

Down the Garden Path

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GARDEN

Blossom-End Rot Plagues Garden Tomatoes

B. Rosie Lerner, Purdue Consumer Horticulture Specialist

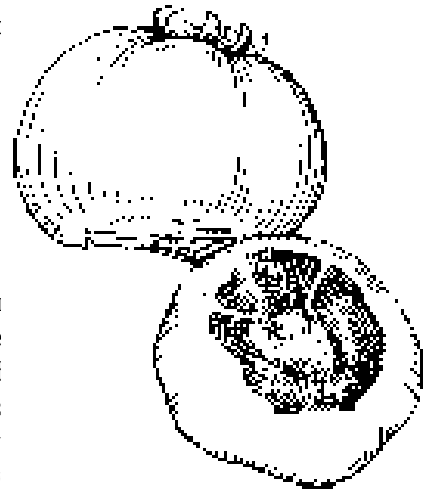
This summer has been a challenging one for vegetable gardeners; alternating heat waves and cold snaps prevented some vegetables from setting fruit earlier this season. This was followed by very spotty rainfall when the thunderstorms choose to visit.

The recent hot, dry weather has brought on a lot of blossom-end rot on tomatoes and other vegetables. Just as your mouth waters for the first tomato harvest, a black, leathery spot appears at the base of the fruit. Blossom-end rot is caused by a physiological disorder rather than an infectious disease. The black scar tissue is thought to be caused by a deficiency of calcium in the developing fruit, usually brought on by extreme fluctuations in soil moisture. The early round of fruits set on the plant are often the most affected.

The spot develops on the blossom end of the fruit opposite the point of stem attachment, thus the name blossom-end rot. The scar is usually firm and leathery, although secondary rotting organisms may enter through the damaged tissue and cause a soft rot to develop. In most cases, the fruit will go ahead and ripen and one can cut away the affected portion and still eat the rest. However, affected fruits should not be used for canning.

The fruits that have already developed the scar can not be helped, but the new developing fruits can be. Watering during dry spells and mulch to conserve soil moisture will help reduce fluctuations in the moisture supply and prevent calcium deficiency in the fruit.

Tomatoes aren't the only fruits affected by blossom-end rot; summer squash and other plants are less often affected. There is no spray that will control blossom-end rot except maybe from the irrigation hose. Most Indiana soils have plenty of calcium although some sandy or muck type soils may be deficient. If your soil has a low-pH (acid soil), you may need to add agricultural limestone to add calcium and bring the pH to a level that is more conducive for horticultural crop production. If you don't know your soil's pH level, it might be a good idea to send a soil sample to a private lab for testing. Your county Extension office can provide you a list of private soil testing laboratories. ☺



OVER THE BACK FENCE

Q: I recently purchased a new car and find muddy cat pawprints and dirty cat hair on the hoods of my neighbors' cars. This morning I found some on mine. I would like to know if there is something I can do to prevent cats from doing it again. I am investing lots of money in this automobile and do not respect the fact that these cat owners expect me to accept their cats ruining the paint of my car!!!!

A: Domestic cats can cause problems when they are allowed to roam free in a neighborhood. Cats will use flower beds and gardens for litter boxes, prey on wild birds at feeders and bird baths, and will spray doors, outdoor furniture, and other objects to mark their territory. Many people find these behaviors intolerable. For those of us who are cat lovers, the greatest drawback to allowing pet cats to roam free is the increased risk of disease and injury. Keeping pet cats indoors can help keep peace in the neighborhood and protect the health and safety of your pet.

You may want to check the local covenants or ordinances that deal with pets in your area. There may be a legal requirement to confine pets to the owner's property. Your local Animal Control Office will have information on this and may also work with you to capture and remove strays. If your neighbors will not keep their cats confined to their own property, there are a couple of methods that may discourage the cats from walking on your car. The most obvious

alternative is simply to park the car in an enclosed garage. If this is not

- possible, you may want to check out some of the dog/cat chemical repellents available at the larger pet stores. This would best be applied in the area immediately surrounding the car and not on the car directly since the chemicals may affect the finish. There are also car covers available to protect cars that are parked or stored outdoors.
- Look around the area where you park your car to try to identify any attractions (bird nests, etc.) that the cat may be trying to get to while climbing on your car. If there are no eggs or birds in the nest, you may dispose of the abandoned nesting materials. Remove any other 'cat attractions' from the area. If you are adventurous and would like to try a new product, there is a device that attaches to your garden hose that will spray an animal that comes within range of the motion detector. The product is called Scarecrow and information on this is available on the Internet (search word - scarecrow).

