



# Garlic Mustard

*Alliaria petiolata*



- \* Garlic Mustard is a Class A noxious weed
- \* A biennial herb in the Brassicaceae Family, Garlic Mustard spreads by seed.
- \* Garlic Mustard seedlings develop into basal rosettes by mid-summer. The plants overwinter as a basal rosette with kidney-shaped leaves. When plants bolt in early spring, the mature leaves are triangular, becoming smaller toward the top of the plant, leaf margins are coarsely toothed. In early spring the roots and new leaves smell like garlic. Each plant usually produces one flowering stem about 3 feet tall bearing small, white 4-petaled flowers about ¼ inch long. Seed pods are long, slender, and curved upward, bearing dark

brown/black seeds that are grooved and oblong. Roots typically have an S-shaped bend that helps the plant hold on to the soil.

- \* Garlic mustard is competitive in a wide range of soils, sun, shade and moisture. It is often found in open disturbed lands, fence rows, shaded roadsides, riparian areas, flood plains, along hiking trails and in dry sunny areas along railroads. It out-competes native vegetation and can establish in dense shade, like the forest understory areas, in addition to urban parks and sunny sites.
- \* Garlic mustard is difficult to control once it has reached a site; it can cross-pollinate or self-pollinate and has a high seed production rate. If a plant is cut, or stepped on, many new stems will emerge.
- \* Garlic mustard is also allelopathic, producing chemicals that inhibit the growth of surrounding plants including mycorrhizal fungi, necessary for healthy tree growth and tree seedling survival. Seeds can last in the soil for at least 10 years.

## CONTROL OPTIONS:

- \* Hand pulling is an effective method of control and mature plants are easily pulled, although care must be taken to remove all of the roots.



- ✦ Controlled burning (where allowable) is an option for large infestations. This method is recommended for two consecutive years in order to achieve effective control. The fire must be hot enough to completely kill the entire plant, or plants may regenerate from the root crowns and produce stalks that have a higher than normal seed production, which will result in even higher seedling survival rates.
- ✦ Herbicides have been shown to be effective. Spot spraying with an herbicide containing the active ingredient glyphosate (e.g.: Roundup Pro, Glyfos, etc.) or 2, 4 D plus dicamba (e.g.: Banvel, Clarity, etc.) Be aware that glyphosate is non-selective and will injure any plants that it comes in contact with, including grass, whereas, 2, 4 D is selective. Herbicides should be applied in spring and fall.
- ✦ When using herbicides, read and follow all label instructions and obey all label precautions. (Note: pesticide product registration is renewed annually and product names and formulations may vary from year to year.)
- ✦ Several potential biological agents have been researched for the control of garlic mustard. For more information about the biological control of Garlic Mustard, see the [WSU Extension Integrated Weed Control Project](#).

