

## Fall Webworm

Fall webworms (*Hyphantria cunea*) are communal caterpillars that spin silk into a tent-like structure at the tip of branches. These webs are often built around leaves they feed on. Fall webworms feeds on a wide range of deciduous trees and shrubs including, but not limited to, crabapple, redbud, sweet gum, maple and oak. As the caterpillars consume the leaves within the web, they will expand the web every week or so to include more leaves. The web of mature caterpillars can be 2 to 3 feet long.



*Fall webworm tent-like webs on crabapple (left, Phil Nixon), and visible larvae (right, Travis Cleveland)*

There are two color morphs of fall webworm. The northern morph caterpillars have a yellow-tan body with a red head and the moths are white. The southern morph caterpillars have a yellow-green body with a black head and adults are white with small dark spots on the wings. Their distributions overlap so they are both found throughout the species range but one is more frequently encountered in the northern portions of their range and the other more frequently encountered in the southern portions of their range.



*Southern fall webworm mature larva (Phil Nixon)*

Adults emerge late spring to midsummer and begin to deposit hairy egg masses on the underside of leaves. A few days later, the larvae hatch and begin to build silken webs over the ends of branches. You may begin to see their tent-like webs when *Hydrangea paniculata* Grandiflora (PeeGee Hydrangea) is blooming. Fall webworms usually build webs in the understory of the trees, fence-row shrubs and ornamental shrubs. Young larvae feed on the upper surfaces of leaves and larger larvae feed on whole leaves, leaving the large veins or midribs behind. While fall webworms are capable of causing significant aesthetic damage, the defoliation does not usually threaten the plant's health. This is, in part, because their populations can be well controlled by natural enemies.

Since, fall webworms are unlikely to cause enough damage to harm the plant, some aesthetic damage may be tolerated and treatment may not be required. When aesthetic damage is not tolerated, there are a number of options for fall webworm control.

Pruning back branches to remove the web is a mechanical control method that can be implemented at any time and can be effective in reducing caterpillar populations quickly.

Chemical and Bt (*Bacillus thuringiensis*) treatments can be applied as a spray application when webs appear on trees. The webs are water resistance so a gentle spray will not penetrate the surface. The spray pressure must be great enough to damage the web so the insecticide can coat the leaves inside the web, where caterpillars are feeding.

*Bacillus thuringiensis kurstaki* treatments (Dipel, Thuricide, etc.) target caterpillars. They are more effective on caterpillars and have no impact on adult moths. Effective chemical insecticides include carbaryl (Sevin), pyrethroids and other products that are labeled to treat fall webworm.

(Sarah Hughson)

## Marestail (Horseweed) in the Landscape

Horseweed or marestail (*Conyza canadensis*) is a fairly common weed in Illinois for corn and soybean fields, nurseries, and orchards. It is less commonly thought of as a landscape weed, but it can find its way to ornamental plantings and control can be challenging. Both names are commonly used throughout the state.

This plant is a bit peculiar considering its life cycle. It can grow as a winter annual or sometimes as a summer annual. Seeds germinate in late summer or early spring. The seedlings develop a rosette of leaves, which can be easily confused with other rosette forming weeds such as Virginia pepperweed and shepherd's-purse. From the rosette of leaves, plants will then "bolt" and produce a flowering stem. Stems can reach 7 feet in height. The rosette may go entirely unnoticed in a bed due to its low stature or the fact that once the stem forms, the basal leaves will deteriorate and disappear altogether with time. The tall stems make marestail more noticeable.

An easy way to describe a mature marestail or horseweed is that of a single stem with many dark green, whorled leaves. The stems is hairy with many small, flowering branches toward the top. I suppose it could look like the tail of a horse, given the name. This weed should not be confused with horsetail (*Equisetum arvense*), which is an entirely different weed.

