

**Grimmia bicolor Herzog - Beih. Bot. Centralbl. 26: 66.
1910.**

Type: Bolivia, prov. Cochabamba, Llavatal, 3600 m, Jan. 1908, leg. Th. Herzog, lectotype, designated by Muñoz (1999a), JE!; isolectotype, PC!

Synonyms: *Grimmia subquatricruris* Broth.

Distribution: Am.4

Description

Grimmia bicolor grows in glaucous-green to blackish-green patches, the leaves densely set, loosely appressed, flexuose when dry, erecto-patent when moist, ovate to ovate-lanceolate, broadly carinate, perichaetial leaves larger, oblong-lanceolate, filiform shoots with small leaves, arising from the basal part of older stems, frequently present, the costa is firm, greatly projecting on dorsal side, hair-points are short, smooth to weakly denticulate, margin plane to recurved below on one side. The distal areolation is bistratose, mid-leaf cells \pm isodiametric with sinuose walls, basal marginal cells quadrate to short-rectangular with thickened transverse walls, basal juxtacostal cells rectangular with slightly incrassate smooth walls. The sexuality is dioicous, capsules on sigmoid seta are occasionally present, they are exserted, ovoid to obloid, with a conical to mammillate operculum.

Discussion:

Grimmia bicolor is only known from a few scattered collections in Bolivia, where it was gathered from rock along glaciers between 3600 and 5180 m. The species is characterized by densely set, ovate, broadly carinate, sheathing leaves with a bistratose distal part, and a rather uniform unistratose, pellucid basal part. Herzog (1910) described non-fruiting material, in Herzog (1916) additional material with sporophytes was described and illustrated. It is peculiar that Herzog found *G. bicolor* on both his travels through Bolivia while since that time, it has been collected only a few times, so its distribution is far from known, and the species is probably quite rare.

Specimens examined

Bolivia. An Felsen beim Huailattanisee, alt. 4900 m, leg. Th. Herzog nr. 2973, October 1911, L!; An Felsen im Schneetälchen des Cerro Tunari, alt. 5100 m, leg. Th. Herzog nr. 4772, Mai 1911, L!;

References

- Herzog, Th. 1910. Beiträge zur Laubmoosflora von Bolivia. Beiheft zum Botanischen Centralblatt 26: 45-102.
- Herzog, Th. 1916. Die Bryophyten meiner zweiten Reise durch Bolivia. Bibliotheca Bot. 87: 58.
- Muñoz, J. 1999b. A revision of *Grimmia* in the Americas: 1: Latin America. Ann. Missouri Bot. Gard. 86: 131-133.