Mile-A-Minute Vine: On the Move

Prepared by Kathleen Nelson, Mad Gardeners' Mile-a-Minute Control Project, revised 10/16/22

PLEASE CHECK YOUR PROPERTY FOR *PERSICARIA PERFOLIATA*, MILE-A-MINUTE VINE (MAM). Yearly checks plus timely action can prevent MAM from becoming a serious pest on your property.

Mile-a-Minute Vine, an invasive annual vine from Asia, is being found in more and more places in New England. MAM often arrives in new places in soils that contain MAM seeds. Once arrived, birds and other animals carry seeds to nearby properties. Be prepared to take immediate action to prevent establishment of new patches. A single seed arriving at a new place can, within 4-5 years, give rise to a large dense patch covering all other vegetation and producing hundreds of thousands of seeds each year plus satellite patches as far as a mile away.

IDENTIFICATION: Mile a Minute Vine is easy to recognize. It is a vine with perfectly triangular leaves and tiny barbs on the stems. The seeds germinate in early spring. The plants grow slowly at first, but by the end of the season they may grow six inches a day, a single plant easily covering a large shrub. Seeds for next years' crop may be produced as early as mid-July. See the video and information at www.madgardeners.com for help recognizing the plant.

PREVENTION: MAM arriving from a distance often comes in with soil – perhaps a seed in bulk soil, or on the soil of a potted plant, or on the tires of equipment, or even on shoes.

- Don't bring topsoil or mixes containing topsoil to your property. (Commercial compost, which is heated to a high temperature, should be weed free)
- Avoid bare soil: a healthy groundcover of native plants is preferable to a sea of mulch.
- Remove non-native invasive shrubs that are often found in old fields and at woodland edges. Many provide perfect places for MAM to hide. Start with those that have thorns: multiflora rose and barberry. Remove honeysuckle, burning bush, autumn olive and other invasive shrubs. Remove Oriental bittersweet and porcelain berry vines. Where shrubs are desired in a MAM area, consider native shrubs with an open habit such as native spicebush (*Lindera benzoin*) and winterberry (*Ilex verticillata*), which are open enough that MAM can't hide.

CHECK YOUR PROPERTY FOR MAM at least once every year between mid-July and frost. Pay particular attention to bird places: shrubby areas, woodland edges, and under trees standing in the open.

IF YOU HAVE MAM:

- CONTROL REQUIRES PREVENTING SEED PRODUCTION. Timing is critical. The goal is to *FIND* and *REMOVE* all mam plants before they produce seeds.
- For a MAM patch at the edge of a lawn, consider expanding the mowed area. MAM does not survive regular lawn-height mowing. Begin mowing before seed production.
- In Litchfield County CT, seed production can begin as early as mid-June but, if biocontrol weevils are present, seed production will be later. Watch for signs of seed production. If in doubt, remove all MAM plants prior to July 10.
- Pulling is easy and very effective. Use gloves to protect your hands from the prickers.
- Our group does not recommend general-purpose foliar herbicides for MAM control. They are not 100% effective. They kill plants that compete with MAM but they do not kill MAM seeds. They may harm other plants, and they may harm you.
- Recheck known MAM areas at least every three weeks until frost. MAM roots usually come out easily when pulled, but sometimes the stem breaks. Also, you may miss a few plants. Repeat checks don't take long. By rechecking regularly you may find all the plants before they produce seeds.

- Plants not yet in flower can be tossed or dropped in place. They will dry out and be dead by lunchtime. Don't put them in piles plants at the bottom of a pile may root.
- Disposal: If you see "little round green things" dispose of the plants as described below. Do NOT put them in your compost pile. "Little round green things" could be flower buds, flowers, or fruits, each with a single seed. There are often smaller hidden fruits produced before the main batch if in doubt, bag and dispose of the plants.
- Seeds live for many years. **Continue inspections and pulling yearly** at least as long as six years after removing the last MAM plant. The work will be easier each year.
- The biocontrol "MAM weevils" are a huge help, delaying seed production, but they do not kill
 the plants. They make control much easier, shortening the work season by a month or more.
 The tiny weevils were introduced in Connecticut in 2009 and seem to be everywhere where
 there is MAM.
- Controlling MAM in a shrubbery is difficult to impossible. Remove invasive shrubs and limit desired shrub plantings to open species so that MAM plants are easy to spot and access.
- Controlling MAM in a field or meadow is also difficult. Some plants always escape our eagle eyes. We have had some success with mowing meadows once just before MAM seed production, then checking/pulling plants every three weeks until frost. To determine optimum mowing time, we examine MAM plants starting in July to see if they are about to flower. So far we've had success with a single mowing in late July or, depending on the weather, sometimes as late as early August.

CAUTION:

- **Disposal:** Dispose of MAM plants containing flower buds, flowers, fruits or seeds in a safe manner. We generally bag the plants in heavy contractors bags and dispose of the bags with kitchen garbage to be incinerated. DO NOT put them in a compost pile!
- Don't move soil from a MAM area. It may contain seeds.
- Clean all equipment, including mowers, from a MAM work area on-site or, if that is not possible, on a flat lawn. Do NOT clean equipment on a driveway or road as MAM seeds could be carried by water to a new location with the road run-off.

MAM BIOLOGY:

- MAM is an annual. Plants die at the end of the season.
- Seeds germinate in early April. Plants are usually about a foot or two tall by June 1st, but may be taller or shorter depending on spring weather.
- By late summer MAM plants are growing about 3 feet a week (6 inches per day)
- MAM produces seeds from mid-June or a bit later if weevils are present, to frost. A single MAM plant can produce 2000 seeds.
- Most seeds germinate the first year. There are still plenty to germinate the second year. A
 few seeds remain viable for extended periods of time nobody knows how long. We
 suspect it is longer than 6 years. If even one seed out of 2000 remains viable for 20 years,
 that is enough to re-establish a population in just a couple of years.
- Seeds dropping from MAM plants can form large patches in a period of a few years. New patches are formed by seeds moved by birds, deer, small animals and people.

QUESTIONS? e-mail Kathleen Nelson, Mad Gardeners Mile-a-Minute Control Project at knelson151@sbcglobal.net.

MORE INFORMATION:

- From UConn: mam.uconn.edu/
- More about MAM from Mad Gardeners: madgardeners.com
- More details of what I've learned: madgardeners.com/2012Project.pdf
- https://portal.ct.gov/-/media/CAES/DOCUMENTS/Publications/Bulletins/B1083.pdf

