Grimmia stolonifera C. Müll. - Bot. Jahrb. 5: 81. 1884.

Type: Kerguelen Isl., Foundery Branch, Nov. 1874, leg. F. Naumann, lectotype,

designated by Muñoz & Pando (2000), PC; syntypes L!, U!

Distribution: Afr.4

Description

Grimmia stolonifera grows in loose, reddish-brown, hoary tufts, the leaves are apppressed when dry, patent when moist, keeled, abruptly contracted into hairpoint, broadly-lanceolate; short-leaved filiform shoots arise from the basal part of the stem, the costa is firm, projecting on dorsal side, hair-points are short to rather long, nearly smooth, margins are plane or recurved on one side. The distal areolation is unistratose, only at margins bistratose, mid-leaf cells are quadrate to short-rectangular with incrassate and sinuose walls, basal marginal cells are short-rectangular with \pm thin walls, basal juxtacostal cells are short-rectangular with thin walls. The sexuality is autoicous, capsules on arcuate setae are usually present, they are exserted, ovoid, smooth, peristome teeth entire, orange, papillose on both sides, the operculum is mammillate.

Discussion:

Grimmia stolonifera was collected during the international Venus expedition to Antarctica (Sept. 1874 - Jan. 1875). Going on an observational expedition to the subantarctic Kerguelen Island, the German scientist Naumann collected plants. The bryophytes from his collection were identified by C. Müller who published a large number of new Grimmias among which G. stolonifera. Although the majority of these species appeared to be Schistidium or Racomitrium, his G. stolonifera is obvious a Grimmia. Müller remarked in his protologue: 'optima species', and I agree with him. G. stolonifera is rather peculiar because it resembles both G. pulvinata and G. orbicularis, deviating from the first in ovate capsules with mammillate lid, and from the second in entire peristome teeth, and thin-walled basal paracostal cells. However, it is more important that it differs from both in the abundant presence of filiform innovations, so far unknown in G. pulvinata as well as in G. orbicularis. Muňoz & Pando (2000) noticed G. stolonifera, without any proof or remark, as a synonym of G. orbicularis, probably they did not detect the significant gametophytical and sporophytical differences between the two species.

Specimens examined

Kerguelen Island, Foundery Branch, leg. Dr. Naumann, *isotype*, Nov. 1875, U 62443;

References

Muňoz, J. & F. Pando, 2000. A world synopsis of the genus *Grimmia* (Musci, Grimmiaceae). Monographs in systematic botany from the Missouri Botanical Garden, Vol. 83.