




Pecan Scab

Pecan scab is the single most important disease of pecan in the Southeastern United States. It is caused by the fungal pathogen *Fusicladosporium effusum*. Pecan Scab produces small olive to black lesions on leaves, fruit shucks, and green twigs. Young tender tissue is more susceptible, and lesions are most often observed on the undersides of leaves. Current season twigs are infected during the green growing stage. Shuck infections are most damaging between fruit onset and shell hardening. By late August, white fungal growth can be observed on old scab lesions. Fungal spores are released during the day, reaching a peak in the late morning. Spores are dispersed by wind, rain, and dew. In order for a significant infection to occur, the plant surface must remain wet for an extended period of time. Severity of Pecan Scab in a year is heavily dependent on the frequency of summer rains.



Pecan scab overwinters on tissues infected in the previous year. It is generally accepted that inoculum sources remaining in the tree are more important than those that have fallen to the ground.

Control of Pecan Scab is best achieved by use of resistant cultivars. Pecan Scab can be controlled by use of fungicide; however, this requires specialized equipment and is impractical for homeowners. Those with susceptible pecans may consider hiring a tree service to treat their pecans.



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Azalea Lace Bug

The Azalea Lace Bug is the most common pest of azaleas. Heavy infestations of this insect can result in extensive damage to the plants. Damage to plants is caused by feeding of both adults and immature insects. The azalea lace bug feeds on the plant by sucking sap using piercing/sucking mouthparts.

Initial damage to the plant gives leaves a stippled appearance. This stippled appearance may be mistaken for damage caused by spider mites; however, looking on the underside of leaves will allow the true problem to be identified.

Adult azalea lace bugs are approximately 1/8 inch long with white wings and dark markings. The immatures are smaller, darker in color and covered with spines. Cast off skins and excrement from the azalea lace bug can accumulate on the underside of leaves and can also be used as a way to diagnose damage from the azalea lace bug if the insect is not present. Azalea lace bugs prefer plants growing in sunny locations and these are more prone to attack than plants growing in shade.



Lace bugs overwinter as eggs, and heavy infestations can build by early summer. This insect can go through several generations in a year with populations increasing through the year. Recovery from damage by azalea lace bugs can take a significant amount of time even after the insects are controlled. Due to this, plants should be checked for insects regularly, and treatments applied if lace bugs are observed in significant numbers. Control of azalea lace bug is best achieved through the use of systemic insecticides. Products containing imidacloprid are particularly effective.

Garden Calendar: June

Planting

- Plant Crape Myrtles in bloom to be sure of color.
- Replace turf in deep shade with ground cover: Liriope, Ajuga, or Jasmine. Set out Caladiums in shady areas.
- Plant summer annuals: Ageratum, Cockscomb, Impatiens, Marigolds, Sunflowers, Four-o'clocks, and Periwinkle.
- Plant Tomatoes late this month to insure harvest late into fall. Cherry Tomatoes are a choice that are heat tolerant.
- Choose Daylilies now that they are in bloom for planting in your garden.
- Divide and replant Iris, cut leaves back to 6 inches after transplant.
- Plant Zinnias and Marigolds now for a second crop of flowers.
- Plant Snapbeans, Lima beans, Cucumbers, Eggplants, Peppers, Squash, and Tomato plants.
- Gladiolus planted now will give lovely fall blooms.



Fertilizing

- Fertilize Camellias with Azalea-Camellia fertilizer if not done earlier in the year.
- Fertilize Bermuda and Zosia grass. Fertilize Tomatoes, Cucumbers, and Zuccinis monthly with 5-10-10.
- Fertilize annuals and perennials.

Pest Control

- Mow lawn in the morning to reduce the chance of starting Brown Spot (fungus).
- Remove Zinnias with powdery mildew and replant.



Pruning

- Prune Oleander after blooming ends. Pinch Dahlias and Mums to assure a compact growth habit.
- Remove blackberry fruiting canes after harvest. Prune new canes to encourage side branching.
- Faded flowers should be removed from Daisy, Daylily, and other summer flowers.
- Prune out dead and damaged wood from trees and shrubs.

In Bloom

- Ageratum, Althea, Balloon Flower, Bee Balm, Begonia, Blackberry, Butterfly Weed, Coreopsis, Cornflower, Feverfew, Funkia, Gladiolus, Hollyhock, Japanese Iris, Lily, Nicotiana, Petunia, Phlox, Rose Scabiosa, Shasta Daisy, Sweet Pea, Verbena, Butterfly Bush, Golden-rain Tree, Hypericum, Mimosa, Stewartia, Sourwood, Vitex, Yucca, Jasmine, Crape Myrtle, Daylily, Geranium, Hibiscus, Hydrangea, Impatiens, Lantana, Morning Glory, Oleander, Plumbago, Portulaca, Purslane, Salvia, Veronica, Dusty Miller, Four O'clock, and Zinnia



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Calibrating Irrigation Systems

Home gardeners with irrigation systems often ask how long they need to run their system. The answer is a little more complicated than it may seem and depends on many factors. Of course, plant type and plant age (lawn or trees/shrubs, newly planted or established) are important to consider. You will also need to know how much water your system applies to each zone when it runs. Your water pressure, sprinkler head type, and distance away from the water source are all factors that can affect this number. We typically get so much rain in South Mississippi that irrigation is not frequently needed for the average home landscape. Watering your landscape when it doesn't need it not only wastes water but can also lead to plant disease issues. However, we do sometimes have periods of drought, or you may need to water new sod or plantings regularly while they establish.



