
**Type:** Mexico, Hidalgo, Cuyamaloya, 8500 ft, Sept. 1908, leg. Pringle No. 10598, herbarium Cardot, lectotype, designated by Muñoz (1999), PC!; isolectotype PC!

**Distribution:** Am.2

**Description**

_Grimmia involucrata_ grows in olive-green to blackish patches with erect stems. The leaves are imbricate when dry, erect-spreading when moist, ovate- to oblong-lanceolate, concave-keeled above, the perichaetial leaves are enlarged, the costa is weak, excurrent, not projecting on dorsal side, the hair-point are ± 1.0 mm long, denticulate, flattened below and slightly decurrent, the margins are plane, incurved above. The distal areolation is bistratose, the mid-leaf cells are isodiametric with straight to slightly sinuose walls, the basal marginal cells are quadrate with thickened transverse walls, and the basal juxtacostal cells are quadrate to short-rectangular with thin walls. The sexuality is autoicous, and immersed capsules on straight setae are usually present, they are ovoid, symmetrical and smooth, the peristome teeth are smooth in lower third part, papillose above, and the operculum is conic to rostellate.

**Discussion**

_Grimmia involucrata_, a Mexican endemic, is characterized by clavate stems, gonio-autoicous sexuality, enlarged perichaetial leaves, usually present immersed symmetrical capsules, and a smooth basal third of the outer plates of the peristome teeth. In the past, it has been confused with _G. affinis_ (Crum 1994), _G. americana_ (Whitehouse & McAllister 1954), and _G. tergestina_. _G. affinis_ (= _G. longirostris_) has clearly exserted capsules, _G. americana_ has usually present ventricose capsules and _G. tergestina_ is dioicous and capsules are only occasionally present. The distribution, ecology and morphology of _G. involucrata_ is discussed in detail in Delgadillo (1999).

**Specimens examined**

**Mexico.** Hidalgo, Cuyamaloya, Sierra de Pachuca, leg. C.G. Pringle nr. 10598, 17-09-1908, MICH!; Distrito Federal: Zacatenco, leg. Amable nr. 1352, 26-11-1925, BM!

**References**


Delgadillo, C.M. 1999. The identity of *Grimmia involucrata* Cardot


The Bryologist 57: 63-146.