

Andrewsianthus ferrugineus Grolle

Status: **Endangered (EN)** B1,2cd

Class: Marchantiopsida

Order: Jungermanniales

Family: Lophoziaceae

Description and biology: Plants green, red-brown or red. Stems fragile, to 2cm long, leafy shoots 1-2mm broad. Branching dorsal-intercalary. Leaves obliquely subtransversely inserted, somewhat concave, rounded-quadrate, leaf apex 1/5-1/4 trilobed, or bilobed on slender branches, lobes triangular, acute, entire. Leaf cells isodiametric, 15-20µm diameter, with weak trigones at angles, surface with large papilla over each trigone. Underleaves rudimentary, 1-4-celled. Dioicous. Androecia, perianths, sporophytes and gemmae unknown.

Distribution and habitat: A Himalayan endemic recorded from Central Nepal, East Nepal, Sikkim and Bhutan, in total 8 localities. It is an alpine species found between 2440m and 4075m in alpine *Abies/ Juniperus* forests, growing on mossy tree-trunks, and above the tree-line in *Rhododendron* scrub, on open hillsides, mossy boulders and wet rocks by streams. It can tolerate both acidic and calcareous rocks.

History and outlook: First discovered in East Nepal by J. Poelt in 1962 and described by Grolle (1966). In 1963 found in a second locality in East Nepal by K. Yoda, and again by Japanese botanists in 1972. Miehe (1990) reported it from Langtang in Central Nepal. In 1979 D.G. Long discovered it in Bhutan, then in a new locality in East Nepal in 1979, and in two localities in Sikkim in 1992. Although considered rare, this is a small species, easily overlooked and it is likely to prove more widespread. Nevertheless, these habitats are vulnerable to over-grazing by yaks, clearance of forest and scrub for grazing, burning, and cutting of alpine forests for fuel wood, especially for trekking parties, mountaineers etc. Protection is unknown except in Langtang National Park in Central Nepal.

Illustration: Grolle (1966, Fig. 3).

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