

## **Grimmia americana E. B. Bartram - Bryologist 32: 8. 1929.**

**Type:** U.S.A., Texas, Jeff Davis Co., Fort Davis, 5200 ft., May 1926, leg. C.R. Orcutt nr. 7082, holotype FH!; isotype NY.

**Distribution:** Am.1

### **Description**

*Grimmia americana* grows in dense, olive-green, hoary tufts, the leaves are erect and appressed when dry, erecto-patent when moist, broadly oblong-ovate, concave above, the costa is weak, not projecting on dorsal side, the hair-points are long, denticulate, flattened below and decurrent, the margins are plane, erect above. The distal areolation is bistratose, the mid-leaf cells are  $\pm$  isodiametric with slightly incrassate walls, the basal marginal cells are quadrate to short-rectangular with thickened transverse walls, the basal juxtacostal cells are short-rectangular with smooth walls. The sexuality is autoicous and capsules are usually present, the seta is arcuate, excentrically attached; the urns are immersed, ovoid, ventricose; the peristome teeth cribose and irregularly cleft at apex, and the operculum is rostrate.

### **Discussion**

*Grimmia americana*, endemic to Arizona and Texas, is closely related to *G. tergestina*, *G. crinitoleucophaea*, and *G. involucrata*, and sterile material of these species can easily be confused. *G. tergestina* and *G. crinitoleucophaea* are dioicous and male patches are clearly different, being much smaller with nearly muticous to shortly hair-pointed leaves. *G. involucrata* is autoicous and usually with fruit, but it has straight setae and symmetric capsules. The differences between *G. involucrata* and its allies are discussed in Delgadillo (1999). In March 2009, I visited Fort Davis to study the habitat, habitus and ecology of the species. It was found growing on north-facing, shaded, large, grainy, granite boulders and walls on igneous rock, the most commonly occurring formation in Jeff Davis Co., *G. americana* was not encountered. Apart from the locus classicus, it was found growing richly on a north-facing wall of a granite rock formation along route 166, about 11 miles west of Fort Davis. Sporophytes, produced in January and February, were, although not ripe, already fully developed, however, despite the autoicous character of the species, they were not present in quantity.

### **Specimens examined**

**U.S.A.** Texas, Jeff Davis Co., Fort Davis, 5200 ft., leg. C.R. Orcutt nr. 7082, 22-05-1926. FH!; Texas, Jeff Davis Co., boulder along route 118, 5 miles northwest of Fort Davis, alt. 1580 m, leg. H.C. Greven nr. Tex. 10, 22a, 22b, 17-03-2009; Texas, Jeff Davis Co., north-facing rock wall along route 166, 11 miles northwest of Fort Davis, alt. 1717 m, leg. H.C. Greven nr. Tex. 21a, 21b, 18-03-2009.

## References

- Crum, H.A. & L.E. Anderson. 1981. Mosses of Eastern North America. Vol 1. Columbia University Press, New York.
- Delgadillo, C.M. 1999. The identity of *Grimmia involucrata*. Novon 9: 153-155.
- Jones, G.N. 1933. Grimmiaceae. *In*: Grout (ed.), Moss Flora of North America Vol. II, Part I: 1-66. Newfane, Vermont.