



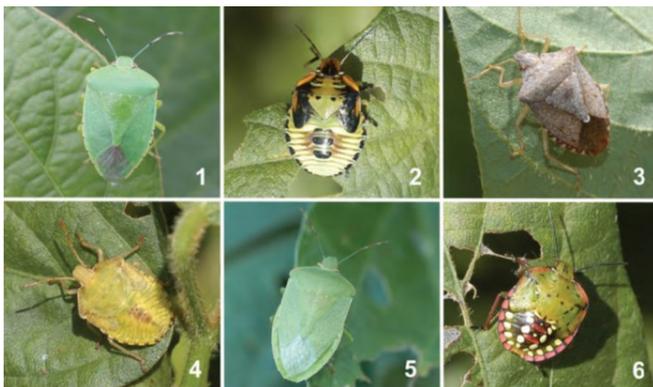
Stink Bugs in Your Vegetable Garden

One of the most damaging and common insect pests in late summer and fall gardens are stink bugs. A crop of vegetables can be damaged so severely by heavy infestations of stink bugs that the crop can be ruined. There are several key reasons that stink bugs are such a problem in late season vegetable gardens.

First, stink bugs have several generations each year, increasing their numbers with each generation. This is the reason that there are heavier numbers of stink bugs in the late summer than there were earlier in the year. Second, stink bugs reproduce on many different major row crops and weeds. After these crops mature the stink bug adults are trying to find another suitable host. Stink bugs are strong fliers and this makes it easy for them to move in where they feel comfortable. Third, stink bugs are fruit and seed feeders who focus their feeding on the part of the plant that we, as humans, like to harvest and eat as well.

The most common stink bug species that we have to deal with here in south Mississippi is Green Stink bugs, Southern Green Stink bugs, and Brown Stink bugs. The immature stink bugs known as nymphs can cause the same damage as the adults. The nymphs look similar to the adults as far as shape but the color can vary based on their stage of development. Another bug that can cause the same damage as the stink bug is the Leaf Footed Bug. They are larger and have an elongated body with leaf shaped segments on their hind legs.

Using an effective insecticide, such as products containing bifenthrin, cyfluthrin, gamma-cyhalothrin, permethrin, lambda-cyhalothrin or malathion, is the best way to get rid of this pest problem. **(Make sure and use the pesticide that is labeled for your particular crop.)** Most likely you will have to treat several times for stink bugs or leaf footed bugs because these unwelcomed bugs will continue to visit as long as there is a crop there that they like. **Be sure to always read the label carefully and follow the directions because the LABEL IS THE LAW!**



1. Green Stink Bug Adult
2. Green Stink Bug Nymph
3. Brown Stink Bug Adult
4. Brown Stink Bug Nymph
5. Southern Green Stink Bug Adult
6. Southern Green Stink Bug Nymph



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Upcoming Events for October 2018

