

Marrubium vulgare L. (Lamiaceae)
Common Horehound, White Horehound

Description. Perennials, somewhat aromatic, from underground rootstocks; stems 30-120 cm tall, simple to branched, erect to ascending or prostrate, white-woolly, some of the hairs stellate. Leaves opposite, sessile to short-petiolate, the blades 2-5.5 cm long, 1-4 cm wide, ovate to almost round, green, gray-green and sparsely appressed (often stellate) pubescent above, woolly below, margins scalloped to toothed, apices obtuse, the bases cuneate to subcordate. Inflorescence spikelike, in axillary clusters subtended by leaves. Flowers bilateral, calyx tube 4-5 mm long, with star-shaped hairs, the 10 teeth slender, equal to unequal, spreading to somewhat recurved at maturity; corolla bilabiate, 4-6 mm long, white; stamens 4, in two pairs, included; ovary superior, 4-lobed, the style short, 2-lobed. Fruit breaking into 4 dark brown nutlets, nutlets ca. 2 mm long. In California, flowering from April to October (Clapham et al. 1962, Abrams 1944, Brooks 1986, Cronquist and Reveal 1984, Gleason and Cronquist 1991, Wilken 1993, Munz 1959).

Geographic distribution. A native of Europe, horehound is widely cultivated elsewhere as a source of food flavoring and for medicinal extracts (Letchamo et al. 1996, Letchamo and Mukhopadhyay 1997). It has become naturalized throughout much of temperate North America, Australia, New Zealand, southern Africa, and Hawaii (Arnold and de Wet 1993, Brooks 1986, Chapman 1991, Cronquist and Reveal 1984, Gleason and Cronquist 1991, Munz 1959, Webb et al. 1988, Wagner et al. 1990).

It was first reported from near San Francisco (Bolander 1870), but by the late 19th century had become widely established at least throughout much of southern California (Parish 1890). Horehound has been reported from all California Channel islands except Anacapa and Santa Barbara (Junak et al. 1993). It is widely distributed throughout much of California (Anonymous 1998, Wilken 1993).

Reproductive and vegetative biology: Related species and other Lamiaceae with similar sized flowers pollinated by small bees and wasps. (Proctor et al. 1996). In cold temperate climates, it germinates in the early spring, depending on suitable moisture and soil temperatures exceeding 20° C (Young and Evans 1986). Maximum seed germination takes place with daytime temperatures of 25° C and night-time temperatures of 15° C. (Lippai et al. 1996). In an experimental study of interspecific competition, *Marrubium vulgare* was negatively affected by such competitors as *Lolium rigidum*, *Brassica tournefortii*, *Rapistrum rugosum*, and *Echium plantagineum*, suggesting potentially greater success in open habitats (Northington-Davies 1967).

Ecological distribution. Horehound occurs on open, disturbed sites, along roadsides, and in pastures (Brooks 1986, Cronquist and Reveal 1984, Gleason and Cronquist 1991, Munz 1959).

Weed status. *Marrubium vulgare* is not considered a serious 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 pathogens. No literature was found that reported microbial pathogens of horehound.

Insect pathogens. The clearwing moth has been found to be an effective biocontrol of horehound in Australia (Sagliocco and Coupland 1995)

Herbicide control. No literature was found that reported herbicide control of horehound.

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