* LINDL.—A RARE AND INTERESTING ORCHID FROM THE NORTH WESTERN HIMALAYA

The terrestrial orchid genus *Listera* R. Br. is poorly known from the North Western Himalaya. Whatever is known is rather exiguous which may be attributed to the inconspicuous flowers they possess and the habitat, undisturbed temperate and sub-alpine forest floor, they occupy. While exploring the Nandadevi National Park recently, the senior author collected a few *Listera* spp. Two populations of them were found to grow on moss-covered rocks in *Abies*, *Pinus*, *Rhododendron* and *Betula* forest. On critical study in the herbarium they were found to belong to two different species. The characters of specimens of one collec-

tion tally with those of *Listera tenuis* Lindl. in general, so far known from the Sikkim Himalaya, Nepal and the Chumbi valley in Tibet. The present finding shows its distribution in the North Western Himalaya as well. Its occurrence in the intervening areas may not be ruled out and intensive searches by future explorers might lead to its discovery. Another pertaining point needing mention here is that *L. tenuis* appears to be a highly variable species. Examination of the specimens from Nandadevi as well as the old collections of Pantling from Sikkim housed in the herbarium of the Forest Research Institute, Dehra Dun, revealed