<u>Hancock County Events</u>	
10	Hancock County Master Gardener Meeting — 1:30 p.m. at the Hancock County Extension Service Office.
16	Planting Trees in the Home Landscape — 2:00 p.m. at the Bay St. Louis Public Library. This program will cover planting trees in the home landscape and will include a discussion on plant selection, placement of trees in the home landscape, and care of trees after planting. Questions are encouraged. Presenter is Christian Stephenson, Hancock County Extension Agent.
17	Holiday Plants — 2:00 p.m. at the Pass Christian Public Library. This program will include information on the selection and care of traditional holiday plants including Christmas trees, amaryllis, kalanchoe, poinsettias, and more. The presenter for this program is Hancock County Extension Agent, Christian Stephenson.
<u>Harrison County Events</u>	
18	Black Bear Workshop — Registration is at 5:30 p.m with the program beginning at 6:00 p.m with a meal provided. The workshop will be held at the Lyman Community Center at 13742 Hwy 49 N in Gulfport. The Hancock/Harrison County Forestry and Wildlife Association will host a workshop on the Black Bear with guest speaker Richard Rummel of Mississippi Department of Wildlife Fisheries and Parks. Richard is the Black Bear program leader. The costs is free to members, \$10 individual (non-membership), \$20 individual (includes membership), or \$30 Couples (includes memberships). Contact Tim Ray at Harrison County Extension for more information at 228-865-4227 or by email at tim.ray@msstate.edu.
<u>Pearl River County Events</u>	
2	Pearl River-Stone County Forestry Association Meeting — 12:00 noon. The Sawmill Restaurant, 2205 Highway 49, Wiggins, MS.
4	The 45th Annual Ornamental Horticulture Field Day — 9:00 a.m. South Mississippi Branch Experiment Station in Poplarville. Updates from scientists at Mississippi State University and the USDA-ARS Southern Horticultural Laboratory will be featured in the Trial and Display Gardens in the morning and conclude in the main field building in the early afternoon. A \$10.00 registration fee (\$6.50 for students) includes lunch and refreshments. The South Mississippi Branch Experiment Station is located at 711 W. North St., Poplarville, MS 39470 (across from Pearl River Community College). From the intersection of Highways 11 and 26, go ½ mile north on Hwy. 11 and one block west on W. North Street. The Trial Gardens are open daily during daylight hours. Removal of plant materials is prohibited. For questions about the gardens, call 601-795-4525.
4	Pearl River County Master Gardeners Meeting — South Mississippi Branch Experiment Station in Poplarville at the conclusion of the 45th Annual Ornamental Horticulture Field Day.
9	Mississippi Well Owner Network Program — 6:00 p.m. Pearl River County Extension Service Office. The first 45 workshop registrants will receive a free bacteria sample analysis for their well. Screenings for others are \$25. Well owners can pick up a sample bottle and collection instructions Oct. 1-5 and Oct. 8 at Extension Service office at 417 Highway 11 North in Poplarville. Well owners can attend the workshop, just get the screening, or do both but registration is required for a free screening. Anyone planning to attend the workshop can bring their water sample then. For best results, use the sample bottles provided by the MSU Extension county office. Preregister for the workshop at http://gcd.msstate.edu/register or by calling 662-325-1788.
19	Beekeeping for Beginners Program — 10:00 a.m. to Noon. Crosby Arboretum, Picayune, MS. Bees and gardens go hand in hand! Pearl River County Extension Agent Dr. Eddie Smith will provide an introduction to how to get started with beekeeping, covering native plants for bees, basic biology, equipment, protective gear, mistakes and tips, how to grow your first colony of bees, and manage them throughout the year. Program free to members; \$5 for non-members. Call 601-799-2311 to register by October 18.
26	Private Applicator Training — 9:00 a.m. until 12:00 p.m. at the Pearl River County Extension Office, 401 West Lamar Street, Poplarville, MS. This training is for those who own or lease property for agricultural purposes. \$20 per individual payable by check or money order. Call 601-403-2280 to register for the training.
<u>Stone County Events</u>	
2	Pearl River-Stone County Forestry Association Meeting — 12:00 noon. The Sawmill Restaurant, 2205 Highway 49, Wiggins, MS.
<u>Multi County Events</u>	
4	Fall Fun with Florals — 12:00 noon until 1:00 p.m. Your local County Extension Office. Presenter: Lynette McDougald, Instructor, Plant and Soil Sciences. Description: Fall is here and florals take on a fun and festive look for the autumn events. Whether a party, tailgate, or your own home décor, we will design some fall fun with our florals. Call your local Extension office to RSVP.
11	You've Got the Interview....Now What? —12:00 noon until 1:00 p.m. Your local County Extension Office. Presenter: Dr. Darrell Easley, Learning & Development Manager, Human Resources Management. Description: A resume will get you the interview, but a strong interview will get you the job. This short session will discuss various types of interviews, strategies for answering questions, (including what employers are really asking), and why you should always ask questions. Call your local Extension office to RSVP.
25	Cyber Security —12:00 noon until 1:00 p.m. Your local County Extension Office. Presenter: Lauren Colby Nickels, Extension Instructor, Center for Technology Outreach. Description: In a world that relies on digital technology and the World Wide Web, it is important to know the risks associated with using the internet and computers. During this session, participants will learn about malicious software, viruses, identity theft, phishing attempts and the importance of strong passwords to prevent being hacked. Call your local Extension office to RSVP.

Garden Calendar: October

Plant

- Spring flowering bulbs should be planted this month, with the exception of tulips and hyacinths, which should be placed in the refrigerator for 6 weeks before being planted in late December or early January.
- Pot up Basil, Chives, Parsley, Rosemary, Sage, and Sweet Marjoram for that sunny kitchen window.
- Annuals to plant are Pansies, Violas, Pinks, Flowering Cabbage and Kale, English Daisy, Wildflower planting, Cornflowers, Larkspur, and Queen's Anne Lace.
- Perennials to plant include: Asters, Salvia, Hollyhock, Daylilies, Babies Breath, Iris, Shasta Daisy, Peonies, and Phlox.
- Many evergreens may be planted this month.

