

Rosaceae—Rose family

Chamaebatia foliolosa Benth.

bearmat

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Other common names. southern bearmat, mountain-misery, Sierra mountain-misery, San Diego mountain-misery, bearclover, tarweed, and running-oak.

Growth habit, occurrence, and use. Two varieties of this species—*Chamaebatia foliolosa* Benth.—are recognized. The typical variety, bearmat, is an evergreen shrub, 15 to 60 cm tall, that grows between 600 and 2,100 m elevation on the western slopes of the Sierra Nevada in California. It occurs in open ponderosa pine (*Pinus ponderosa* Dougl. ex Laws.) and in California red fir (*Abies magnifica* A. Murr.) forests (Munz and Keck 1963). Southern bearmat—*C. foliolosa* var. *australis* Brandg.—grows to a height of nearly 2 m on dry slopes in the chaparral type from San Diego County to Baja California.

The typical variety is normally regarded as a pest because it inhibits the establishment and growth of trees (Adams 1969; Dayton 1931). From an aesthetic viewpoint, the plants can provide attractive ground cover, but their glutinous leaves are highly aromatic (Bailey 1928; McMinn 1959). It is useful for watershed stabilization and is a potential landscape plant (Magill 1974).

Flowering, seed production, and seed use. Bearmat produces perfect flowers throughout its range from May through July; southern bearmat flowers from November through May (McMinn 1959). The fruits are brown achenes about 5 mm in length (figures 1 and 2). Seeds require from 1 to 3 months of moist stratification at temperatures ranging from 1 to 5 °C before they will germinate (Emery 1964; Magill 1974). In the nursery, seeds should be sown in spring (Bailey 1928).

Figure 1—*Chamaebatia foliolosa*, bearmat: achene (left) and extracted seed (right).

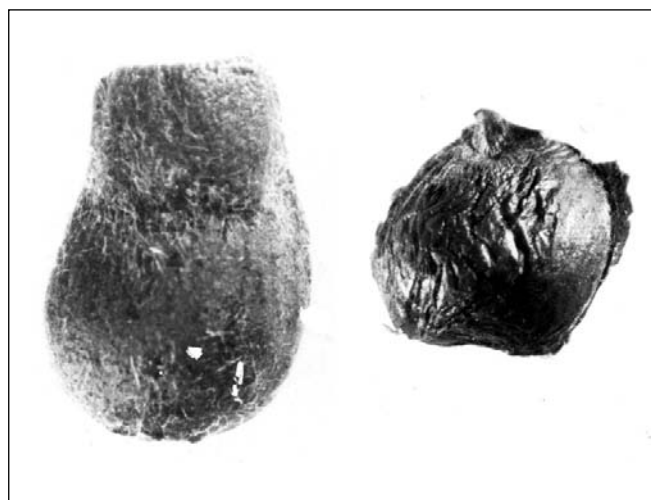
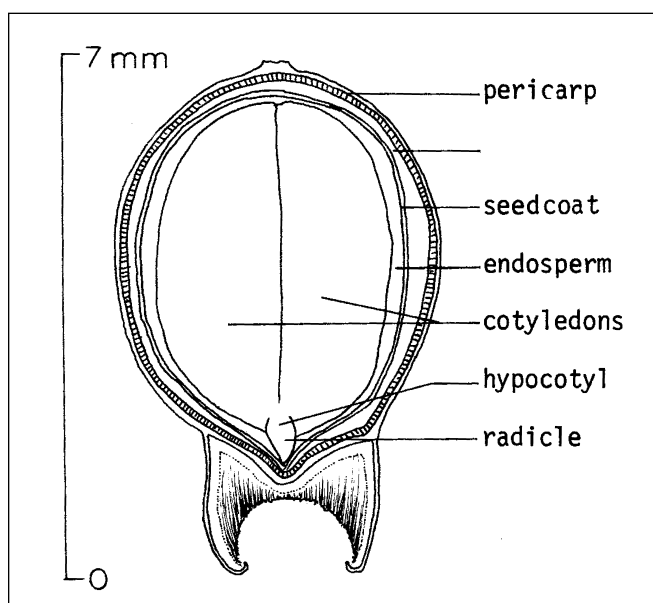


Figure 2—*Chamaebatia foliolosa*, bearmat: longitudinal section through an achene.



References

Adams RS. 1969. How to cure mountain misery. Sacramento: California Division of Forestry. 23 p.	McMinn HE. 1959. An illustrated manual of California shrubs. Berkeley: University of California Press. 663 p.
Bailey LH. 1928. The standard cyclopedia for horticulture. New York: Macmillan. 3639 p.	Magill AW. 1974. <i>Chamaebatia foliolosa</i> Benth., bearmat. In: Schopmeyer CS, tech. coord. Seeds of woody plants in the United States. Agric. Handbk. 450. Washington, DC: USDA Forest Service: 315.
Dayton WA. 1931. Important western browse plants. Misc. Pub. 101. Washington, DC: USDA. 214 p.	Munz PA, Keck DD. 1963. A California flora. Berkeley: University of California Press. 1681 p.
Emery D. 1964. Seed propagation of native California plants. Santa Barbara Botanical Garden Leaflet 1(10): 81–96.	