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MULTI COUNTY

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Mums for Fall

Bright, vivid colored mums are synonymous with fall. Think football games, hay bales, scarecrows, pumpkins, gourds and mums. Of course, the word "mums" is short for one of our favorite perennial garden plants, the chrysanthemum. Visit any garden center or nursery now and you will have many, many choices of colors and sizes. When making your selection choose a plant with good shape and lots of unopened flower buds to ensure a long flowering period. Consider the bloom color and what other plants or accessories, such as gourds, pumpkins, baskets, pots, ornamental corn or whatever, will complement the flower.

For the most dramatic effect it is best to mass mums by color. If planting directly into a bed, be sure to space the plants so that the edges of each plant almost touch. Remember that odd numbers of plants tend to make the plants easier to arrange for that dynamic impact you are seeking!

If you're planting in containers, plant enough mums so that the container looks full with a mounding effect above the edge of the container. Mums combine well with many other plants. Ornamental grasses, ornamental cabbage and kale and pansies are just a few suggestions. Remember that the first killing frost we have will wipe out the mums. At that time you can yank the plants out and toss them in the compost or just leave in place, cut the tops back, and keep the stems pinched back next summer to encourage bushiness. Stop pinching the stems back by mid to late June so buds will have time to form for fall flowering.

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Events for September 2019	
	Hancock County Events
11	**Hancock County Master Gardener Meeting**— 6:00 p.m. Hancock County Extension Office.
18	**Planting Trees in the Home Landscape**— 2:00 p.m. Bay St. Louis Public Library. This program will include information on selection of fruit and ornamental trees for the home landscape, as well as information on best practices for planting and care of trees through their first year. Presenter is Dr. Christian Stephenson, Hancock County Extension Agent.
28	**Breakfast in the Garden**— 9:00 a.m. - 10:30 a.m. Bay St. Louis Community Garden. The Hancock County Master Gardeners invite you to a potluck breakfast and tour of the Bay St. Louis Community Garden and Orchard.
	Harrison County Events
3	**Hancock/Harrison Forestry and Wildlife Association monthly meeting**— 11:00 a.m. until Noon. Sherry's Country Kitchen located at 20180 Highway 53 in Gulfport, MS. All Hancock/Harrison CFWA members are welcome to attend.
10	**Lawn Winterizers—** 1:30 p.m.-3:30 p.m. Osher Lifelong Learning Institute, USM Gulf Park Campus, Long Beach, MS. Through this program you'll learn what you should know and understand about winterizing your lawn. Presenter is Tim Ray, Harrison County Extension Agent. For more information or to register, visit https://www.usm.edu/lifelong-learning. The costs is $10.
10	**Wood Pellet Plant Meeting—** The Hancock/Harrison County Forestry & Wildlife Association will host a meeting on the new pellet plant coming to George county, Lyman Community Center located at 13742 Highway 49 N in Gulfport. 5:30 p.m.-8:30 p.m. Enviva, Inc. will build what will be the largest pellet plant in the world in Lucedale, producing 1.4 million oven dry tons of pellets when at full capacity. Dinner is free for CFWA members, and $10 for non-members. Preregistration is required by calling the Harrison County Extension Office at (228) 865-4227 or emailing Tim Ray at tim.ray@msstate.edu.
	Jackson County Events
9	**Jackson County Master Gardener Meeting**— 10:00 a.m. at the Biloxi Yacht Club. The topic covered will be hypertufa containers with Dr. Wayne Porter.
17	**Jackson County Forestry Association Meeting**— 6:30 p.m. at Riverfront Community Center in Moss Point (4400 Denny St). Dinner will be served, free to attend with RSVP. Open to Forestry Association members and individuals in Jackson and George County interested in becoming a member. Speakers will be Extension Associate Marc Measells and Dave Godwin from the Mississippi Forestry Association. RSVP by September 13 to 228-769-3047 or evan.ware@msstate.edu.
	Pearl River County Events
3	**Pearl River-Stone County Forestry Association Meeting**— 12:00 noon. The Sawmill Restaurant, 2205 Highway 49, Wiggins, MS.
6	**Pearl River County Master Gardener Meeting**— 12:30 p.m. Crosby Arboretum in Picayune, MS.
9-14	**Pearl River County Fair & Rodeos**— Visit the Facebook page for more information: www.facebook.com/PearlRiverCountyFairRodeo/ or call 601-403-2280.
16	**Wild Hogs**— 11:00 a.m. until 12:00 noon . The Senior Center of South Pearl River County. Presenter: Dr. Eddie Smith, Pearl River County Extension Agent & County Coordinator. No RSVP required.
	Stone County Events
3	**Pearl River-Stone County Forestry Association Meeting**— 12:00 noon. The Sawmill Restaurant, 2205 Highway 49, Wiggins, MS.

