Grimmia pulla Card. - Rev. Bryol. 36: 106. 1909.

Type: Mexico, Hidalgo, Honey Station, leg. Pringle No. 10423, lectotype, designated by Muñoz (1999), PC!, isolectotypes, CANM, FH, JE, NY!, PC (2 replicates), TENN, UC.

Distribution: Am.2

Description

Grimmia pulla grows in flat, extended, dull-green patches, the leaves are oblong lanceolate, flexuose with incurved tips when dry, spreading to squarrose when moist, lanceolate, carinate, apex with some small dents, the costa is percurrent, slightly projecting at dorsal side, hair-points are absent to short and brownish below, serrate, the margins are recurved on one or both sides. The distal areolation is unistratose, only at margins bistratose, mid-leaf cells are quadrate to oblate with slightly sinuose walls, basal marginal cells are quadrate with thickened transverse walls, basal juxtacostal cells are rectangular, the longitudinal walls are straight, slightly incrassate. The sexuality is dioicous, the seta is arcuate, capsules are occasionally present, they are exserted, obloid, striate with a rostrate operculum.

Discussion

Grimmia pulla is a peculiar Mexican endemic characterized by dull-green patches with lanceolate, keeled leaves with incurved tips. When moist, the leaves are spreading to squarrose, gradually tapering to short, slightly serrate tips or hairpoints. The male and female inflorescences are terminally positioned, the perichaetial leaves are from an oblong base narrowed to a rough subula. The seta is twisted when dry, and arcuate when moist. The peristome teeth are characterised by smooth, orange-coloured basal parts with yellowish, papillose, irregularly cleft and perforated tips. There is some resemblance to *G. pulvinata*, but this species is autoicous and usually found with capsules, the hair-points are hyaline, smooth and long, and the perigonia are situated just below the perichaetia.

Specimens examined

Mexico. Hidalgo, river ledges near Honey Station, 7000 ft., leg. C.G. Pringle nr. 10423, 12-12-1907, FH!, BM!; Aquascalientes, Sierra Frio, alt. 8200 ft., leg. Cantrall nr. 54, 1954, MICH!; Morelos, old route 95, 42,5 km from Mexico to Cuernavaca, very common on rock, leg. J. Snider nr. 262, 28-01-1966; MICH!; Michioacan, 2 km north of Cuanajo, 19° 29' N - 101° 31'W, alt. 2400 m, leg. Cárdenas nr. 5082, 22-09-1989, H!;

References

Crum, H. 1994. Grimmiales. *In*: A.J. Sharp, H. Crum & P.M. Eckel (editors), The Moss Flora of Mexico. Part One. Sphagnales to Bryales. Mem. New York Botanical Garden 63: 386-415.