



INVASIVE ALIEN SPECIES

Garlic Mustard (*Alliaria petiolata*)

aka Garlic Root, Jack-by-the-Hedge, Poorman's Mustard

SK Provincial Designation: Prohibited

Overview:

Garlic mustard is a herbaceous, biennial, flowering plant native to Europe and Asia. It was introduced to North America in the 1800s as a culinary herb and medicinal plant.

Similar to other invasive species, garlic mustard was introduced without the many insects and fungi that control it in its native habitat. In addition, the plant produces chemicals that suppress the growth of surrounding native plants, reduce its palatability to herbivores, and create an environment favorable to its spread.

Garlic mustard has threatened the survival of two woodland plants in Canada - the wood poppy and the wood aster - as well as contributing to the decline of several native wildflowers.

Sources:

Alliaria petiolata. Wikipedia: The Free Encyclopedia. 2013. www.wikipedia.org

Garlic Mustard Fact Sheet. Alberta Invasive Plants Council. www.invasiveplants.ab.ca

Garlic Mustard (*Alliaria petiolata*) WEED ALERT. British Columbia Ministry of Agriculture. www.agf.gov.bc.ca

Problem Weed of the Month: Garlic Mustard. Ontario Ministry of Agriculture and Food. www.omafra.gov.on.ca

Habitat:

Garlic mustard thrives in moist, shaded, woodland environments but has also been known to grow in full sun. It does not tolerate acidic soils.

Identification:

Leaves: Leaves are heart-shaped with scalloped edges. Rosettes grow close to the ground in the first year and develop into flowering plants the following spring. The leaves smell like garlic when crushed.

Stems and Flowers: Flower stalks grow in the second year, up to 1.2 metres tall, with small white cross-shaped flowers growing in clusters at the top.

Seeds: Reproduction is by seed only. A prolific seed producer, each plant is capable of producing 150 to 850 seeds. The black seeds develop in rows inside slender brown pods. The seeds can remain viable in the soil for up to 5 years.



PHOTO: Sannse, Wikipedia.org



PHOTO: David Cappaert, Michigan State University, Bugwood.org

Prevention:

Re-vegetating disturbed soil and maintaining healthy competitive vegetation in areas suitable to invasion are effective prevention strategies.

Control:

Grazing: Garlic mustard is unpalatable to grazing animals. Invasive plants should not be considered as forage.

Mechanical: Plants can be cut to prevent seed production, but will re-sprout below the cut height; repeated mowing is necessary. Plants can be pulled by hand; ensure most of the root is removed.

Chemical: 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 provincial acts in Saskatchewan. For the latest information on pesticides for agricultural use in Saskatchewan, please consult the provincial Guide To Crop Protection produced annually by the Saskatchewan Ministry of Agriculture or consult your local Ministry of Agriculture representative.

Biological: A search for potential biological control agents is ongoing.