-- Judy Loven, State Director, Wildlife Services ☺



stock before the onset of winter. This can be a good buy, if the plants are species that are quick to establish new roots and the consumer is willing to provide proper care.

Some general rules of thumb include planting container-grown or balled and burlapped stock only. Bare-root stock should only be planted in late winter or early spring while the plant is still dormant. Needled evergreens generally adapt well to fall planting. Plants that are known to be slow to regenerate roots should not be planted in fall including oak, magnolia, tulip tree, poplars, birch, maple, dogwood, hawthorn, and callery pear.

Whenever you decide to plant, prepare a large planting hole and loosen the soil to allow easy root penetration. Generally, the hole should be refilled with the same soil that was taken out. Amending the back fill soil with organic matter is not particularly helpful and may actually be harmful in heavy clay soils. Water thoroughly, and be prepared to water deeply every 7 to 10 days, depending on natural rainfall and temperatures.

Wrap trunks of young and newly planted trees for winter protection and prevention of rodent injury in late November. Wrapping the trunks too early can cause injury to the trunk due to high temperatures.

For more information on proper tree planting techniques, refer to *HO-100, Planting Landscape Trees and Shrubs*, available from your local county Cooperative Extension Service Office or at <<http://www.agcom.purdue.edu/AgCom/Pubs/>>. ☺

YARD

Need To Replace Trees?

B. Rosie Lerner, Extension Consumer Horticulture Specialist

Many Indiana gardeners have lost landscape plants to various causes including winter cold snaps, summer drought, insects, and disease. Fall can be a good time to replace some of those plants, but there are a few important notes to keep in mind.

Many garden centers and nurseries offer bargain sales in the fall to move their



THE GRAPE VINE

And Along Came a Spider

Mike Potter, University of Kentucky
Kentucky Pest News, August 2, 1999

Numerous calls are received each year about spiders. Typically, the caller wants to know if the spider they've seen is dangerous, and what if anything should be done in terms of control.

Many different kinds of spiders live in and around buildings. Some, such as the house, cellar, and garden spiders, construct webs to help entrap their prey. Others, like the wolf spiders, are free-roaming and make no webs. The vast majority of spiders are harmless, and in fact are beneficial, because they prey upon flies, crickets and other insects. They generally will not attempt to bite humans unless held or accidentally trapped. Moreover, the majority of spiders have fangs too small or too weak to puncture human skin. Of the hundreds of species found in the Midwest, only the black widow and brown recluse are dangerous. Fortunately, both are relatively uncommon, and have markings which can be used to distinguish them from other non-threatening species.

Even though most spiders are harmless, few people are willing to tolerate them inside the home. Their unsightly webbing and fecal spots further negate the beneficial aspects of spiders to most homeowners. This column provides practical tips on spider control for concerned clients.

General Control Measures (all species)

1. Routine, thorough house cleaning is the most effective way to eliminate spiders and discourage their return. A vacuum cleaner and broom are the householder's most useful tools for removing spiders, webs, and egg sacs.

2. Spiders prefer quiet, undisturbed areas such as closets, garages, basements, and attics. Reducing clutter in these areas makes them less attractive to spiders.

3. Large numbers of spiders often congregate outdoors around the perimeter of structures. Migration indoors can be reduced by moving firewood, building materials, and debris away from the foundation. Shrubs, vines and tree limbs should be clipped back from the side of the building. Maintaining a vegetation-free zone next to the house also lowers the moisture content of the foundation and siding, making them less attractive to termites, carpenter ants, rodents and decay.

4. Install tight-fitting window screens and door sweeps to exclude spiders and other insects. Inspect and clean behind outdoor window shutters, and inside the orifices of gas barbecue grills.

5. Consider installing yellow or sodium vapor light bulbs at outside entrances. These lights are less attractive than incandescent bulbs to night-flying insects which, in turn, attract spiders.

