



Cleavers/False Cleavers (*Galium aparine*/*G. spurium*)

aka Bedstraw, Goose Grass, Sticky-Willy, Catch Weed

Provincial Designation: None

Overview:

Cleavers is an annual or winter annual that reproduces by seed only. Native to Europe, this plant has been used by herbalists and its seeds are similar to coffee when roasted. Cleavers can cause significant crop loss by out shading and interfering with harvesting equipment. It has a simple tap root. Cleavers and false cleavers are nearly identical in appearance, except that false cleavers (*G. spurium*) has smaller flowers and seed nutlets.

Habitat:

Cleavers prefers damp to moist soils, but can tolerate dry soils with shade. It grows in sandy, loam or clay soils.



Left: PHOTO COURTESY Government of Western Australia, Department of Agriculture & Food website (www.agric.wa.gov.au)

Below: PHOTO COURTESY Mount Allison University website (www.mta.ca)



Identification:

Stems: Stems are square, trailing, and covered with short, bristly spines giving them a “sticky” feel. They can grow 1 to 2 m in length and climb other plants for support. The stems will climb or twine around other plants to reach sunlight. They are usually profusely branched.

Leaves: Leaves are lance shaped, have smooth edges and pointed tips, and grow 1 to 4 cm long. Leaves occur in whorls of 6-8 and have short bristly spines along their edges and midribs.

Flowers: Flowers are very small and plain, white to greenish, and have 4 petals. They are borne on short stalks emerging from the upper leaf axils. Flowers are hermaphroditic – having both male and female organs – and are self pollinating.

Seed: Seed are gray-brown nutlets, about 2 mm long, covered with short, bristly spines, and are produced in pairs. Seeds must be covered by soil to germinate and viability is limited to about 2-3 years.

Prevention:

Seeds are similar size to some crop seeds, such canola, and difficult to separate, therefore contaminated crop seed is one method of spread. A single plant can produce over 1000 seeds which can survive ingestion by livestock and birds. Seeds will float on water and can also be spread in manure.

Control:

Grazing: Not a control option as the sticky



Seed nutlets

Above: PHOTO COURTESY the Hawk Conservancy Trust website (www.hawkconservancy.org)

Left: PHOTO COURTESY www.herbalremedies.com

seeds are easily spread by animals.

Cultivation: Tillage can promote germination by burying surface seed to depths more suitable for germination, and seed can be transported on equipment. Repeated, shallow tillage followed by herbicide application on new plants could exhaust the seed bank – equipment must be cleaned after.

Mechanical: Mowing is not effective. Small infestations can be hand pulled and left in the sun to dry. Plant debris can then be burned, or bagged and put in landfill-bound garbage.

Chemical:¹ Although herbicide resistances have developed in cleavers, there are several herbicides registered for use in crops. For small, non crop infestations glyphosate is effective. Consult your local Agricultural Fieldman or Certified Pesticide Dispenser for more information.

Biological: A European gall mite has been screened and approved for release in Canada. No overwintering survival of the agents was observed during field trials in Alberta. (McClay, Alec. 2005)

¹ Always follow the product labels. The use of pesticides in any manner not published on the label or registered under the *Minor Use of Pesticides* regulation constitutes an offence under both the *Federal Pest Control Products Act* and *Alberta's Environmental Protection and Enhancement Act*.