Grimmia unicolor Hooker – *In*: R. K. Greville, Scott. Crypt. Fl. 3: plate 123. 1824.

Type: U.K., Scotland, Glen Clova, leg. T. Drummond, lectotype, designated by

Geissler & maier (1995), E!

Synonyms: *Grimmia brevirostris* Williams, *G. norvegica* Bryhn

Distribution: Am.1.4, As.1.2.3, Eur.

Description

Grimmia unicolor grows in dense to loose, readily disintegrating rigid patches, dull green to reddish-brown, blackish below, the leaves are loosely appressed when dry, patent when moist, from an oblong \pm clasping base narrowly linear to ligulate, apex obtuse, rounded and cucullate, the costa is broad at base, obscure above, ending below apex, not projecting on dorsal side, hair-point are absent, the margins are plane, incurved above. The distal areolation is very opaque, 2-3-stratose, the mid-leaf cells are quadrate or rounded with incrassate \pm straight walls, the basal marginal cells are short-rectangular with straight walls, the basal juxtacostal cells are rectangular with incrassate straight walls. The sexuality is dioicous, and capsules on straight to slightly arcuate seta are occasionally present, they are exserted, ovoid to oblong-ovoid smooth, with a rostrate operculum.

Discussion

G. unicolor is a boreal-alpine species with a preference for siliceous rock in damp habitats, frequently close to waterfalls and glaciers, usually occurring between 1500 and 3000 m. In favourable habitats it may form extended dark-coloured patches, which at first sight do not show the appearance of a Grimmia, because there is no trace of hair-points and the smooth, linear leaves are rather succulent. G. unicolor has sometimes been confused with G. atrata and with G. incurva fo. brevifolia but the extremely opaque upper leaf with nearly parallel incurved margins and rounded cucullate apex exclude confusion with those and other species. I have studied the type from E, where it is present in a mass, nicely fruiting. It is peculiar that, although the holotype was collected in quantity, the species was not seen in Scotland in the foregoing century until 1964, when it was rediscovered in the same area on a wet, sloping schist rock in Glen Clova (Hill et al. 1992). Grimmia stefanii, endemic to the eastern Himalaya (Tibet, China), is rather close to G. unicolor, the differences with this species are described there.

Specimens examined

Andorra. Val de Juclar, alt. 1960 m, leg. A. Sotiaux, nr. 9760; Austria. Salzburg, Kleinarltal, Grieszkareck, leg. G. Schwab; Tirol, Frosniztal, Mt. Musing, leg. Molendo; Tirol, Frosznitztal, Windischmatrei, alt. 1300 m, leg. J. Baumgartner; Corsica. Mte. Cinto, alt. 1620 m, leg. H.C. Greven, nr. 2981; Lac de Melo, alt. 1510 m, leg. H.C. Greven, nr. 2980; France. Savoie, Massive du Mt. Cernis, Mt. Malamot, leg. E.C. Wallace; Scotland. Clova Mountains, Bachnagaim, leg. W.J. Hooker; Sweden. Norköping, leg. Olsson; Switzerland. Pontresina, Morteratch, Isla Persa, alt. 2720 m, leg. H.C. Greven, nr. 2678; Wallis, Les Haudères, Val d'Hérens, alt. 2200 m, leg. H.C. Greven, nr. 2637; Wallis, Thyon, Mt. Rou-ge, alt. 2290 m, leg. H.C. Greven, nr. 2638; Fusio, alt. 1300 m, leg. M. Jäggli.

References

- Hill, M.O., C.D. Preston & A.J.E. Smith. 1992. Atlas of the Bryophytes of Britain and Ireland. Vol. 2. Harley Books, Colchester, Essex, England.
- Ignatov, M.S. & T. Cao. 1994. Bryophtes of the Altai Mountains IV. The Family Grimmiaceae. Arctoa 3: 67-122.
- Jones, G.N. 1933. Grimmiaceae. *In*: Grout (ed.), Moss Flora of North America Vol. II, Part I: 1-66. Newfane, Vermont.