

# Down the Garden Path

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## THE GRAPE VINE

### Multiflora Rose

Dan Childs, Extension Weed Science Specialist

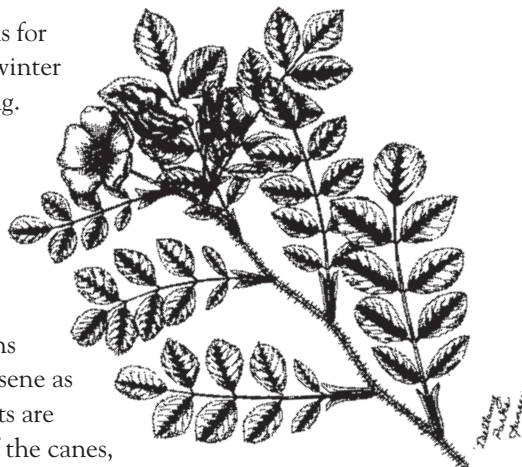
Multiflora rose (*Rosa multiflora*) has, over the past several years, invaded nearly every county in Indiana. This woody perennial plant is a bramble with short spines or thorns on the stems and leaf petioles. It produces many clusters of small, white flowers in late May to early June. While they provide habitat for wildlife, these shrubs can quickly spread along fence rows, into vacant lots and wooded areas.

**Mechanical Control:** Pulling individual shrubs out of the ground with a heavy chain and tractor or truck can be successful only if all the roots are removed. If root pieces remain, new plants will regenerate from these. Repeated mowing of the tops has proven to be effective and is generally a good management practice for controlling all types of weeds in pastures, yards, etc.

**Biological Control:** Certain insects and diseases are being studied for their effect on multiflora rose. One such disease, called Rose Rosette, has been detected in several Indiana counties. Rose Rosette produces a bright red, witches' broom-type foliar growth at the end of the canes. Studies conducted at West Virginia University show the disease to be transmitted from plant to plant by a tiny mite. The disease will eventually spread throughout the entire plant, and the plant will die within two years after the infection.

**Chemical Control:** The use of herbicides to control multiflora rose can be successful if an effective herbicide is timely applied. *If applied incorrectly, herbicides may affect surrounding desirable vegetation such as grass, trees, garden plants, ornamentals, grapes vines, etc. Always follow label directions when applying herbicides.*

There are two time periods for herbicide application: late winter to early spring and late spring. Some herbicides may be applied anytime the shrubs are dormant, prior to the resumption of growth. Some applications may be made as a "basal bark" treatment involving solutions containing diesel oil or kerosene as the carrier. These treatments are applied to the lower areas of the canes, including the crown. Dormant treatments



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have certain advantages over foliar applications. Since basal applications do not require coverage of the entire shrub, less volume is needed; therefore, less time and energy are required for treating individual shrubs. Also, homeowners may have more time to make these treatments in late winter than they would in May and June when foliar treatments are applied. Various brush killers sold at ag chemical dealerships carry a label for dormant treatments. Read and follow label directions for rate and application instructions.

Foliar treatments (water as the carrier) are made in late spring, when the shrub is green and actively growing. Thorough spray coverage of the foliage is essential for good control. Products containing 2,4-D are effective on multiflora rose. Symptoms of plant death may begin to occur within two to three days. Many “brush killers” contain 2,4-D as one of the herbicidal components. Follow the label directions for proper rate. Never apply 2,4-D products near sensitive broadleaf plants such as tomatoes or grapes!

Glyphosate (Roundup, Kleenup) is also effective when used as a foliar spray on multiflora rose. Symptoms of plant death are slow, and may take one or more weeks to notice any effects. Typically, a 1.5 to 2 percent solution of glyphosate in water is the application rate for spot treating multiflora rose shrubs. Caution: glyphosate is a non-selective herbicide and will kill or injure most any green plant it contacts. These products can be purchased at most garden centers or department stores. ☺



## GARDEN

### Spring Frost Can Spoil the Show

*B. Rosie Lerner, Consumer Horticulture Extension Specialist*

At long last, signs of Spring are everywhere. Forsythia, daffodils, and magnolias blooming; trees budding, and songbirds chirping happily. But along with the hope of spring, winter’s last gasps in the form of frost and freeze can spoil the show.

