



## Planting Time for Fruit Trees

November or anytime during the fall season is a great time to evaluate your existing trees or plant new varieties in your landscape.

It is important, however, to select only those fruit trees that are adapted for the Coast. Chilling hours are very important, since we receive a limited number of them. Chilling hours refers to the number of hours spent below 40 degrees, but above freezing. Fruit trees need chilling hours to successfully produce fruit. The Coast sometimes receives only 350-400 chilling hours per season; therefore, select only those varieties that have the lowest chilling hour requirements to help ensure a lot of tasty fruit next year.

Sometimes people want to plant fruit trees simply because they want to try their hand at it. Fruit trees require a lot of maintenance and patience. The Gulf South is a tough place sometimes to produce high quality fruit. Other times homeowners lose their trees to insects or diseases and wish to replace them.

Unless you have an "orchard," many people have limited space for their fruit trees. Sometimes people will ask, "Can I replant my tree in the same place?" If you do have another suitable open space, it is best not to replant in the same area. Depending on what killed your tree, pests in the soil may have increased over the years and reached levels that caused the tree's death. The soil where you removed your dead or dying tree could be contaminated with insects or diseases that could attack and weaken your new, young tree over time. A weakened, declining tree is even more susceptible to winter injury, insects, diseases and drought.

Sometimes people think if they wait a year or two they can then put another fruit tree in the once contaminated area. In fact, it really depends on what soil disease or insect problem was present in the first place. For example, a common root disease on peaches has been found in the soil 35 years after the tree was removed! Pesticides available to homeowners are of limited value to fruit growers when trying to decontaminate problem areas. Fruit trees, however, do require a rigorous spray schedule each year to combat insects and diseases from ruining your crop. The spray program starts during late winter and continues throughout the season.

I encourage you to consult Extension publications for specific information on the fruit trees of your choice. Proper fruit tree selection, planting, fertilizing, and pruning combined with a pest management spray program is essential to a bountiful harvest of your favorite fruit.



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## Upcoming Events for November 2018

	<b><u>Hancock County Events</u></b>
14	<b>Hancock County Master Gardener Meeting</b> — 1:30 p.m. at the Hancock County Extension Service Office.
28	<b>Protecting Landscapes from Winter Weather</b> — 2:00 p.m. at the Pass Christian Public Library. This program will include information on protecting landscape plants, including ornamental and fruit trees from damage due to winter weather, as well as how to help plants recover from damage. Presenter is Christian Stephenson, Hancock County Extension Agent.
	<b><u>Lamar County Events</u></b>
15	<b>Private Applicator Training</b> — 6:00 p.m. at the Lamar County Extension Office in Purvis, MS. This training is for those who own or lease property for agricultural purposes. \$20 per individual payable by check or money order. Call 601-794-3910 by November 13 to register for the training.
	<b><u>Pearl River County Events</u></b>
2	<b>Pearl River County Master Gardeners Meeting</b> — 12:30 p.m. Crosby Arboretum, Picayune, MS. LaJuan & Lenore will show us how to make a table arrangement for the Holidays.
6	<b>Pearl River-Stone County Forestry Association Meeting</b> — 6:00 p.m. Mississippi Gulf Coast Community College cafeteria meeting room. Perkinston, MS.
	<b><u>Stone County Events</u></b>
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	<b><u>Multi County Events</u></b>
1	<b>Setting the Table</b> — 12:00 noon until 1:00 p.m. Your local County Extension Office. Presenter: Lynette McDougald, Instructor, Plant and Soil Sciences. Description: As families gather for Thanksgiving, you will want to set the perfect table! MSU's lead floral designer, Lynette McDougald AIFD, CFD, will share projects that are sure to impress! Call your local Extension office to RSVP.
8	<b>Tomato Cage Tree</b> —12:00 noon until 1:00 p.m. Your local County Extension Office. Presenter: Shanna Taylor, Extension Agent, Coahoma County. Description: The holidays are coming and it is time to decorate your home or office. Join Shanna as she shows how to transform tomato cages into trees for beautiful Fall and Christmas décor. Call your local Extension office to RSVP.
29	<b>The Great Outdoors: How to Involve Your Kids!</b> —12:00 noon until 1:00 p.m. Your local County Extension Office. Presenter: Dr. John Long, Assistant Extension Professor, 4-H Youth Development. Description: John will share great ideas to introduce your kids to the great outdoors. Whether hunting, plant identification, animals, or insects, join him to see the outdoors thru a child's view. Call your local Extension office to RSVP.





