

Grimmia plagiopodia Hedw. - Spec. Musc. Frond: 78. 1801.

Type: Germany, Jena, Febr. 1798, leg. Flugge, holotype, G; isotypes, GOET, JE!

Synonyms: *Grimmia argentea* R. Br. ter, *G. arvernica* Philib., *G. brandegei* Aust., *G. nivea* Dus., *G. obtusa* Brid., *G. plagiopus* Spreng., *G. plagiopodia* var. *antarctica* Bart.

Distribution: Am.1,6. Ant. Austr.2. Eur.

Description

Grimmia plagiopodia grows in green and not very hoary, to white-hoary patches, the leaves are appressed and imbricate when dry, erecto-patent when moist, broadly oblong-lanceolate, concave-keeled, above, abruptly contracted into hair-point, costa is flat or somewhat channeled, vanishing in distal leaf, slightly rounded-projecting at dorsal side, hair-points are short to long, flattened at base and broadly decurrent and denticulate, margins are plane to erect, sometimes slightly recurved. The distal areolation is unistratose, mid-leaf cells are quadrate to short-rectangular with slightly incrassate walls, basal marginal cells are hyaline, rectangular with thin walls, basal juxtacostal cells are hyaline, rectangular with thin walls. The sexuality is autoicous, seta is very short and curved, excentrically attached to the capsule, capsules are usually present, they immersed, ovoid and ventricose with mammilate operculum.

Discussion:

Grimmia plagiopodia has a cosmopolitan distribution but it is rare in its entire distribution area. Being the only *Grimmia* s.s. species in Hedwig (1801), it forms the nomenclatural basis for the genus. Preferent substrate is basic sandstone but it has been found on limestone and concrete also. The species is characterized by flat, hardly hoary to extremely hoary patches with shiny imbricate leaves and usually present, peristomate, ovoid, ventricose capsules on a very short, excentrically attached seta. A form with long hair-points and shorter peristome was described as *G. arvernica*, later on reduced by Boulay as var. *arvernica*. I have seen specimens of this taxon from France (Cantal), and I do not see a reason for a specific rank for this probably xerophytic form, which is comparable with material that I found in New Zealand (Greven 1998). *G. plagiopodia* has a peculiar, shiny, succulent habit

and shows some resemblance to *G. anodon* and *G. crinita*, however it differs from the first in having a peristome and a unistratose leaf margin, and from the second by the broadly oblong leaves.

Specimens examined

Czechia. Bohemia, Kralupy, leg. Velenovsky; **France.** Cantal, Grottes de Fraisse, alt. 1130, leg. Culmann; Cantal, Murat, Enterroche, alt. 900 m, leg. Culman; **Germany.** Thüringen, Kr. Gotha, Arnstadt, Kaffberg, leg. R. Düll; Thüringen, Erfurt, Kallenberg, leg. H.C. Greven, nr. 2664; Thüringen, Naumburg, Wethautal, leg. Schliephacke; Naumburg, Saale, Ruine Schönburg, leg. K. Schliephacke; Saale, Schlosz Goseck, leg. Bergner; **Hungary.** Zempleni-hegyseg, Boldogkö, leg. H.C. Greven, nr. 2434; **Slovakia.** Bokemia, Kralupy, leg. Velenovsky; **Canada.** Alberta, Waterton Lakes, Buchanan Ridge, alt. 7700 ft., leg. G.W. Scotter; Alberta, Dry Island, Red Deer River, leg. D.H. Vitt; **U.S.A.** Wyoming, Weston Co., Newcastle, leg. P.M. Eckel; Utah, Millard Co., Pavant Mnts, Maple Grove, alt. 6200 ft. leg. S. Flowers; **Bolivia:** south of Oruro, between Poopó and Pazña, conglomerate wall, alt. 3705 m, leg. H.C. Greven nr. Bol. 64, 16-05-2005; Road nr. 1 to Oruro, 2 km north of Huancane, limestone, leg. H.C. Greven nr. Bol. 63, 20-05-2005;

References

- Greven, H.C. 1998b. Synopsis of *Grimmia* Hedw. in New Zealand, including *Grimmia wilsonii* sp. nov. Journal of Bryology 20: 398-402.
- Hedwig, J. 1801. Species Muscorum Frondosorum. p. 78, t. 15. Leipzig.
- Ochyra, R. 1993. *Grimmia plagiopodia* in the Southern Hemisphere. Fragm. Flor. Geobot. 38: 21-27.