NC COOPERATIVE EXTENSION

Home Gardening Newsletter

June - July
2024

NC COOPERATIVE EXTENSION
N.C. A&T STATE UNIVERSITY | NC STATE UNIVERSITY

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Brown Rot and Borers, Two Foes of Peaches

Every year around mid-summer, I receive inquiries about a 'jelly' like substance, oozing out from the tree trunk, of fruit that either does not ripen or falls off early, and or of a fuzzy brown substance that is invading their peaches and or nectarines. The top two foes causing these symptoms are the Peachtree Borer a clearwing moth & Brown Rot caused by the fungi Monilinia fructicola.

Peachtree Bores - Peachtree borers are clear-winged moths that deposit their eggs on the tree trunk, lower limbs or soil. Their eggs hatch and become larvae, which overwinters under the tree bark. When it warms up they tunnel into the lower trunk and roots feeding on the growing tissue and inner bark. Bores that feed on the roots will lead to a reduced crop yield due to lack of nutrient uptake, while heavy trunk feeding can girdle the tree and cause death. The end result is the tree may lose fruit, exhibit stunted growth, yellow foliage and eventually die. Fortunately, we can control Peachtree Bores by using a product with the active ingredient permethrin, or cyfluthrin at the label rates. If possible, purchase pheromone traps as a means to determine exact emergence of adult Peachtree Bores. Insecticides should be applied 8 to 16 days after the first adults are detected in the trap. If unable to utilize traps, then then spray 2 or 3 applications from early Aug. through mid-Sept.

Brown Rot - Although brown rot damage is typically observed on fruit, the fungus may also infect blossoms and shoots. Blighted blossoms turn brown and stick to shoots in a gooey mass. Infected shoots develop brown, oval, sunken cankers that may become sticky. Symptoms on ripening peaches may first appear as small circular spots that expand and develop rapidly on mature fruit. Wet weather and temperatures of 55°to 77°F create ideal conditions that favors disease development. Ripening fruits may rot completely within two days transforming from brown to black and shrunken, followed by either dropping to the ground or remaining attached to the tree. The end result of shriveled fruits, aka mummies will become the major source of overwintering fungal inoculum. Other fruits impacted by the Brown Rot include plums, quince and cherries.

The following practices such as sanitation, appropriate canopy management, and a properly timed spray program will go a long way to minimize Brown Rot disease.

- Plant fruit tree(s) in a well-drained location with 8-10 hours of full sunlight.
- Prune regularly to keep trees open to light and air circulation.
- Remove damaged or diseased fruit and limbs to lessen infection.
- Clean pruners between cuts.
- Dispose of pruning and other debris to avoid recontamination.
- Thin fruit 6-8 inches apart. Most homeowners miss this step!
- Pick off and dispose of, infected fruit to help slow the spread of this disease. Do not leave them on the ground.
- Spray the tree with a recommended fungicide such as Captan starting about 4 weeks prior to anticipated harvest. Sprays should be applied every 7 days until harvest.

Common and Not So Common Rose Diseases

Roses are grown for their beautiful blooms, landscape color, fragrance and cut flowers. Many gardeners try their hands at growing roses oftentimes following behind the footsteps and traditions learned from a beloved parent or grandparent. When tending a rose garden a particular smell or flower color may kindle cherished memories spent with grandpa in his bed of antique roses or hybrid teas. For most gardeners, growing roses is straight forward with careful pruning and fertilizing in the springtime followed by fungicide sprays throughout the growing season to combat the more common diseases of black spot and powdery mildew.

The following information will cover the top two rose diseases and introduce you to a relatively new disease entitled Rose Rosette Virus (RRV).

Black Spot and Powdery Mildew
Black spot is a fungal disease considered more serious than powdery mildew. Black spot causes circular black spots that start out small but will enlarge and increase in number with a frayed margin on the upper leaf surface. Eventually the infected leaf will turn yellow resulting in early leaf drop. If no action is taken to control the disease, defoliation will continue which will weaken the plant and reduce flower production.

Powdery mildew is a very common fungal disease on roses that is identified by white mold that occurs on the surface of young leaves, shoots, and flower buds. The disease causes leaf distortion and is usually more severe in shady areas and during cool periods. The fungus is windborne and may increase during periods of heavy dew. The diseased foliage and canes should be removed and destroyed during the growing season along with following a fungicide spray program.