To be more accurate in our description, we must consider the leaves further. They are approximately 4 inches long by 1/3 inch wide, hairy, alternate but numerous, and crowded around the stem. Stem leaves are lanceolate to linear, with minimal toothing on the margins. Flowers are present July to October and consist of dense panicles of many small flower heads with white ray flowers and yellow disk flowers. The seeds have white slender bristles at the end which aid in wind dispersal.

Marestail or horseweed has a slender taproot and can be removed by hand easily most of the time. However, be sure to pull this plant at the base or it can break off. For best results, pull when plants are young and soil is moist. Removing this plant from the landscape before seed set is important in preventing future large infestations. One plant can produce around 200,000 seeds. Herbicides can be used as well, but be aware that resistance to certain herbicides (ALS inhibitors and glyphosate) has been found in this weed. You may not have a history of using glyphosate to control this plant, but if the seed moved in from an agricultural area that had that history, the plant may not be well controlled with this herbicide. Preemergent herbicides can be used as well but proper timing can be difficult given the extremely wide germination period.



*Young maretail.*



*The stems and leaves are hairy.*



*Mature mare's tail in flower.*

*Michelle Wiesbrook*

Sources:

Weeds of the North Central States

Weeds of the Northeast

[https://extension.umd.edu/sites/extension.umd.edu/files/docs/programs/ipmnet/Mare's tail-UMD%20IPMnet.pdf](https://extension.umd.edu/sites/extension.umd.edu/files/docs/programs/ipmnet/Mare's%20tail-UMD%20IPMnet.pdf)

## Ramorum Blight Confirmed on Samples Taken from Illinois Garden Centers

The Illinois Department of Agriculture published a press release July 2 announcing that *Phytophthora ramorum*, causal agent of Ramorum blight and Sudden Oak Death, had been confirmed on samples taken from garden centers in the state.: <https://www2.illinois.gov/Pages/news-item.aspx?ReleaseID=20290>

*Phytophthora ramorum* is a federally regulated plant pathogen which has devastated native plants and forests in California and Oregon over the past several decades. The pathogen causes two groups of symptoms, often referred to as two separate diseases: Ramorum blight and Sudden Oak Death. *P. ramorum* can infect a wide range of hosts, including many popular ornamentals (rhododendron, azalea, lilac, viburnum, and more), as well as oak trees. Ramorum blight causes leaf discoloration and branch dieback on the ornamental hosts, while Sudden Oak Death causes rapid wilting, decline, and death of oak and tanoak trees. Ramorum blight usually does not kill infected plants, but symptoms will continue to reoccur.

# University of Illinois Plant Clinic



In late May 2019, a routine survey in Indiana confirmed the presence of *P. ramorum* on rhododendrons received from Oklahoma. The original source of the plants were nurseries in Washington and British Columbia. Shipping records revealed that plants from the same nurseries were routed through Oklahoma to garden centers in 18 Midwest states, including Illinois. Illinois Department of Agriculture and United States Department of Agriculture field staff inspected stores which had received plants from the same

shipment and collected samples from symptomatic plants. Those samples were tested at laboratories including the University of Illinois Extension Plant Clinic, Michigan State, Cornell, Kansas State, and USDA labs. *P. ramorum* was confirmed on plant material in stores across the state. So far, one other state which received samples from the same shipment has confirmed *P. ramorum* (Kansas) bringing the total number of affected states to 3.

A similar situation occurred in the early 2000s. Nursery plants in 19 southwestern, southeastern, and northeastern states were confirmed with *P. ramorum*. Those plants were destroyed, and there is no evidence that the pathogen became established in the natural environment in any of the affected states. Risk maps based on epidemiological models indicate that most of Illinois is considered at low risk to this pathogen. The greatest threat would be in southern Illinois in the natural forested areas, and along the southern banks of the Mississippi.

While there are products labeled for use on oak trees against Sudden Oak Death, we currently are not recommending treatments since the pathogen has yet to be identified in the environment or on oak trees.

