

Skottsbergia paradoxa M.A. Cardenas

Status: **Endangered (EN)** B1, 2c,d

Class: Bryopsida

Order: Dicranales

Family: Ditrichaceae

Description and Biology: This is a monotypic genus that grows in compact, small, short turfs. It is light green, with a conspicuous red setae. Fuegian plants grow up to 10cm in height and the leaves are approximately 2.5 to 3.5mm in length; the setae grow up to 3cm in length. South Georgian material is smaller in all aspects. They are usually fertile with abundant fruit. Asexual reproduction is unknown. The species is monoicous. The peristome structure is unusual and its evolutionary role should be investigated. It is asymmetrical and has nine short teeth and seven long teeth that seem smooth or finely granulose. It is conspicuously cross-banded and the spores which are approximately 45–50µm in diameter are granulate-verrucate (Matterer 1987).



The moss *Skottsbergia paradoxa*
Card. A habit; B. leaves. Illustration by
Celina Matterer.

Distribution and Habitat: The plant is endemic to the South Georgian-Fuegian region. It is distributed in Fuegian bogs amongst deciduous *Nothofagus* forests and is unknown from evergreen forest bogs. The pH of Fuegian peat bogs ranges between 5.5 and 6.5 whilst the annual rainfall levels in deciduous forests range between 500–800mm (Matterer 1988). The species is hygrophytic, and can also be found on the wet soil of open peat bogs and marshes scattered amongst other mosses between 100 and 650m a.s.l..

History and Outlook: Since 1950 it appears to have been collected only three times on the Fuegian Isla Grande. In view of its present distribution, the species may have had a larger distribution in Gondwanic times. The present sites are not protected on the Fuegian Island, as all sites are outside the National and Provincial Parks of Tierra del Fuego. The species is threatened by destruction of its original habitats. The Tierra Mayor peat bog (54°43'S 68°02'W.) and the area around the summit of Glaciar Le Martial (North of Ushuaia, 54°46'S 68° 29'W.) should receive protection.

References: Cardot, J. 1905. Deux genres nouveaux de Mousses acrocarpes. *Rev. Bryol.* 32: 45–47; Roivainen, H. and Bartram, E.B. 1937. Bryological investigations in Tierra del Fuego. I. Sphagnaceae-Dicranaceae. *Ann. Bot. Soc. Zool.-Bot. Fenn. Vanamo* 9(2): 1–56; Matterer, C.M. 1987. Las esporas recientes de los Musei (Bryophytes) de las tuberas de Sphagnum de Tierra del Fuego, Argentina. *Bol. IG-USP, Inst. Geocienc. Univ. S. Paulo* 17: 109–119; Matterer, C.M. 1988. Distribution maps of mosses from Tierra del Fuego, Argentina. 1. *Lindbergia* 14(3): 176–178.

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