# MILE-A-MINUTE Polygonum perfoliata

#### Mile-A-Minute (MaM)

Mile-a-minute or devil's tearthumb is a Pennsylvania state listed noxious weed with a limited nationwide distribution occurring only in the Northeastern states. Mile-aminute is capable of forming a monoculture in all habitats but especially riparian areas and wetland communities, displacing native or beneficial plants and poses a serious threat to forest regeneration.

#### History

In the 1930's, mile-a-minute was introduced from Japan to the United States as a contaminant in rootstock at a nursery in York County, PA. Attempts to eradicate the infestation in 1950 were unsuccessful. By 1989 the weed had been spread by birds and by water into 5 nearby counties and adjoining counties in Maryland, Delaware and New Jersey. By 2010, MaM infestations had been reported from Massachusetts to Ohio and as far south as North Carolina. The USFS researchers and the University of Delaware and the P.A.B. Insect Rearing Lab., Trenton, NJ began researching biological control measures in 2004 (Colpetzer, K. and J. Hough-Goldstein. 2004.

#### Mile-A-Minute in Pennsylvania

The Pennsylvania Department of Agriculture added mile-a-minute vine to the

Noxious Weed Control List in 1989 declaring this weed a state noxious weed. As of 2004, MaM had been documented as present in 26 southern tier counties in the Commonwealth. In 2005, a large infestation was documented infesting Sinnemahoning State Park in Cameron and Potter Counties and neighboring properties. Since then, small pockets of plants have also been reported in Northern Lycoming County and southern areas of Wyoming, Lackawanna and Pike Counties.

MaM distribution in Pennsylvania is best described at the regional level: It is commonly found along roadsides, streams and forest edges in 12 counties: Perry, Cumberland, Adams, York, Dauphin, Lebanon, Lancaster, Berks, Chester, and Delaware

Counties. MaM is still relatively rare and only occurs sporadically along roads and streams in counties between Interstate 80 and the PA Turnpike or Rte 78. However, each year the infestations spread further across these regions. MaM has not yet be-

come established in the northern -tier counties.



#### Mile-a-Minute Program

The only PDA program for MaM is a joint effort with the USDA Forest Service and various partners to establish a **Cooperative Weed Management Area** in Potter and Cameron Counties along Sinnemahoning Creek. The CWMA partners are working together under the umbrella of the CWMA to contain and restrict MaM from spreading any further.



All properties owners should manage mile-a-minute vine infestations on a yearly basis to prevent a build up of seed in the soil. Pre-emergence herbicides, post-emergence herbicides or

mowing and even hand pulling will stop seed set.







Mile-A-Minute Flower and Ochrea



Mile-A-Minute Leaf



Mile-A-Minute pulls easily at this stage of growth

## **Mile-A-Minute Description**

MaM vine is an annual herbaceous

vine that has triangular shaped leaves and small thorns or barbs that curve downward on its stems.

MaM vine utilizes these barbs to grip adjacent

vegetation to climb, often blanketing small trees and shrubs. As the summer progresses, MaM will develop racemes of small inconspicuous green flowers. These flowers develop into small green fruit clusters

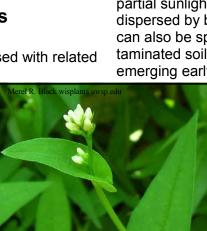
that turn blue when ripe, small racemes of oneeighth inch blue berry-like fruit distinguish it from other vine-like plants. Each small blue fruit contains a hard round black seed. Another distinguishing characteristic of MaM plants are the ochrea – a small, circular skirt-like plant structure that wraps around the stems of the vine\_often located below ra

vine, often located below racemes.

## **Similar Species**

MaM may be confused with related native species and

other herbaceous climbing vines. MaM can be distinauished from our native halberdleaf tear-thumb and arrowleaf tearthumb by differences in leaf Halshape. berdleaf tear thumb leaves are shaped like a "spade" or "spearhead" while arowleaf tear- thumb leaves are



shaped like an "arrow head". Also, neither of these two native are vines and their stems are not barbed but "prickly" or "stiff"

"prickly" or "stiff" hairs.

Mile-a-minute also looks similar to two common weeds found in PA: wild buckwheat and field bindweed. However these com-

mon, climbing, annual, vines lack barbs on their stems and are more often found in gardens and cropland.

These two weedy species have large showy flowers resembling



morning glory flowers, and do not produce clusters of blue berries.

## Biology/ Ecology

MaM grows in a wide variety of soil

conditions, but does best in full to partial sunlight. Seed is primarily dispersed by birds and water, but can also be spread by moving contaminated soil. Seedlings begin emerging early in the spring at rela-

> tively low temperatures. MaM is capable of growing six inches a day and over thirty feet during the growing season. MaM begins producing ripe seed mid summer and continues growing and producing seed until a killing frost.

Mile A-Minute Infestation

Bravo et al. 2011. Pennsylvania Department of Agriculture Noxious Weed Alerts.

Arrow-Leaved Tear-thumb