

Herniaria hirsuta L. ssp. cinerea (DC.) Cout. (Caryophyllaceae)

Description. Annual, mat-like, from a tap root; stems 5-20 cm long, spreading to prostrate, moderately branched, hispidulous. Lower and mid-cauline leaves usually opposite, the upper ones alternate, 3-12 mm long, oblong to narrowly lanceolate, entire, hispidulous; stipules 0.5-1 mm long. Flowers ca. 1 mm long, in small axillary clusters of 3-8; sepals ca. 1 mm long, \pm equal to slightly unequal, ovate, fused at base into a cup-like hypanthium, becoming unequal in fruit, minutely hispidulous, the hairs in two separate lengths, the apices with a bristle; corolla absent; fertile stamens 2-5 and adnate to the calyx tube, sterile stamens (staminodes) 4-6; ovary superior, with a 2-lobed style. Fruit a utricle, membranous, with 1 seed; seed compressed, surface smooth, reddish brown (Brummitt and Heywood 1964, Clapham et al. 1962, Ferris 1944, Hartman 1993, Munz 1959).

Typical ssp. *hirsuta* has sepals \pm equal in fruit, the sepal hairs are \pm of one size, and sepal apices typically without a bristle (Clapham et al. 1962, Hartman 1993).

Geographical distribution. *Herniaria hirsuta* (Including *H. cinerea* DC. in Lam.) is native to central and southern Europe. It has become naturalized in Australia, New Zealand, but in North America only in California. (Chapman 1991, Ferris 1994, Hartman 1993, Munz 1959, Webb et al. 1988). Elsewhere in North America (i.e., Maryland, Wisconsin), it has been reported as a waif (Fernald 1950, Gleason and Cronquist 1991).

The earliest collections of *Herniaria* were made in the late 1890s from a number of localities throughout middle and southern California (Robbins 1940). Naturalized populations occur on San Miguel, Santa Barbara, and Santa Rosa islands (Junak et al. 1997). The species occurs in scattered counties mostly west of the Sierra Nevada (Anonymous 1998, Hartman 1993).

Reproductive and vegetative biology: No references were found that reported on the reproductive biology of *Herniaria*. However, most small-flowered species in related genera (e.g., *Paronychia*) are apparently self-compatible and self-pollinated (Proctor et al. 1996).

Ecological distribution. In both native and naturalized habitats *Herniaria* occurs on sandy to clay soils and disturbed sites (Clapham et al. 1962,). However, it has been reported as a serpentine endemic, at least in Albania, and is known to accumulate heavy metals (Shallari et al. 1998)

Weed status. *Herniaria hirsuta* is not considered a noxious weed in agricultural or horticultural practice, at least at a global level (not listed by Holm et al. 1977), nor is it considered a noxious weed by the State Dept. of Food and Agriculture (Anonymous 1996). It is not listed for the United States in Lorenzi and Jeffery (1987).

Microbial and insect pathogens. No literature was found that reported *Herniaria hirsuta* sensu lato, including *H. cinerea* DC. and *H. hirsuta* ssp. *cinerea*, as a host of detrimental bacterial, fungal, or insect pathogens.

Herbicide control. No literature was found that reported herbicide treatment.

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