

Forest Pests

Invasive Plants and Insects of Maryland

Invasive plants and insects can be problematic for forest landowners. From vines that take over disturbed areas, forest edges, and tree canopies to insects that defoliate and girdle trees, these pests not only decimate the natural ecosystem, they are difficult to control and can be expensive to eradicate. This informational sheet discusses the controlling of the vine commonly known as mile-a-minute.

Mile-A-Minute (*Persicaria perfoliata* (L.) H. Gross)



DESCRIPTION

Mile-a-minute is an annual, herbaceous, trailing vine that is part of the Buckwheat (*Polygonaceae*) family. It is also commonly known as Devil's or Asiatic tearthumb. The vine can be identified by its alternating, pale-green triangular leaves and recurved hook-like barbs. When present, flowers are small and white, which produce a blue berry-like fruit that contains a single black or reddish-black hard seed called an achene. Seeds can germinate in the soil for up to six years.

ORIGIN & SPREAD

Mile-a-minute is native to eastern Asia. It was originally established at a nursery in York County, PA during the 1930's and has since spread into Maryland and 9 other states. The weed has been able to spread because of its ability to grow rapidly in open and recently disturbed areas. The vine has also been able to spread over long distances via birds and water, as seeds stay buoyant for 7 to 9 days.



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As the vine moves into an area, it is able to out-compete the native plant species by growing over them, blocking sunlight, and using up valuable resources. As a result, the natural ecosystems suffer and put a strain on the wildlife in the area that depend on the native plant species for food and habitat. Mile-a-minute has had economic impacts on sites by growing over young planted trees and forest regeneration in open areas. The vine has even colonized areas that have been recently sprayed with herbicides to eradicate kudzu. Clearcut or open harvest areas, power line and highway right-of-ways, and fields are all optimum areas for the spread of mile-a-minute. Controlling mile-a-minute is critical to maintaining the natural ecosystem, and early detection gives landowners the most cost-effective options for control.

CONTROL OPTIONS

Hand Control

Controlling mile-a-minute can be a difficult and time intensive process. Young, small infestations can be controlled by hand pulling and grubbing the vines and roots. It is important to make sure that the roots are pulled up and disposed of because the vine will sprout again. Hand pulling should be done before mid-summer because the barbs on the vine will harden and the vine will start to produce seeds. Heavy gloves will be required if barbs of the plant have hardened. Also, frequent mowing of the site can keep the infestation down and from producing seeds.

Equipment & Herbicide Control

Larger infestations will usually require the use of herbicides or, in some cases, heavy equipment. Since mile-a-minute is a trailing vine that creates heavy thickets, equipment like

bull dozers, skidsteers, or brush hogs can be used to pull up, push over, or cut the stems. Re-establishment can occur from the cut vines sprouting, seed germination, or any missed vine pieces left in the dirt. If the equipment is not completely cleaned on site, spread of the vine can occur when the equipment is transported.

Mile-a-minute can be effectively controlled with herbicide. As with all invasive plants, new control methods are currently being researched and documented. Table 1 shows some of suggested uses of herbicides as found in Swearingen et al (2010), Okay, Hough-Goldstein, and Swearingen (2010), and McCormick and Hartwig (1995). The most commonly used herbicide for controlling the vine is glyphosate (e.g. Accord[®] XRT). Since mile-a-minute is a trailing vine found climbing over other vegetation, the foliar spray method is the most common way of applying an herbicide.



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Foliar Spray Method

Generally, an herbicide solution is sprayed on the foliage just enough to wet it, not drip. The herbicide is absorbed through the leaves and is carried to the root system. It should be noted that with most of the herbicides used to treat mile-a-minute, other desirable species may be affected. Please read the herbicide label to examine the extent of the application.

SUMMARY

When dealing with mile-a-minute, it is important to remember that these applications usually will not completely control the infestation on the first attempt. Several attempts may be needed over several years. Seeds remain viable in the soil for up to six years and pieces of vines or roots may take hold and begin to grow vines again.

Table 1. Herbicide Suggestions for Controlling Mile-A-Minute Infestations.

Application Method	Active Ingredient	Brand Name	Percent Solution	Time of Year
Foliar Spray	Glyphosate	Roundup [®] Pro	1-3% in water&surf.	March to June
Foliar Spray (around water)	Glyphosate	Rodeo [®]	1-3% in water and surfactant	March to June
Foliar Spray	Glyphosate	Glyphomate [®] 41	See Label	April to June
Foliar Spray	Triclopyr	Garlon [®] 3A	See Label	April to June
Foliar Spray	Hexazinone	Velpar [®] L	See Label	March to June
Foliar Spray	Imazapyr	Arsenal [®] AC	See Label	February to June
Foliar Spray	Imazethapyr	Pursuit [®]	See Label	February to March
Foliar Spray	Atrazine	AATrex [®]	See Label	February to March

Use pesticides wisely. The information in this sheet is intended to illustrate methods that are currently being practiced and does not endorse or promote any of the herbicide products listed. Please be sure to read herbicide labels, even if you have experience with the herbicide, as labels are updated frequently. All information in this sheet is based on the information of the herbicide labels at the



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time of printing. Please contact the Maryland Department of Agriculture (MDA) if you have any questions about pesticides. The MDA website (www.mda.md.state.us/plants-pests) contains a searchable pesticide database where you can search for pesticides, applicators, dealers, and businesses.

REFERENCES

McCormick, L.H. and N.L. Hartwig. 1995. Control of the noxious weed mile-a-minute (*Polygonum perfoliatum*) in reforestation. Northern Journal of Applied Forestry 12: 127-132.

Okay, J.A. Gerlach, J. Hough-Goldstein, and J. Swearingen. 2010. Plant Conservation Alliance Weeds Gone Wild Fact Sheet: Mile-A-Minute Weed.

<http://www.nps.gov/plants/alien/fact/pepe1.htm>

Swearingen, J., B. Slattery, K. Reshetiloff, and S. Zwicker. 2010. Plant Invaders of Mid-Atlantic Natural Areas, 4th ed. National Park Service and U.S. Fish and Wildlife Service. Washington, D.C. 168pp.