**The public is being asked to be on the lookout for plants which could potentially be infected with *P. ramorum*.**

Because *P. ramorum* is not known to have been found in Illinois before this year, plants purchased prior to 2019 are unlikely to be infected. While *P. ramorum* has a wide host range, so far it has only been confirmed on rhododendron and lilac hosts shipped to the Midwest. Symptoms of *P. ramorum* can appear similar to disease, insect, and environmental damage, including bacterial blight on lilac and winter injury on rhododendrons.

Questions to answer if you are concerned about a specific plant:

1. Was the plant purchased in 2019?
2. Is the plant a lilac, rhododendron, or azalea?
3. Is the plant displaying any of the following symptoms:
  - Dark brown spots, blotches, or tip dieback on leaves?
  - Dark brown discoloration along the leaf margins?
  - Dark brown discoloration of the branches, usually starting at the tip of the branch?

If the answers to all the above questions are YES, please contact the Illinois Department of Agriculture (IDOA) at (815) 787-5476. **Do NOT** submit samples to local Extension offices, arboretums, parks, or to the University of Illinois Extension Plant Clinic if you suspect the plant is infected with *P. ramorum* without first contacting the IDOA. **Do NOT** destroy the suspected plant without the approval of the IDOA. Because the pathogen can spread through irrigation water, we recommend either not irrigating possible infected plants, or watering at the base of the plants (try to avoid wetting the leaves or creating irrigation runoff). Sanitize any tools or equipment that may have come into contact with suspect plants (10% bleach or 70% ethanol solutions are appropriate for most situations).

The University of Illinois Extension Plant Clinic published an Alert that can be downloaded here: <https://uofi.box.com/v/Pramorumaalert>

(Diane Plewa)

### Powdery Mildews on Ornamentals

Much of Illinois has settled into a hot and humid weather pattern conducive to powdery mildew infections. The six common genera of powdery mildew fungi in the Midwest all prefer warm, humid days. The spores germinate on foliage when the relative humidity is 23% to 99% but not in free moisture (rain). Powdery mildew is a common fungal disease of many annuals, perennials, shrubs, and trees. Some species of powdery mildew fungi infect only a few closely related host plants, while others attack many genera of plants. This disease can spread quickly over a host plant; it doesn't normally kill one.

Symptoms of powdery mildew are white or dusty gray patches on the leaves, shoots, buds, flowers or stems. This mildew is composed of threadlike mycelium and asexual spores of the fungus. Powdery mildew fungi overwinter on plant tissue and dormant buds. The spores are released in the spring damp weather and move to uninfected tissue in water or wind. In some cases the growth is superficial, and in other cases the leaves become distorted dwarfed and discolored. The severity of the symptoms depends on the host species, age of the tissue infected, environmental conditions, and the fungus involved. New growth on plants is more sensitive than older leaves.



*Powdery mildew on common lilac*

Managing powdery mildew infections can be done by several means. It is important to provide conditions for adequate air flow. Pruning and thinning stands of plants, or branches will allow for better air movement. Watering in the morning or early part of the day to promote rapid drying will also help. Resistant varieties are the first means of disease control but unfortunately are not always available. Fungicides are also available and should be utilized at the first sign of the disease. Once the disease has become widespread, it cannot be controlled in that year. Finally in the fall when cleaning up plant debris. Remove and destroy all infected plant parts.

(Maria Turner)

### Slime Molds

Warm, wet weather has stimulated the development of slime molds on mulch, turfgrass, and other surfaces. Slime molds can appear in many colors including white, gray, yellow, violet, blue, green, purple, brown and black. Although they can be quite alarming, slime molds do not infect or harm plants. They mostly feed on microorganisms and other decaying organic matter, while utilizing plants and other structures for support.

Chemical controls are unnecessary. Slime molds will dry up and disappear on their own in the dry weather. If the presence of slime molds is unacceptable, they can be controlled by raking, mowing, or

rinsing the affected areas with a strong stream of water. Although rinsing may have the effect of spreading additional spores.

(Travis Cleveland)



*Slime mold on mulch*



Slime mold slowly moving up the base of a spruce tree



*Slime mold on turfgrass*