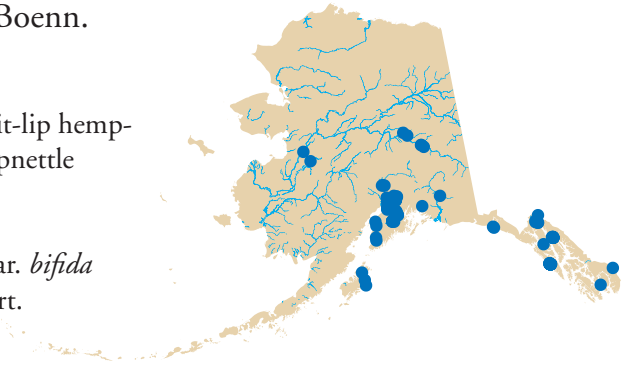
Hempnettle

Galeopsis bifida Boenn.



Alternate Names
Bifid hempnettle, split-lip hempnettle, common hempnettle

Synonyms
Galeopsis tetrahit L. var. *bifida* (Boenn.) Lej. & Court.

Related Species
brittlestem hempnettle
Galeopsis tetrahit L.

Hempnettle.

USDA Forest Service photo by Tom Heutte

Description
Hempnettle is an annual plant that grows ½–3 feet high. The stem is erect and simple or branched above. The leaves are 1–5 inches long, short-stalked, opposite, ovate-lanceolate to lanceolate, coarsely serrate, and sparsely pubescent on both sides. The stem is usually swollen below leaf nodes. The flowers are terminal or borne in axillary clusters. Flowers range in color from purple and pink to white and are ½–¾ of an inch long and bilaterally symmetrical. Plants of the two species are quite similar and sometimes are treated as subspecies. The flowers of *G. bifida* are smaller with a split lower lip, while those of *G. tetrahit* are larger with an entire lower lip. Seeds are egg-shaped and mottled grayish-brown.

Similar Species
Native species similar to hempnettle include field mint (*Mentha arvensis* L.), American dragonhead (*Dracocephalum parviflorum* Nutt.), and hairy hedgenettle (*Stachys pilosa* Nutt.). Field mint is easily identified by its strong

mint odor. American dragonhead has serrated leaves similar to hempnettle, but the flowers are crowded in dense heads with sharp spiny bracts. Hairy hedgenettle is a wetland plant that can be distinguished from similar species by its open terminal flowerhead and rounded teeth on the leaves.

Ecological Impact

Hempnettle has been observed primarily in disturbed areas, where it creates a dense mid-forb layer and reduces the cover of grasses and low forbs. It consumes soil moisture and limited nutrients and can delay the establishment of native species in disturbed sites.

USDA Forest Service photo by Michael Shephard

A hempnettle infestation.

Biology and Invasive Potential

Each plant is capable of producing up to 2,800 seeds, which can remain dormant in the soil for several years. Hempnettle does not reproduce vegetatively and generally occurs only in disturbed sites. The seeds are large and do not have any apparent adaptations for long-distance dispersal. This species appears to spread as a contaminant of hay or other agricultural products. Germination occurs at ½–1½ inches deep. Hempnettle has been declared noxious in Quebec, Manitoba, Alberta, and Alaska (Alaska Admin-

istrative Code 1987).

Distribution and Abundance

Hempnettle is a plant of disturbed sites, roadsides, gardens, and agricultural lands. Native to Europe and Asia, it is now found throughout Canada and the northeastern quarter of the United States. It has also been introduced into New Zealand and the Canary Islands (GRIN 2004, Hultén 1968). Hempnettle has been reported from southeast, southcentral, interior, and western Alaska, including 2 remote locations in the Yukon River delta (ALA 2004). It is an important weed of both agricultural areas and communities in Alaska.

Management

Hempnettle is difficult to control once established, and so maintaining weed-free areas is of primary importance. Once established, dense cover crops planted early may inhibit hempnettle in agricultural settings. Herbicides are also effective (MAFRI 2001a).

Notes

A drying oil used for polishing leather is obtained from the seed of hempnettle. The genus name *Galeopsis* means "looks like a weasel" as early botanists thought that is what the corolla resembled, and the species epithet *tetrahit* means "four-parted," probably for the ovary of the plant.

Sitka Conservation Society photo by Nanna Borchert

Hempnettle.