If you think you have powdery mildew or black spot there are several fungicides that can provide adequate control. A suggested spray program includes the use of chlorothalonil and alternating with one of the following three fungicides containing the active ingredients: triforine, propiconazole, or myclonbutanil. Spray applications should occur every 7 to 10 days making sure to cover all plant surfaces for best results. Read and follow all label directions when using fungicides.

Rose Rosette Disease
In recent years, rose rosette disease caused by the *Rose rosette virus* (RRV) has been making an adverse appearance in landscapes throughout Western North Carolina. Rose rosette disease is actually a virus carried and transmitted by tiny eriophyid mites that threatens all types of cultivated roses including the hardy knockout roses. Eriophyid mites are wingless and move by crawling or being carried via wind currents. RRV first appeared in 1941 in California, progressed to Wyoming, followed by Manitoba Canada and has since spread to Tennessee (1994) and North Carolina. Losses can occur in home and commercial landscapes, nurseries, and botanical garden plantings.

Symptoms of RRV will vary depending on the variety of rose involved and may include elongated flexible shoots, shoots leading to a “witches-broom” appearance, excessive development of thorns, leaf deformation, abnormal red discoloration in shoots, flower abnormalities and plant death. If your roses begin to display “hyperthorniness,” then in all likelihood you have the RRV. However, leaf and shoot deformities can also be caused by accidental exposure to low rates of the herbicide glyphosate, so a little detective work may be necessary.

There is no chemical control for plant virus diseases in general and for RRV in particular. Since viruses become systemic in their hosts, pruning is not effective. Removal of infected plants is the best choice. Bag the shrub before digging to reduce the chance that the mites will scatter on the wind and take the virus to nearby plants. Research has shown that the incubation period for rose rosette can vary from 17 days to 9 months.

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June Horticulture Tips

Lawns

- Do not fertilize cool season lawns between April through August.
- If broadleaf weeds are present, pull them while they are small or spot treat with a broadleaf herbicide.
- Mow Fescue and bluegrass lawns at 3 inches.
- Recent wet weather may induce red thread or brown patch fungus disease to start developing in many lawns. The best steps to reduce the spread of the disease is to have a soil pH of 6.0-7.0 along with adequate levels of phosphorous and potassium. Avoid mowing when the grass is wet. Fungicides sprays are an option.

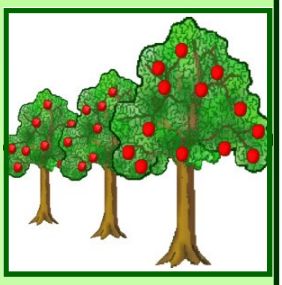
Vegetables

- *Consider submitting vegetables and or fruits at this years Macon County Fair in Sept.*
- Plant beans, lima beans, beets, carrots, Swiss chard, corn, cucumbers, okra, southern peas, pumpkins, and turnips.
- Side-dress vegetables 6 weeks after planting.
- Plant pumpkins and other winter squash for a fall harvest.
- Assure that vegetables get a least one inch of water per week. Do not wet foliage late in the day. Consider drip irrigation.
- While squash plants are still small, apply Bacillus thuringiensis (Bt) to stems weekly to prevent squash vine borers. Scout for insects. Hand pick, or if necessary to save the crop, use the least environmentally harmful insecticides.

- Spray tomatoes weekly with fungicide to prevent early blight and late blight diseases.
- Start Brussels sprouts for transplanting into the garden in mid-July.

Fruits & Berries

- Protect blueberries and raspberries with bird netting.
- Early summer rain has produced perfect conditions for lots of black rot to develop on grapes, as well as brown rot on peaches and nectarines. At this point, if you have not been applying fungicide sprays on a regular basis, you probably already have problems. Products containing Captan are most effective.
- July is the time to remove suckers & water sprouts from fruit trees.



Trees Shrubs & Flowers

- Water newly planted trees and shrubs weekly if rain is inadequate.
- Prune out dieback on rhododendron, azalea, and mountain laurel.
- Remove dead flowers in flower beds to encourage longer flowering.
- Cut off the faded flowers of perennials to encourage a second flowering.
- Install supports for tall-growing flowers before they start to flop.
- Pinch back chrysanthemums to develop busy plants with more flowers.

- Nothing perks up a patio or entry like a colorful container garden. You can create great looking containers without relying on flowers. Combine colorful foliage plants such as sweet potato vine, purple heart, coleus, wandering Jew, creeping Jenny, dusty miller, crotons, ivies and grasses.

Rose Diseases cont,

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