

ground ivy

Glechoma hederacea L.

Synonyms: *Glechoma hederacea* var. *micrantha* Moric., *Glechoma hederacea* var. *parviflora* (Benth.) House, *Nepeta hederacea* (L.) Trevisan

Other common names: creeping charlie, gill-over-the-ground, haymaids

Family: Lamiaceae

Invasiveness Rank: 48 The invasiveness rank is calculated based on a species' ecological impacts, biological attributes, distribution, and response to control measures. The ranks are scaled from 0 to 100, with 0 representing a plant that poses no threat to native ecosystems and 100 representing a plant that poses a major threat to native ecosystems.

Description

Ground ivy is an aromatic, perennial herb with creeping, rooting stems and ascending, flowering branches. Leaves are 6 to 76 mm long and kidney to heart-shaped with long petioles. Two to five flowers are borne in a series of whorls. Flowers are usually blue-violet with purple spots on the lower lip, but they are sometimes pink or white. Corollas are 13 to 25 ½ mm long. Each flower produces up to four smooth nutlets (Hultén 1968, Hutchings and Price 1999).



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Similar species: This weed is similar in appearance to birdeye speedwell (*Veronica persica*). Ground ivy can be distinguished from birdeye speedwell by its two-lipped corollas and long petioles (Hultén 1968).

Ecological Impact

Impact on community composition, structure, and interactions: Ground ivy forms extensive, monospecific stands of up to 33% cover. It is toxic to many vertebrates, although it is palatable to numerous insects (Hutchings and Price 1999). Ground ivy is insect-pollinated (by bumblebees, honey bees, beetles, and

ants). Studies suggest that ground ivy has strong allelopathic effects on surrounding plants (Southwick et al. 1981, Hutchings and Price 1999).

Impact on ecosystem processes: The impacts of ground ivy on ecosystem processes are unknown.

Biology and Invasive Potential

Reproductive potential: Ground ivy primarily spreads vegetatively. Establishment from seed is probably rare in many habitats (Hutchings and Price 1999). Relatively few seeds are produced by each plant. A single flower produces a maximum of four nutlets, and plants have moderate flower production.

Role of disturbance in establishment: Colonization by ground ivy likely follows openings created by plant mortality or disturbances caused by grazing animals (Hutchings and Price 1999).

Potential for long-distance dispersal: Seeds are passively dispersed when the calyx bends down as the fruit matures. Seeds may be further dispersed by ants. Nutlets produce mucilage on contact with water and can stick to various substrates (Hutchings and Price 1999).

Potential to be spread by human activity: Ground ivy has been sold for use in hanging baskets. Garden varieties are occasionally found naturalized (Hutchings and Price 1999).

Germination requirements: Germination rates increase after seeds have been stored dry for at least one month at 20°F. Seeds require light to germinate (Grime et al. 1981).

Growth requirements: Ground ivy grows primarily on damp, heavy, fertile, and calcareous soils with pH between 5.5 and 7.5. It does not tolerate strongly acidic or saline soils (Hutchings and Price 1999). Ground ivy is partially shade tolerant (Slade and Hutchings 1987).

Congeneric weeds: The genus *Glechoma* is monotypic (USDA 2002).

Legal Listings

- Has not been declared noxious (but is listed as a weed in CT, KY, NE, WI; is on the Invasive Garden Perennials Not to Plant Statewide List of Alaska)

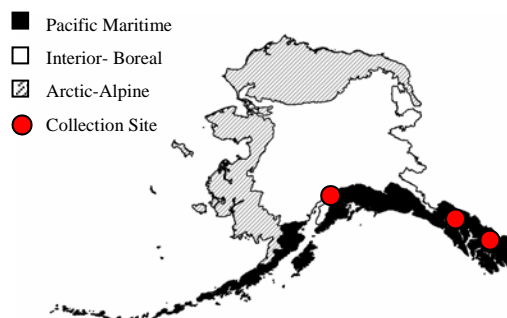
- Listed noxious in Alaska
- Listed noxious by other states
- Federal noxious weed
- Listed noxious in Canada or other countries

Distribution and abundance

Ground ivy grows in shaded roadsides, waste areas, pasture edges, arable fields, grasslands, cleared woodlands, and shrublands. Although ground ivy is generally absent from aquatic habitats, it is occasionally found on river banks and floodplains (Hutchings and Price 1999).

Native and current distribution: Ground ivy is native to most of Europe, including the British Isles, and temperate Asia (USDA, ARS 2005). It has been introduced to North America and New Zealand. In North America, its range extends throughout the United States; it is naturalized in Canada and ranges from Newfoundland to British Columbia. This species has been collected from Juneau and Petersburg (UAM

2004). It has been observed established in Earthquake Park in Anchorage (J. Riley – pers. obs.)



Distribution of ground ivy in Alaska.

Management

Once established, ground ivy is difficult to control. It is impossible to dig out all root and stolon fragments (Mititch 1994).

References:

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