The only way to know how long to run your individual irrigation system in order to water correctly is to calibrate it. Follow these steps to calibrate:

- Calibrate on a day when wind conditions are calm.
- Set several flat-bottomed, straight-sided containers (of all equal size) equally spaced within a watering zone. Tuna cans or coffee cans work well.
- Turn on the sprinkler system for 15 minutes.
- Add all the water collected from each can into one container of the same size that you used. Measure the depth of the water in the container to the nearest 1/8". Try to be as accurate as possible.
- Divide the measurement (in inches) by the number of collection containers to determine the average depth of water applied in that zone in 15 minutes. Multiply this depth by 4 to get an approximate rate in inches/hour.
- Adjust as needed.

Once you know how many inches/hour your irrigation system applies, make adjustments to your system. Don't run the system any longer than needed, and don't apply more than 1/2 inch of water per application. Use this recommendation as a guideline. Depending on your soil type, you may need to adjust this number. If you have sandy soils, you may need to adjust up to 3/4 inch of water per hour since sandy soils don't hold water as long. Remember to keep an eye on the weather and don't let your system run when we get enough rain. Rain shutoff devices or soil moisture sensors can be installed to help make sure you're not watering when it is not needed. Calibrating your irrigation system is an important step to save water and money and to decrease the likelihood of garden disease issues.



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Downy Mildew of Cucurbits

Downy mildew is the one of the most common and important foliar diseases of cucurbits. It is caused by the fungus-like pathogen *Pseudoperonospora cubensis*. This pathogen only infects cucurbit hosts, but may cause major losses in cucumbers, melons, squash and pumpkins.

Symptoms of downy mildew are almost entirely confined to the leaves. Small light green to yellow lesions first appear on the upper surface of the leaf. Notably, these lesions appear angular and are limited by the veins of the leaf. As the infection develops, the leaf yellowing spreads and leaves may become brown and necrotic.

Downy mildew is dispersed by air under dry conditions, but requires a period of at least 6 hours of moisture in order for the pathogen to establish itself on the plant. Mobile spores (zoospores) make their way to the stomata where they produce germ tubes and enter the plant. When conditions favor the formation of spores, they are produced on the underside of leaves and give the underside of the leaf the downy appearance from which the disease gets its name.

The downy mildew pathogen is an obligate parasite, meaning that its season to season survival is dependent on the presence of cucurbit hosts. Due to this, downy mildew can be eliminated by removing potential hosts from the area. Additionally, watering practices may have an impact on management of this disease. Limiting watering to the morning allows leaves to dry more quickly and may prevent the pathogen from infecting the plant. Watering from above the plant may also serve to spread the pathogen and allows for long periods of leaf wetting. Recommended fungicides for control of downy mildew include Chlorothalonil and Mancozeb. Copper fungicide products are effective in control of downy mildew.



Online Private Applicator Certification Program

A *private applicator* is a certified applicator who uses or supervises the use of restricted-use pesticides to produce an agricultural commodity on his or her own land, leased land, or rented land or on the lands of his or her employer. Private applicators must be at least 18 years old.

In response to limited face-to-face training during the COVID-19 situation, the Mississippi Department of Agriculture–Bureau of Plant Industry has approved an online private applicator certification program developed by the MSU Extension Service. Persons needing to obtain or renew their private applicator certification can complete the online training (two video training modules and a competency exam) by using the following link: <http://extension.msstate.edu/content/online-private-applicator-certification-program>. The fee for training and testing is \$20, payable online by credit card, debit card, or eCheck.



Being Counted Matters

Mississippi needs your help. By participating in the U.S. Census, you can help our state get the representation and resources we need.

BE A HERO!

PROTECT YOURSELF AND THE PEOPLE YOU LOVE FROM COVID-19

- Do you have diabetes?
- Do you have high blood pressure?
- Do you have heart trouble?
- Do you have asthma?
- Do you have lung disease?
- Have you had cancer or chemotherapy?
- Do you have some other serious illness?
- Do you have a weak immune system?
- Are you over 60 years old?
- Do you take prescription pills every day to keep you healthy?



If you answer “yes” to **just one** of these questions, **stay home!**

If you live with your parent, your grandparent, your aunt, your uncle, or anyone else who answers “yes” to **just one** of these questions, **stay home!**

Ask for help

If you need to stay home, call on friends, neighbors, or other family members (who don’t live with you) to pick up medicine, groceries, or other things for you.

Ask them to call you when they drop them off outside your door.

Be a helper

If you answered “no” to all of the questions above, and you don’t live with anyone who answered “yes” to any of them, you can be a helper.

Check on your friends, neighbors, and family members who might need help. You can pick up and deliver things that they need.

If you can, wear a face covering. If you don’t have a mask, you can tie a bandanna or a T-shirt around your head. Be sure it covers your nose and mouth. While you are wearing it, don’t touch it with your hands! Wash it at the end of every day.