Fertilize

- Test soil in garden to monitor balance of minerals.

Prune

- Remove damaged and dead wood from trees.
- Pick blossom-like fruit of Golden Rain Trees and let dry for winter arrangements.
- Prune back annuals like Blue Salvia and Dianthus to the ground and mulch. They may go through the winter and bloom again.



Miscellaneous

- Dig up Caladiums now with foliage intact, allow to dry, remove dried foliage and store in peat moss in a cool dark place for replanting next year.
- Force bulbs for indoor show. Place bulb on gravel and water enough to cover the roots, keep in dark place until root system is established and sprout reaches 3 inches, bring gradually into the light and refill container with water to original level. Enjoy the blooms of Paper-white, Narcissus, Lily of the Valley, Jonquil, or Hyacinth in this way.
- Make sure the birds in your garden have food, shelter, and water.
- Place leaves in compost bin.



In Bloom

Mums, Marigolds, Periwinkle, Salvia, Sasanquas, Golden Rain Tree, Roses, Ageratum, Aster, Camellia, Celosia, Colchicum, Dahlia, Petunia, Salvia, Torenia, and Zinnia.



MISSISSIPPI WELL OWNER NETWORK

MISSISSIPPI WELL OWNER NETWORK PROGRAM

The Mississippi Well Owner Network program is a free, educational training opportunity for Mississippi residents who depend on household wells for their water needs. The program will benefit private well owners who want to become familiar with groundwater resources, septic system maintenance, well maintenance, water quality, and water treatment. Private well owners are independently responsible for monitoring the quality of their wells. Essentially, they are the operators of their own water systems and are responsible for ensuring that their water is safe.

BRING YOUR WELL WATER SAMPLES!

Well owners may bring water samples to be screened for total coliform and E. coli bacteria for \$25. Pick up approved sample containers with instructions at the Pearl River County MSU Extension office October 1-5 and October 8.

Each participant will receive free MSU Extension publications related to private wells and septic systems.



MISSISSIPPI STATE
UNIVERSITY™

EXTENSION

WORKSHOP

TUESDAY, OCTOBER 9, 2018

WATER SAMPLE DROP OFF
9 a.m.–4:30 p.m.

WORKSHOP begins at 6 p.m.

Pearl River County MSU Extension Office
417 Hwy 11 N. Poplarville, Mississippi 39470

FIRST 45
REGISTERED WATER
SAMPLES WILL BE
FREE



Preregister for the workshop at
gcd.msucare.com/register or call **662-325-1788**.

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Winterizing Fertilizer for Southern Lawns

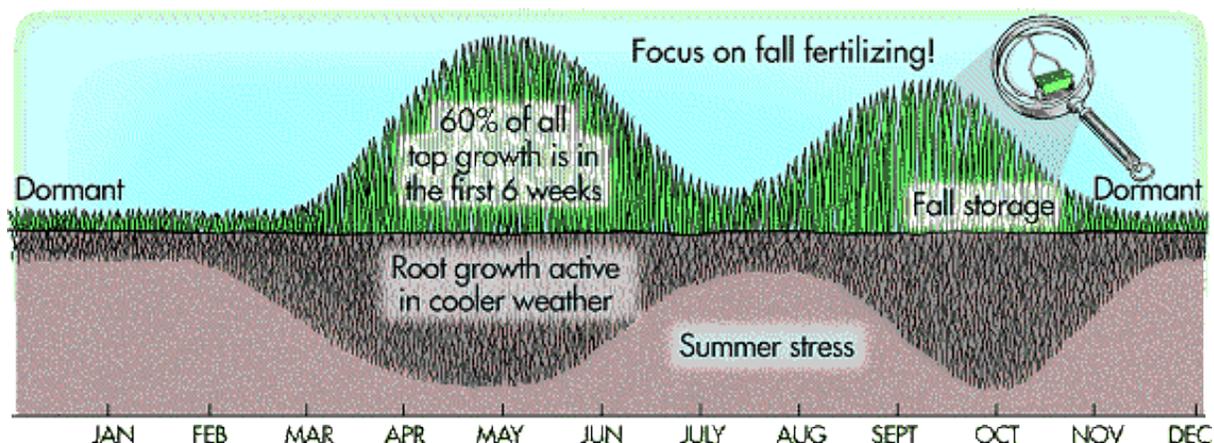
Any year-round lawn fertilization program should be based on soil test analysis, turf use requirements, and grower expectations. However, applying a late-season or “winterizing fertilizer” application to warm-season turfgrasses in Mississippi often becomes a controversial management practice. The controversy stems from the concerns for potential winterkill, disease promotion, and the effect on total nonstructural carbohydrates. Some research has indicated that late-fall nitrogen fertilization increases vulnerability to winterkill and promotes diseases. Other studies, including those conducted by Mississippi State University, have shown no direct correlation to winterkill but instead shows prolonged fall color and earlier recovery in the spring.



