Grimmia macroperichaetialis H.C. Greven - Bryologist 101: 100-102. 1998.

Type: Australia, Victoria, Mt. Buller, 1790 m, March 1997, leg. H.C. Greven No.

Aus. 35, holotype CANB!; isotypes BM!, MEL!, MO!

Distribution: Austr.1

Description

Grimmia macroperichaetialis grows in dull-green to blackish-green hoary cushions, the leaves are appressed when dry, erectopatent when moist, concave, oblong-lanceolate, subulate, above gradually narrowed into the hair-point, the costa is firm, slightly projecting on dorsal side, the hair-points are short, brittle, and denticulate, the margins are plane, incurved above. The distal areolation is bistratose ridges, the mid-leaf cells are quadrate with rounded angles and \pm smooth walls, the basal marginal cells are quadrate to short-rectangular with thickened transverse walls, the basal juxtacostal cells are short-rectangular with thin walls. The sexuality is dioicous, and capsules on straight setae are occasionally present, they are emergent above enlarged perichaetial leaves, ovoid to oblong-ovoid, chestnut-brown, and striate in the basal part, the operculum is mammillate to obliquely rostellate

Discussion

Grimmia macroperichaetialis is endemic to the Australian Alps. At high altitudes, it is a common species, occurring on various types of igneous rock from 1200-2000 m. In the field, it may be confused with G. reflexidens; however, in this latter species the capsules are clearly exserted, the upper part of the leaf is not subulate, but plane, and the leaf areolation is not bistratose, but unistratose with bistratose ridges. G. macroperichaetialis is characterized by dull, blackish patches, occasionally with capsules, partly hidden in the enlarged perichaetial leaves. It is closely related to G. montana of the northern hemispere, but differing by emergent, striate capsules with thin-walled exothecial cells, stomata at the base of the urn, and enlarged perichaetial leaves. G. macroperichaetialis has the possibility to grow in moss balls. A number of such balls was sent to me by D.A. Meagher, who found them along a walking track at Bogong High Plains, alt. 1720 m.

Specimens examined

Australia New South Wales, Kosciusko Nat. Park, Kiandra, leg. W. Forsyth, Dec. 1901, NSW 402348; Victoria, Mt. Buffalo Nat. Park, granite rock in valley east of The Horn, alt. 1380 m, leg. R. Melville nr. 2566, 27-12-1952; Victoria, Bogong

Nat. Park, northeast of Pretty Valley, leg. C. Beauglehole nr. 15833, 29-01-1966, MEL 1044734; Victoria, Bogong High Plains, Mt. Bundara, alt. 1720 m, moss balls in grassland, leg. D.A. Meagher nr. 10002287, 03-03-2005; New South Wales, Kosciusko Nat. Park, Kiandra, alt. 1410 m, grewacke outcrop, leg. H.C. Greven nr. Aus. 40, 41, 42, 45, 04-03-1997; New South Wales, Kosciusko Nat. Park, Charlotte Pass, along track to Blue Lake, alt. 1810 m, leg. H.C. Greven nr. Aus. 46, 05-03-1997; New South Wales, Kosciusko Nat. Park, Charlotte Pass, boulder near parking, alt. 1810 m, leg. H.C. Greven nr. Aus. 47, 05-03-1997; New South Wales, Kosciusko Nat. Park, Lake Cootapatamba, alt. 2045 m, leg. H.C. Greven nr. Aus. 43, 44, 06-03-1997; Victoria, Mt. Bogong Nat. Park, Falls Creek, Eagle Rock, alt. 1610 m, leg. H.C. Greven nr. Aus. 28, 10-03-1997; Victoria, Mt. Bogong Nat. park, Pretty Valley, Damside Hill, alt. 1690 m, leg. H.C. Greven nr. Aus. 49, 50, 51, 63, 64, 11-03-1997; Victoria, Mt. Buffalo Nat. Park, east slope of The Hunt, alt. 1755 m, leg. H.C. Greven nr. Aus. 34, 12-03-1997; Victoria, Mt. Buffalo Nat. Park, summit of The Horse, alt. 5654 ft, leg. H.C. Greven nr. Aus. 65, 66, 12-03-1997; Victoria, Mt. Buffalo Nat. Park, 2 km east of The Horn, alt. 1510 m, leg. H.C. greven nr. Aus. 31, 13-03-1997; Victoria, Mt. Buffalo Nat. Park, The Monolith, alt. 1455 m, leg. H.C. Greven nr. Aus. 48, 13-03-1997; Victoria, Mt. Buller, summit, alt. 1790 m, leg. H.C. Greven nr. Aus. 35, 14-03-1997, CANB!, BM!, MEL!, MO!

Tasmania

Ben Lomond Nat. Park, Giblin Peak, very common on dolerite bedrock, alt. 1545 m, leg. M.G. Noble nr. 28373, 28-02-1979, HO 41872;

References

Greven, H.C. 1998a. *Grimmia macroperichaetialis*, a new species from Australia. The Bryologist 101: 100-102.