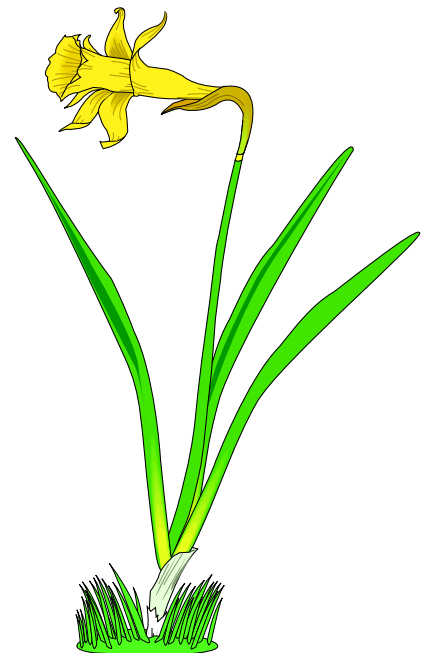
The further along the plant buds are in their development, the more likely they are to be damaged by below freezing temperatures. The lower the temperature drops below freezing, the more damage can be expected. Also, different species of plants vary in their susceptibility to freezing.

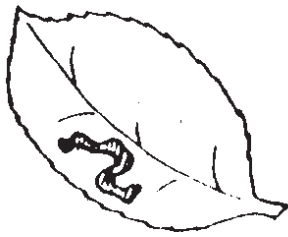
Early spring flowering trees and shrubs are most likely to have some flower damage, since their flower buds were set last fall. Depending on the conditions mentioned above, the damage may just be brown edges along the petals, or it may be failure to bloom. For fruit crops, every flower that is freeze-damaged results in decreased fruit potential.

Foliage buds are generally considered to be more resistant to cold damage. Depending on the severity of low temperatures, freeze-damaged foliage buds usually leaf out as warm weather returns. However, foliage will likely appear distorted, scorched, and/or tattered. Most plants should be able to outgrow this type of damage.

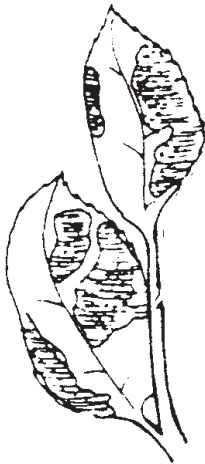
Spring-flowering bulbs such as daffodil and tulips are also likely to be damaged if temperatures drop into the teens and low twenties. The flowers can take freezing temperatures without much damage but colder temperatures will likely cause some damage to flowers and foliage. If flowers are in full bloom when frost or freeze strikes, the flowers may wilt as the flower stalk thaws.

Many gardeners ask if they should cover the plants for protection. Blankets, tarps, etc., may provide a few degrees of warmth, but if temperatures drop into the teens, the covers may not be sufficient to prevent damage. Snow is a great insulation, but if it is heavy and wet, the weight may cause stem breakage on tender shoots. Likewise blankets can become heavy from snow load and cause breakage. Providing some support under the blanket in tent like fashion should help prevent mechanical damage. Keep in mind that even if the flowers are damaged, the bulb is well-protected in the soil. If the foliage is allowed to mature, the bulbs should make a good come back next year. ☺





*serpentine leaf mine*



*blotch leaf mines*

## OVER THE BACK FENCE

Q: I enjoyed the recent articles about preserving plant specimens. Do you have any more information that discusses preserving specific plants?