Late fall applications of potassium is a standard recommendation and practice as potassium promotes winter hardiness and disease resistance in turf. Therefore, a fall application of a winterizing fertilizer formulated to contain lower ratios of nitrogen to potassium may be just what your lawn needs. Nitrogen sources that are released slowly are recommended. Time the winterizing fertilizer application when temperatures begin to moderate and days begin to shorten but before the turf goes dormant.

Regardless of time of year, lush turf growth stimulated by excessive nitrogen may be more susceptible to certain diseases and insects. Be prepared to treat accordingly with appropriate fungicides and/or insecticides if conditions warrant.

A strong healthy lawn probably can do just fine without fall fertilization but a weak stressed lawn can still benefit from a boost in nutrients. The first official day of fall was September 22, so there still are several weeks of growing conditions left for most of the state.



Preventing Annual Winter Weeds

Winter annual weeds, those that show up as young seedlings in the fall and become quite unsightly by mid-winter through spring, will be germinating soon. A pre-emergence herbicide applied prior to their germination is the most effective and efficient way of control.

Pre-emergence herbicides have little to no effect on weeds that have already germinated, so it is important to get the herbicide out soon. A minimum of one-half inch of water either from rain or irrigation should follow shortly after the herbicide application to ensure that the herbicide is activated and moved onto the surface soil to form a uniform weed control barrier.

Pre-emergence herbicides may be purchased formulated as dry granules, wettable powders or water dispersible granules, liquids, and coated on fertilizers. Choose a formulation that is best suited for you and ALWAYS READ THE LABEL for specific application instructions, weeds controlled, and safety precautions.

Extension publications [#1532](#) and [#1322](#) provide information to help select the appropriate herbicides for specific weeds and turf species. These publications can be obtained from your local Extension office or downloaded. If your lawn was full of winter annual weeds this past spring, then now is the time to do something about preventing this from happening again this coming spring.



Fire Ant Control

Fire ant control is a never-ending battle across Mississippi, but with a good strategic plan and persistence, you can keep them to a minimum in your lawn. Now that somewhat cooler weather has arrived, fire ants have been busy elevating their mounds in preparation for winter. New mounds can appear overnight as a large colony of 100,000 ants or more carrying five times their own weight can excavate a 6 inch by 6 inch by 6 inch mass of dirt while making only 5 trips each. Considered one of the strongest animals in the world, ants have been digging through the earth for eons. It is estimated that ants worldwide dig up more than 16 billion tons of dirt annually. That is enough to fill 3 billion dump trucks.



There are several methods of applying products that control fire ants such as mound drenches, dry mound treatments, or broadcast sprays or granules. Probably one of the most effective for homeowners in terms of costs and effort is granular baits applied three times a year (spring, mid-summer, and fall). Baits can be applied to individual mounds, but when broadcast across the entire lawn, you also eliminate small undetected colonies that quickly replace the larger ones you individually treated.

Baits can provide 80 to 90 percent control when applied two to three times a year, and a fall application will eliminate many colonies before winter. If you have large colonies that need immediate reduction, then individual mound treatments with a contact insecticide can be used in combination with baits, but wait at least a few days after applying the bait to allow the workers to bring the bait into the mound. There are many trade name baits available containing at least one of the following active ingredients: hydromethylnon, fenoxycarb, spinosad, pyriproxyfen, methoprene, or abamectin. Since baits generally use some type of oils for attracting ants, it is important to use fresh baits and store them in cool dry areas so they don't become rancid.

Extension publication number 2331 "[Control of Insect Pests in and Around the Home Lawn](#)" provides additional information on fire ant control and other home lawn insects.



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Caring for Houseplants

Houseplants add color to our homes and can improve air quality. Usually plants in the home have fewer problems than those in the landscape, but infestations of insects or pathogens, as well as environmental conditions, may cause the plants to be unhealthy or less attractive.

