

Cerastium glomeratum
Mouse-ear chickweed
Caryophyllaceae

Cerastium glomeratum is a hairy, more or less glandular, annual, 3-40 cm tall. The leaves are lanceolate or oblanceolate to ovate; axillary leaf clusters are absent. Inflorescences have herbaceous bracts. Flowers have a glandular-hairy calyx, and fruits are 3.5-8 mm long. Seeds are 0.4-0.6 mm. This species is native to Europe and is found in California on dry hillsides, grasslands, chaparral, and disturbed areas (Hartman 1996).

Seeds of *C. glomeratum* are persistent in the seed bank and emerge in early autumn (Roberts 1986). Weedy species of *Cerastium* appear to be favored in relatively disturbed areas. For example, *C. fontanum* in New Zealand is found predominantly in areas of river disturbance (Kohli and Jalota 1997), while *C. arvense* in Central Germany was found to be positively associated with ant nest-mounds. These findings may be inconsistent, however, with the findings discussed below that indicate that *C. glomeratum* is favored over other species under conditions of low grazing intensity. This apparent discrepancy cannot be addressed without information regarding the mechanisms underlying the observed responses.

In a study of the use of "photo-control" as a weed-control strategy, Milberg (1997) found that germination of seeds of *C. fontanum*, a close relative of *C. glomeratum*, was not altered by initial exposure to light, in contrast with two other weeds, *Rumex obtusifolius* and *Silene noctiflora*. Furthermore, germination of *C. fontanum* showed a linear response to the logarithm of photon fluence, suggesting that near complete elimination of light during a process of dark harrowing would produce the best control of this species. Finally, in a test of interactions between light regime and nitrate availability, it was found that there were no significant interaction effects for *C. fontanum*, though such effects were observed for *Descurainia sophia* and *Thlasp arvense*.

The management of grazing intensity may be useful in controlling *C. glomeratum*. In an experimental study of grazing pressure, *C. glomeratum* was abundant in plots experiencing low grazing pressure, but not in those experiencing higher intensities of grazing (Nishida et al. 1993). In a study of the phytotoxicity of oxadiazon and simazine against *C. glomeratum*, Lamont and Spohr (1988) found that up to 92% control was achieved by either of the two herbicides.

References:

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