# Garden Calendar: November

## Plant

- Plant shrubs and trees after soil cools.
- Plant summer blooming perennials: Iris, Daylily, and Daisies. Plant winter and spring annuals: Pansy, Pinks, Flowering Cabbage, and Kale.
- Root Rose cuttings.



## Water

- Water all newly planted trees and plants regularly.

## Prune

- Remove dead limbs and prune evergreen shrubs.
- Cut off tops of brown perennials, leave roots in the soil.



## Do Not Prune

- Do not prune spring flowering shrubs such as Azaleas, Hydrangeas, Mock Orange, Spirea, and Flowering Quince because flower buds are already forming.
- Delay pruning of most trees and shrubs until February since any new growth stimulated by pruning may be killed by a sudden freeze.

## Miscellaneous

- Put leaves and spent annuals into compost bin.
- Add mulch to your garden and all ornamental beds for winter protection.
- Repair and sharpen garden tools, store with light coat of oil to prevent rusting.
- Build bird feeders and houses.



## In Bloom

- Impatiens, Cannas, Roses, Witch Hazel, Gerbera Daisies, Sweet Olive, Camellias, Sasanquas, Japanese Plum, and Poinsettias.



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## Planting Spring Flowering Bulbs

Now is the perfect time for planning your garden next year. The first group of plants you should consider are the spring flowering bulbs. This group of plants includes tulips, daffodils, hyacinths, crocus and many others that grow from bulbs, corms, rhizomes, and tubers

However, beautiful, planting bulb crops is not the instant color associated with planting bedding plants. Bulb crops must be planted when the soil temperatures are cooler and with sufficient moisture. In south Mississippi, any time after Thanksgiving is a good time to plant bulbs. This allows the root system to become established and support foliage and flower growth through the winter and spring (See photo).

Planting bulbs has gotten easier over the years with the advent of specialty bulb augers. Simply attach the auger to a cordless drill, a regular corded drill is also fine, drill holes to the desired depth, place bulb and cover. Done!

The depth of hole is determined by the size of the bulb. Generally, a hole 2 ½ times deeper than the bulb diameter is sufficient.

Always plants in the correct bulb orientation, usually this refers to the wide side down, and pointed end up. Some bulbs may have a papery covering called a tunic. Do not remove as this provides protection to the bulb.

Fertilization is not required for the first year. In subsequent years a general 10-10-10 garden fertilizer is sufficient at about 1 ½ lbs per 100 ft<sup>2</sup>.



**Development of daffodil through winter and flowering in spring. Photo courtesy of the International Flower Bulb Centre ([www.bulb.com](http://www.bulb.com))**





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## Crape Myrtle Bark Scale

Before buying and planting crape myrtle trees it is important to be sure they are not infested with crape myrtle bark scale (CMBS). CMBS is a new, non-native pest of crape myrtle that was first detected in Mississippi in 2015. So far it is known to occur in and around the areas of Ocean Springs, Southaven/Olive Branch, Oxford, Madison, Natchez, and Senatobia. But it can quickly and easily spread to other areas of the state. Initial infestations are usually brought into an area on newly planted trees, trees that were either infested when they were purchased at the retail nursery or when they



were installed by a commercial landscape contractor. Once established in an area, CMBS can readily spread to other nearby trees. The females can't fly, but newly hatched crawlers can move to trees that are up to several hundred feet away by hitching rides on the feet of birds and other animals, or by being transported on limbs trimmed from infested trees.

This is a serious pest that can turn what has traditionally been a beautiful, low-maintenance landscape tree into an ugly, high-maintenance tree. CMBS causes crape myrtles to become black and ugly with accumulations of sooty mold and results in poor growth and poor bloom production. Heavy, uncontrolled infestations can even kill trees or cause the trees and the area underneath them to be so unsightly that the homeowner opts to have them removed. Fortunately, there are effective treatments.

