

You Ain't From Around Here! Exotic Invasive of the Quarter: Mile a Minute Vine (*Persicaria perfoliata*)

By: Tina MacIntyre, Virginia Department of Agriculture and Consumer Services



MAM vine can quickly take over a site, crowding out native species. Photo by: Tina MacIntyre, VDACS.

Introduction/Damage

Mile a minute vine (MAM; *Persicaria perfoliata*, formerly *Polygonum perfoliatum*) invades a variety of habitats including disturbed areas, openings in forests, orchards, nurseries, streamside herbaceous wetlands, upland meadows, forest edges, and roadsides. It can grow 20 feet in a season, so you can see how it got its name. The MAM vine will create monocultures, crowding out native plants, and can easily overwhelm small trees, seedlings, shrubs, and small structures.

MAM vine is native to eastern Asia. It was introduced into the United States in 1890 in Oregon, in the 1930's in York County, Pennsylvania, and in the 1940's in Prince Georges County, Maryland. It can now be found in 14 states from New York southward to North Carolina and westward to Ohio. The population that was introduced in Oregon seems

to be eliminated.

Life Cycle/Identification

MAM is a prickly, branching, annual vine. It emerges from seeds in early spring, producing white flowers in early June or July and fruit from August to frost. Frost kills the vines but seeds can remain viable for up to six years. Seeds can be dispersed by birds, animals, and people. One MAM vine growing in good conditions and full sun can produce over 2,000 seeds.

MAM weed can be identified by the following characteristics:

- Leaves are triangular, 1.5-3 inches long, and are alternately attached to the stem.
- The main veins, petioles, and stems have sharp, hook-like barbs.



MAM vine features distinct triangular-shaped leaves, and blue berry-like fruit. Photo by: Leslie J. Mehrhoff, University of Connecticut.

- At growth nodes, there is a saucer-shaped collar (ocres) that encircles the stem.
- The berry-like fruit are shiny and blue and are borne in clusters.

Management

Due to its prolific seed production and the long viability of the seed, it is very difficult to eradicate this aggressive weed once it gets established. Here are some management tactics that can help reduce its impact. To be successful, managers may have to use several of these methods.

Mechanical Controls - If small populations of MAM vine are found they can be hand-pulled. (Remember, MAM is prickly, so you might want to wear gloves). Once pulled, the plant dies and does not regenerate from the roots. Mowing low or string trimming will also help keep MAM in check. The plants should be mowed or hand-pulled before seed is produced.

Cultural Controls - MAM vine does not grow well in shade. If possible, plant or protect existing plants that provide shade or out-compete MAM in open or disturbed areas.

Chemical Controls – There are pre-emergent and post-emergent herbicides available to control MAM vine. Post-emergent herbicides should be applied before seed set. Commonly used herbicides for MAM include pendimethain, imazapic, sulfometuron, glyphosate, atrazine, hexazinone, imazethapyr, imazapyr and triclopyr. Always read and follow the label. Due to the long viability of the seed, several applications over several years may be necessary.

Biological Control – The mile a minute weevil, *Rhinoconomimus latipes*, is a host-specific pest of MAM. The weevil, which is native to China, is being mass-reared by the New Jersey Department of Agriculture and released in several states in the Mid-Atlantic and Northeast to help control MAM weed. The adults feed on the foliage and the larvae are stem borers. Approximately 25,000 weevils were released at 26 sites in Virginia from 2009 to 2014. The New Jersey Department of Agriculture will sometimes have extra weevils which can be purchased by the general public. For more information, go to <http://www.nj.gov/agriculture/divisions/pi/prog/biological.html>. Permits may be needed in order to buy the weevils. In order to obtain a permit for the release of *R. latipes*, go to the USDA permits information webpage at: <http://www.aphis.usda.gov/wps/portal/footer/topicsofinterest/applyingforpermit>.

After three years, this weevil is very good at migrating away from the original release site. You may want to check MAM infestations to see if the weevil has moved to your location.

MacIntyre. Virginia Forest Landowner Update. Vol. 29, No. 2. Spring 2015.

Conclusion

MAM is an aggressive weed that can be an economic problem in orchards, nurseries, and forest production settings. It can also cause environmental damage by creating monocultures and crowding out native plants. Early detection and the use of appropriate control measures can be effective in limiting the impact of this invasive plant.



***Mile a minute weevils are a biological control option for this pesky vine.
Photo by: Beth McClelland, VDACS.***

For additional information check the following websites:

http://www.na.fs.fed.us/spfo/pubs/pestal/mm/pa_mam.pdf

<http://www.invasivespeciesinfo.gov/plants/mileminute.shtml>

<http://www.invasive.org/browse/subinfo.cfm?sub=3065>

***Tina MacIntyre is an Agricultural Inspector, VDACS Office of Plant Industry Services;
Tina.macintyre@vdacs.virginia.gov; 804/564-9696.***

