

Invasive Plants in Pennsylvania

Mile-a-minute

PA Noxious Weed

Persicaria perfoliata



Brett Pifer, DCNR - BOF

Background:

Also known as devil's tear-thumb, mile-a-minute has been introduced into the U.S. from the Philippines several times between the late 1800s and the 1930s. It arrived in Pennsylvania in contaminated nursery stock in York.

Range:

A native of eastern Asia, this vine is not yet widespread in the U.S. but is very common in the southern two-thirds of Pennsylvania, as well as parts of WV, VA, MD, DE, NJ, NY, CT, MA, RI and NH.



Brett Pifer, DCNR-BOF

Description:

This is an herbaceous, annual vine with delicate, highly branched stems that are covered by small, curved spines. The **alternate leaves are triangular, light green, one to three inches wide and barbed on the underside**. Round leaf-like structures called ocreae surround the stem. It is from there that the inconspicuous flowers and fruits arise. From mid-July through the first frost, **green fruits appear, turning a metallic blue color** as the season goes on.

Habitat:

This plant readily colonizes disturbed areas along forest edges, wetlands, stream banks and roadsides. It needs regular sunlight to thrive and prefers high soil moisture.

If You Find This Plant

Mile-a-minute is on the Federal and PA Noxious Weed List. It is a violation of the Noxious Weed Control Law to sell, transport, plant or otherwise propagate a listed species, like mile-a-minute, within the Commonwealth. If you believe that you have found a new population of this plant, please contact:

Botany/Weed Specialist
Pennsylvania Dept of Agriculture
Phone: 717-787-7204

Biology and Spread:

Its fast growth is one way that the plant spreads, but its seeds are the primary means. Birds and other wildlife eat the fruits and spread the seeds in their droppings. Seeds are also buoyant for up to nine days in water and can be spread by streams and floods.

Ecological Threat:

Because this plant can grow up to six inches a day, it can quickly smother native vegetation and climb into the tree canopy where it restricts light availability to plants below. It can be a pest plant on tree farms and for horticultural crops where the soil is not regularly tilled.

Look-a-Likes:

There are several other vines with triangular-shaped leaves that may be confused with mile-a-minute, including halbard-leaved tearthumb (*Polygonum arifolium*), climbing false buckwheat (*Polygonum scandens*), wild morning glory (*Ipomoea purpurea*) and hedge bindweed (*Calystegia sepium*). The presence of spines and ocreae will let you know that it is indeed mile-a-minute.



D. Case, DCNR - BOF

How to Control this Species:

Manual and Mechanical

Hand-pulling of vines is possible, especially when the soil is wet, but be sure to wear thick gloves. Removal should be done prior to fruit formation. Repeated mowing will prevent the plant from flowering and thus reduce or eliminate fruit and seed production. Monitor the site for several years to ensure no seeds germinate.

Chemical

A systemic herbicide like glyphosate will work on mile-a-minute, especially when used with a surfactant that will help to penetrate the leaves' waxy coating. Apply the herbicide in the summer, before fruits appear.



Biocontrol

A weevil, *Rhinocominus latipes*, is being used on various test plots in Pennsylvania and elsewhere to control mile-a-minute. These small insects feed on the leaves and bore into the stems. While they will not completely eliminate the plant they help keep it in check and reduce fruit production.



Photos by Luke Ulsamer, DCNR - BOF



MAM growing out of silt sock



Mile-a-minute early growth (late May – early June)

Mile-a-minute (*Persicaria perfoliata*)

Leslie Mehrhoff, Univ. of Connecticut



Mile-a-minute late season (late September-early October)



Mile-a-minute weevils

Mile-a-minute (*Persicaria perfoliata*)



Mile-a-minute cotyledons and first leaves (late May – early June)

Mile-a-minute Treatment Guidance

Large populations of this species are best controlled with pre-emergent application, such as Oust, during March or April. Be advised that any pre-emergent applications will likely effect non-target species in the application area.

For very small populations, hand pulling and digging may be effective. Small plants pull out by the roots easily early in the growing season. As the season progresses and plants become larger, root material can be more difficult to remove completely. Due to barbs on mature plants, gloves are recommended for pulling plants. Plants can be pulled until fruits mature (begin to turn blue).

Both tricolpyr (Garlon 3A) and glyphosate (Glyphomate 41) can be used as a foliar application during the growing season. A surfactant should be used as well. Garlon 3A targets only broadleaf plants, which may be more desirable if mile-a-minute is growing with other non-target species. The extent of the population should be flagged and considered for pre-emergent treatment the following growing season.

Mile-a-minute weevils also provide control of large mile-a-minute populations where herbicides may not be practical. Field trials indicate that the weevils take several years to control large populations