*What to Look For:* Heavy infestations of CMBS are easy to identify. 1} Watch for crape myrtles with heavy accumulations of black sooty mold, but keep in mind that heavy aphid infestations also cause this symptom. 2} Look more closely for patches of white felt-like material on the trunk, limbs or twigs. 3} Individual adult female scales are oval-shaped and about 1/10 inch long, but heavily infested limbs may be totally encrusted with scale. 4} CMBS bleed pink if the felt cover is broken with a knife point or tooth pick.

*Control:* The best offence is a good defense. Avoid buying and planting infested crape myrtles. Work closely with your nursery or landscape contractor to be sure any crape myrtles you purchase are CMBS free. Systemic insecticides such as imidacloprid, dinotefuran, or thiamethoxam applied as soil injections or soil drenches in May to June are the best treatments available for crape myrtle bark scale. Because these treatments do not give 100% control, plan on treating trees again the following year—even if you don't see any scale on them. See extension publication 2938, [Crape Myrtle Bark Scale Identification and Control](#), for more information. This publication contains tables with recommended insecticides for both home and commercial application, including brand names, treatment rates and tips on how to use these soil-applied products.



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## Fungus Gnats (*Bradysia* sp.)

Fungus gnats (*Bradysia* sp.) are small dark-winged insects that are often found around houseplants in homes and offices. They can be a nuisance pest when they occur in large numbers. Adult fungus gnats are approximately 1/8" long with long legs and antennae. Though the adult insects are somewhat similar to mosquitoes in appearance, adult fungus gnats are harmless and do not bite. Larvae of the fungus gnat develop in the growing media of houseplants. Larvae are wormlike in appearance and are translucent with a black head.

Fungus gnat larvae live in the top 2 to 3 inches of growing media, dependent on moisture levels. These insects primarily feed on algae and fungi present in the medium. They will feed on leaves or roots resting on the surface of the growing medium and can cause damage to delicate houseplants. Larvae mature in 2 to 3 weeks and pupate in the growing medium. Adults emerge about 1 week later. Fungus gnats are weak fliers and usually fly in short erratic patterns. Adults are usually seen around houseplants, but will occasionally also be found on nearby window frames. Adults can lay as many as 200 eggs in cracks or crevices of the growing medium. Moist media with high amounts of peat moss are highly attractive to these insects.

Though these insects are present year round, they tend to be more noticeable in the fall and winter. During this time of year, many plants are brought indoors. Small fungus gnat populations present outdoors may rapidly increase in response to warmer indoor temperatures. Also, with cooler temperatures and shorter daylengths, plant growth is slowed and less water is used leading to media staying wet longer.

The easiest way to manage fungus gnats is to allow the growing medium in the pot, especially the top few inches, to dry between watering. Dryer media are less attractive to egg-laying females, and eggs and larvae will often die in dry soil. Repotting plants will also decrease fungus gnat populations, as older growing media will retain more water once it has broken down. Another means of dealing with large populations of fungus gnats is to place yellow sticky cards under plant foliage. Adult gnats are attracted to the color of the card and will be eliminated before laying eggs.



Adult Fungus Gnat



Fungus gnat larva

## Good Sanitation Helps Prevent Disease

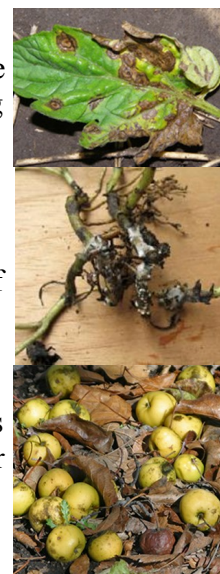
Plant diseases can negatively impact both the appearance of ornamental plants and the productivity of vegetables. The backbone of a good disease management strategy for the home landscape is sanitation. The goal of sanitation is to eliminate or reduce the amount of potential disease by removing inoculum (fungal spores and bacteria). Sanitation can include any activities aimed at preventing the spread of inoculum to healthy plants.