One of the major causes of problems in houseplants is the level of watering. Underwatering is frequently first seen as yellowing of the leaves and browning around the leaf edges. The air inside our homes tends to be much lower in humidity than it is outside. This may cause plants to lose water by transpiration much quicker than expected.

Additionally, being placed near an air vent can cause leaves to desiccate. Overwatering is another frequent problem and can cause leaves to wilt. The soil mix for overwatered plants will often have a sour smell and the root system may be dark and off color. To avoid problems with over or underwatering, stick your finger into the soil to a depth of about two inches. If you feel moisture, do not water the plant.

Insect pests of houseplants include aphids, whiteflies, scale, and mealybugs. These insects often hide on the underside of leaves allowing them to escape notice until populations are high. Take care when purchasing new plants or bringing plants in from outdoors as you may be carrying these insects into the house. Infestations of insects can harm the appearance of plants as well as transmit plant diseases. Occasionally, houseplants will develop sooty mold due to insect infestations. Sooty mold is caused by a fungus and appears as a black coating on leaves, and in severe cases stems of plants. This mold is feeding on the “honeydew” produced by sap feeding insects. Most insect pests of houseplants can be removed by forcefully washing leaves of the plant with water. Insecticidal soap and Neem oil, which are both widely available in garden stores, are also effective in eliminating most pest problems.

Disease problems are less common in houseplants as most bacterial or fungal diseases require periods of high humidity in order to infect the plant. The lower humidity inside houses prevents this from occurring in most cases. However, as with insect pests, care should be taken not to bring infected plants into the house as these can serve as a source of pathogens to infect other plants. Disease in houseplants is usually first observed as yellow, brown, or black spots on the leaves. The shape of these spots varies with the particular organism causing the disease. Grayish-white powdery material on leaves and stems is a sign the plant is infected with powdery mildew. Houseplants may also occasionally develop root-rot diseases which are initially observed as wilting or a lesion near the base of the stem. Houseplant diseases are best managed preventatively. Care should be taken to not overwater the plant, and when watering do not allow the foliage to remain wet for long periods of time as this promotes disease development. Plants should also be spaced to allow for good air circulation. Should disease symptoms appear, the affected foliage can be pruned so that it does not serve as a source for more disease. Additionally, once the disease is diagnosed, fungicides or bactericides can be applied if needed.



Mealybug



Leaf spot disease



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Growing Pecans at Home

It's close to pecan harvest! However, I receive several phone calls throughout the year asking about pecans, more specifically, "what is wrong with my pecan trees?" While the answer may not be that simple over the phone, we agents often do home visits to determine the problem, or at least a good text or email photo. Pecans trees throughout the U.S., in particular South Mississippi, have a number of issues.

The primary issues that we've seen lately are Pecan Phylloxera, an insect that creates gall formations on leaves and stems, and Pecan Scab, a fungal disease that causes pecans to turn black and eventually fall off the tree. Both of these may cause little to no pecan production in severe situations. The unfortunate issue for most homeowners is the ability to control these pests, especially once a pecan tree reaches mature height. It is important that trees get good treatment coverage and homeowners often lack the equipment necessary to provide the coverage.



Phylloxera on hickory.

When treating for Pecan Phylloxera, timing is critical for successful phylloxera control. Insecticide sprays have to be applied in the narrow window between bud break and before new growth is 1 inch long. Sprays applied after galls have formed will not be effective. Sprays containing imidacloprid (Admire Pro, or many generics) or carbaryl (Sevin) provide good control if properly timed.

When addressing Pecan Scab, disease resistance is the primary ingredient for varietal selections in home plantings. Some pecan varieties resistant to scab and recommended for South Mississippi are Kiowa, Owens, Sumner, Elliott, Melrose, and Jackson. If possible, removing and destroying all leaves and husks may help reduce the amount of scab the following year.



Pecan Scab

When using a spray program, the following fungicides are registered on pecans: benomyl (Benlate 50WP), propiconazole (Orbit 3.6EC), fenbuconazole (Enable 2F), and thiophanate methyl (Topsin-M 70WSB), however, they do require the right equipment for proper coverage. Spray applications should be made every 2-3 weeks beginning when leaves first emerge until shell hardening (early August). Commercial pecan growers use high volume air blast sprayers to get good spray coverage of large trees, but finding a way to safely and properly treat mature pecan trees is a real challenge for most homeowners, especially those living in urban settings.