A: Yes, there is an excellent Purdue Extension publication that discusses preserving plant materials in detail. The publication, HO-102 *Preserving Plant Materials*, can be obtained from your local Cooperative Extension Service office. ☺

## YARD

### Leafminers: Artists in their Own Way

Corey K. Gerber, *Extension Entomology Specialist*

Leafminers are immature larvae of beetles, flies, wasps (sawflies), and moths. Once females lay eggs on the surface of host plants (sometimes directly in host plants), larvae will hatch and burrow into leaves and feed between the upper and lower leaf surfaces. This feeding behavior will discolor leaves in one of two patterns; serpentine leaf mines or blotch leaf mines. Serpentine leaf mines are snake-like in appearance. On the other hand, blotch leaf mines are simply irregular blotches on the leaves. It is quite easy to determine if a leafminer is present by holding the leaf up to a light source and looking for the larva(e) and small excrement pellets.

Many different leafminers occur in Indiana. Here are a few examples:

**Birch leafminer (sawfly):** Birch leafminer pupae overwinter in soil at the base of infested birch trees. Adult sawflies fly to leaves in early May, about one week after leaves unfold. Eggs are laid within young leaves. Larvae mine leaves for 2-3 weeks, until they chew a hole in the leaf and drop to the ground to pupate. There are three to four generations a year. Controlling the first generation (mid-May) will, for the most part, reduce not readily susceptible to pesticides.

**Hawthorne leafminer (sawfly):** Adults emerge in early May. Eggs will hatch a few days after being laid within the leaves. At the end of May, larvae will leave their mines and pupate within the soil. Overwintering will also take place in the soil. Hawthorne leafminers only have one generation a year. Controls should be applied around the first of May. Again, acephate is the recommended chemical for control. Caution, acephate may burn some varieties of hawthornes. As with the birch leafminers, monitor trees for adult activity as well as egg laying scars on the leaves.

**Locust leafminer (beetle):** As temperatures begin to warm in the spring (May), overwintering adults become active, where feeding, mating, and laying eggs on new leaves take place. Eggs will hatch in mid- to late May, with extensive mining visible during the first part of June. Unlike the other leafminers, locust leafminers pupate within leaves. Adults will emerge and lay eggs. Locust leafminers have two generations a year. As with each of the leafminers mentioned above, acephate should provide adequate control. Note, control is most effective against the adults. Make sure that the leafminers are not in the late larval stage or in the pupal stage because they are not readily susceptible to pesticides.

**Holly leafminer (fly):** Holly leafminer larvae overwinter in leaf mines. Larvae will then pupate in late March or early April. Adults will emerge and lay eggs over a period of six weeks. A contact insecticide can be applied every 10 days from early April through May to control the adults.

**General control:** First, keep trees properly watered and fertilized. Second, consider natural enemies when determining whether a pesticide should be implemented. Natural enemies are normally present and can easily find leafmining larvae. Third, systemic insecticides, such as acephate (Orthene), avermectin (Avid), and imidacloprid (Merit), are very effective against young leafminers. Always read and follow label directions when using pesticides. ☺

## There's a Crayfish in my Driveway!



*Peggy Sellers, Director,  
Plant and Pest Diagnostic Laboratory*

I woke on Easter morning to the sound of my puppy barking furiously. He was barking at something in the driveway, but I couldn't tell what. Upon further investigation, I quickly realized that it was a crayfish! Some of you may call these crustaceans crawfish, crawdads, or stonecrabs.

With the recent rain and flooding in some parts of the state, some of you may find crayfish where they don't belong.

There are about 300 species of crayfish in United States. They are used as fish bait and for human consumption. However, crayfish can cause damage when they burrow into home lawns. The burrows may be hazardous to lawn mowers.

Control of crayfish is difficult. There are no general use pesticides for crayfish control. Capture is the most popular method of control (watch out for those pincers!). Wire cage traps can be baited with fish, chicken, or other meat and can be used to capture crayfish. ☺

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