Many disease organisms overwinter on plant debris such as fallen leaves. If this debris is left in the garden area, spring rains result in the spread of the pathogen to healthy plants. Wind and rain will move the disease to other areas of the garden or landscape. Removal of this debris is an important part of a disease control plan, especially for diseases such as rusts, powdery mildew, and bud and flower blights.

In many cases, burying plant residue with soil helps break down the plant material and destroys some pathogens. In addition, pruning out diseased branches can prevent spread onto healthy tissue. In perennial beds, old flower heads, stalks and any diseased plant parts should be removed. Examine shrubs and trees for dead branches. If dead areas are the result of canker disease, their removal will prevent later spread of the disease. When cutting away a diseased branch, the pruning cut should be made 4 to 6 inches below the diseased area. Remember to properly disinfect tools between cuts. A solution of 1 part bleach to 19 parts water (5%) is effective.

If a plant was infected by leaf spot, raking and disposal of fallen leaves will help minimize the problem. Diseased plant tissue should not be added to compost piles as some organisms can survive in the soil and will spread when the compost is added to the garden area.

Good sanitation practices can dramatically reduce the incidence of disease in the home landscape, as well as reduce the need for pesticide applications throughout the year.



Diseased plant material such as fallen leaves and fruit, as well as diseased stems can serve as sources for disease in the home land-





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## Sod Webworm Causing Turf Damage on the Coast

There are several species of caterpillars that occasionally damage turfgrass in Mississippi including fall armyworms, cutworms, and sod webworms.

Although fall armyworms are the primary pest we see in pasture and rangeland almost annually, we often see both the sod webworm and tropical sod webworm on the coast. The good news is these sod webworm pests aren't always reaching the economic threshold; the bad news...they are this year!

Tropical sod webworm moths look much different than the moths of other sod webworms. Moths are often noticed before damage is observed, with large numbers of low-flying, small, whitish or brown moths being flushed up from the lawn and surrounding ornamental shrubs, or being attracted to lights at night. Because these insects do not survive freezing weather, they are more common in the coastal counties.

Heavy outbreaks are sporadic and can cause severe short-term damage, with turf having a dead, ragged appearance, and with trails of webbing present among the grass blades. In heavy infestations, small brown patches of affected turf may run together forming irregular, brown patches.

Sod webworms will damage all types of turf grass, but especially favor St. Augustine, bermuda, and centipede. Careful, frequent scouting is necessary to detect a developing infestation before it causes damage. There may be two or three generations per year so several applications may be necessary in a growing season. Foliar spray products work best with Sevin concentrate containing Beta-permethrin, Spinosad, and Ortho Bug-B-Gone Insect Killer containing Bifenthrin being a few choices to consider although there are granular products available.



**Lawn damage caused by sod webworms**

**Small spots of dead grass indicative of sod webworm damage**



**Sod webworm larvae**

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## Drugstore Beetle

Household insect pests come in a wide variety of shapes and sizes. On the small side (about 1/10 of an inch), is a little brown beetle named the drugstore beetle. Other names include bread beetle or biscuit beetle. As is often the case, these beetles received their name based on the areas and foods they are commonly associated with. Years ago when apothecary shops, which contained large supplies of dried medicinal plants were common, these small beetles were usually nearby. Still today, they are often found infesting dried plant matter in the form of potpourri, dried flower arrangements, flour, cereal, and tea and tobacco products.

Controlling these small beetles is often as simple as removing the item they are infesting. However, if they have been present for a long time this can become less effective as they have likely moved around to other food sources. Additionally, if any rodents have cached nuts in the attic or voids in the wall they may be feeding on these as well. Thoroughly check all potential food sources, including flower arrangements and herbal supplements. Store those that are not infested in insect proof containers, and throw away any infested items. While insecticides can help control heavier infestations, the best method is to thoroughly clean any crumbs or food items the insects use and to store them in insect proof containers. Should you choose to use an insecticide, it is important to read the label and only apply in the kitchen or pantry after all food has been removed.



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