

**Grimmia nevadensis H.C. Greven – The Bryologist**  
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**Type:** U.S.A., California, Sierra Nevada, Co. Tulare, Sequoia National Forest, Troy Meadows, 6300 ft, leg. H.C. Greven & S.N. Khoebal No. C50, holotype, NY!; isotypes herbaria H.C. Greven and D. Toren.

**Distribution:** Am.1

**Description**

*Grimmia nevadensis* grows in dense, sand-filled, blackish-green cushions, but also in rounded patches, the leaves are appressed when dry, erecto-patent when moist, concave, ovate-lanceolate, gradually narrowed to the hair-points, the perichaetial leaves are homomalous, with conspicuous white and long hair-points, the costa is weak and slightly projecting at dorsal side, the hair-points short in male plants, longer in female plants, denticulate and slightly decurrent, the margins plane, flat to incurved above. The distal areolation is bistratose, the mid-leaf cells are irregularly quadrate to rounded with firm walls, the basal marginal cells are short-rectangular with thickened transverse walls, the basal juxtacostal cells are short-rectangular with thin, smooth walls. Sexuality dioicous, seta is straight, capsules are usually present, they are emergent, chestnut brown, smooth, ovate with distinct constriction below rim, exothecial cells rectangular, thick-walled, stomata absent, annulus of 1 row of quadrate, thick-walled cells, peristome teeth absent but frequently rudimentary teeth composed of only a few basal cells present, operculum conical-obtuse, calyptra cucullate.

**Discussion**

*Grimmia nevadensis*, endemic to California, is rather common on eastern slopes of the Sierra Nevada. It attracts attention by a growth-form in dense, blackish, hoary cushions, the perichaetial leaves with conspicuous white, homomalous hair-points. The cushions are usually richly provided with emergent gymnostomous capsules. The species is related to *Grimmia mariniana*. Both species share emergent capsules on blackish green cushions. However, *G. nevadensis* grows in dense sand-filled cushions, and capsule-bearing plants have perichaetial leaves with rather long homomalous hair-points. *G. mariniana* grows in more loose cushions with rather short, non homomalous hair-points. In *G. nevadensis*, the capsule mouth is not especially widened when empty, and the urn is hardly narrowed in the basal part. In *G. mariniana*, the urn has a wide mouth when empty, and is clearly narrowed in the basal part. *G. nevadensis* has ovate-lanceolate leaves with a weakly defined

costa and rather uniform chlorophyllose basal cells with thin longitudinal walls, *G. mariniana* has somewhat longer oblong-lanceolate leaves with a stout terete costa, and pellucid basal cells with incrassate longitudinal walls.

### **Specimens examined**

**U.S.A.** California, Tulare Co., Sierra Nevada, Sequoia Nat. Forest, Troy Meadows, alt. 6300 ft, granitic rock, leg. H.C. Greven nr. C 50, 05-11-1999; California, Kern Co., Sierra Nevada, Route 178, 2 miles east of Canebrake, north-facing slanting granitic rock, leg. H.C. Greven nr. C 51, 04-11-1999; California, Sierra Nevada, track up to Mt. Whitney, alt. 7000-9000 ft., leg. H.C. Greven nr. C 56, 06-11-1999; California, Inyo Co., Sierra Nevada, Inyo Nat. Forest, Big Pine Creek, northwest-facing granitic rock, alt. 8220 ft., leg. H.C. Greven nr. C 53, 08-11-1999; California, Mono Co., Sierra Nevada, Toiyabe Nat. Forest, Devil's Gate, southeast-facing sunny rock, alt. 7519 ft, leg. H.C. Greven nr. C 52, 54, 55, 09-11-1999;

### **References:**

Greven, H.C. 2002. *Grimmia nevadensis*, a new species from California. The Bryologist 105(2): 273-275.