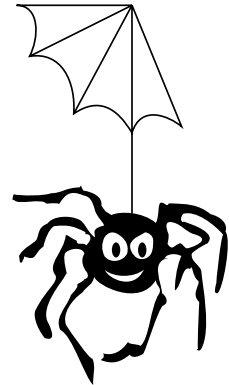
6. To further reduce spider entry from outdoors, insecticides can be applied as a "barrier treatment" around the base of the foundation. Pay particular attention to door thresholds, garage and crawl space entrances, including foundation vents. Sevin, Dursban, or any of the synthetic pyrethroids, e.g., Spectracide Bug Stop (tralomethrin), Ortho Home Defense System (bifenthrin) are effective, but may need to be reapplied periodically throughout the summer.

Brown Recluse/Black Widow Both of these spiders are potential health threats. They are timid, however, and will only bite in response to the threat of being injured. Most bites occur while putting on a shoe or piece of clothing in which a spider has hidden, or while unpacking boxes, etc.

The female black widow is about 1/2-inch long, shiny black and usually has a red hourglass mark on the underside of the abdomen. In some varieties the hourglass mark may be reduced to two separate spots. Most adult brown recluse spiders are about the size of a dime to a quarter with legs extended. Coloration ranges from tan to dark brown, with the abdomen often darker than the rest of the body. The feature that most distinguishes the brown recluse from many other harmless spiders is a somewhat darker violin-shaped marking on the top of the leg-bearing section of the body. The neck of the violin "silhouette" points toward the rear (abdomen) of the spider. Although each species has distinctive markings, a "spider is a spider" to most people. Concerned homeowners or victims of spider bites should be advised to bring the specimen in for confirmation.

Spider bites are difficult to diagnose, even by physicians. Black widow venom is a nerve toxin and its effects are rapid. The victim suffers painful rigidity of the abdomen and usually tightness of the chest. Victims should seek medical attention promptly. The bite of the brown recluse is usually painless until 3 to 8 hours later when it may become red, swollen and tender. Later the area around the bite site may develop into an ulcerous sore from 1 to 10 inches in diameter. Healing often requires a month or longer, and the victim may be left with a deep scar. Prompt medical attention can reduce the extent of ulceration and further complications. Not all brown recluse bites result in ulcerations and scarring.

The brown recluse may be found living indoors or outdoors. Black widows are more often encountered outdoors. Thorough inspection of cracks, corners, and other dark, undisturbed areas with a bright flashlight is an essential first



step in determining the location and extent of infestation. Indoors, pay particular attention to basements, attics, crawl spaces, closets, under/behind beds and furniture, inside shoes, boxes of stored items, and between hanging clothing. Brown recluse spiders also may be found living above suspended ceilings, behind baseboards, and inside ductwork or floor/ceiling registers. Another way to detect infestations in these areas is to install glueboards or sticky traps. Designed to capture mice and cockroaches, these devices can be purchased at grocery or farm supply stores. Placed flush along walls and in corners, they are useful monitoring tools and will also capture large numbers of spiders.

Brown recluse and black widow spiders also live outdoors in barns, utility sheds, woodpiles, and underneath lumber, rocks, and accumulated debris. To avoid being bitten, wear work gloves when inspecting inside boxes or when moving stored items.

Each of the management tips noted above for spiders in general are also useful for the black widow and brown recluse. Removal of unnecessary clutter is especially helpful in making areas unattractive to these pests. Indoor infestations of brown recluse and black widow also warrant treatment with insecticides. Insecticides should be applied into areas where spiders are living, making an attempt to contact as many spiders and webs as possible with the treatment. Most household insecticides with spiders listed on the label will kill spiders provided the spider is treated directly. Spot treatment with synthetic pyrethroids such as those mentioned earlier are especially effective. In attics, storage sheds, and other inaccessible or cluttered areas, total-release foggers (e.g., Raid Max, containing cyfluthrin) will have a better chance of contacting spiders that are hidden.

Severe infestations of brown recluse or black widow spiders require specialized skills, persistence and equipment to eradicate. In these situations, it would be prudent to call a professional pest control operator. ☺

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