Garden Calendar: September

Get Ready
- Make sure you've ordered daffodils and other spring bulbs for October planting.
- Build or buy compost bin in anticipation of autumn leaves.

Plant
- Plant cool season leafy root vegetables: Carrots, Beets, Turnips, Lettuce, and Spinach.
- Sow hardy annuals: Sweet Alyssum, Calendula, Annual Pinks, Snapdragon, and Sweet Peas.
- Sow rye grass seed in winter lawns.

Fertilize
- Stop feeding mums when the buds start showing color.
- Acidify Azaleas and Camelias.

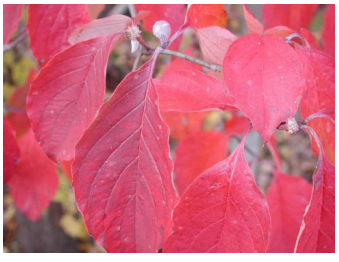
Water
- Slow down watering of Azaleas and Hydrangea to allow them to harden against winter freezes.
- Spray foliage of Camelias in anticipation of their bloom.
- Water potted plants and hanging baskets frequently.

Prune
- Disbud Camellias, Dahlias, and Chrysanthemums to produce specimen blooms. It is generally not a good idea to prune this late in the year, because new growth will be more susceptible to winter freezes.

Miscellaneous
- Turn compost pile.
- Propagate by layering. Scrape underside of a strong branch, bend down to ground, cover with soil and weigh down with a brick. Water from time to time and end of branch will put out new growth; becoming a new plant.
- Pick flowers in bloom and dry for future arrangements. Bundle flowers together and hang upside down in a dry, sheltered area.
- Repot houseplants. Prune away damaged foliage and give a good dose of food.

In Bloom
- Canna, Cosmos, Copper Plant, Marigolds, Periwinkle, Plumbago, Crape Myrtle, Althea, Four-o'clocks, Salvia, Ageratum, Coleus, Lycoris, Aster, Begonia, Celosia, Chrysanthemum, Coral Vine, Ginger Lily, Gladiolus, Jacobina, Liriope, Morning Glory, Petunia, Phlox, Rattle Box, Rose, Spider Lily, Torenia, Vinca, White Zephyranthes Lily, Zinnia, Buddleia, Franklin Tree.

Fall Color
- Flowering Dogwood with showy, drooping red leaves.
- Ginko leaves turn pure yellow.



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The Beauty of Tree Foliage in the Fall

Every fall we see a mixture of red, purple, orange and yellow leaves. This is the result of chemical processes that take place in the tree as the seasons change from summer to winter. During the spring and summer, the leaves serve as food manufacturers necessary for the tree's growth. This food-making process takes place in the leaf in numerous cells containing chlorophyll, which gives the leaf its green color. Chlorophyll absorbs from sunlight the energy that is used in transforming carbon dioxide and water to carbohydrates, such as sugars and starch. This is the process we know as photosynthesis.

The brilliant orange fall color of Sugar Maple

But in the fall, the leaves stop their food-making process and the leaves' work ends. This is because of changes in the length of daylight and changes in temperature. The chlorophyll breaks down, the green color disappears, and the yellow to orange colors become visible. Often there is too much sugar in leaves to transfer back to the tree. In this situation, the chemical combination of these sugars with other substances produces many color shades. Some mixtures of various amounts of chlorophyll and other pigments produce the brilliant red of the dogwood to the darker red-browns of oaks or the yellows and purples of sweetgum, while others give the sugar maple its brilliant orange.

Fall color of Sweetgum

While the leaf is changing, other important processes are taking place. At the point where the stem of a leaf is attached, a special layer of cells develops and gradually cuts tissues supporting the leaf. The leaf falls leaving a scar where it grew on the twig. Shedding leaves is another provision for winter. After broadleaf trees shed their leaves, branches can more easily support snow and ice accumulations, which is particularly useful in areas more north.

Temperature, light, and water supply have an influence on the degree and the duration of fall color. Low temperatures above freezing will favor the bright reds in maples. However, early frost will weaken the brilliant red color. Rainy and/or overcast days tend to increase the intensity of fall colors. The best time to enjoy fall color would be on a clear, dry, and cool day. So, enjoy it while it lasts, even for such a short time.

The fall brings out the most vibrant colors in trees.

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Two-lined Spittlebugs

As insect that has been seen in many lawns and gardens this year is the Two-lined Spittlebug. These insects first appear in June and numbers will increase through August and September. This insect is most frequently a pest of lawns, especially centipede grass, but adults and immatures may be observed on garden plants. Heavy infestations can be damaging to lawns.

The Two-lined spittlebug is easily identified by the two bright red lines which cross each of their maroon wings. Immatures can be found by looking for the frothy masses of "spittle" that can be found on grass stolons or on the stems of other plants. These masses of froth are used by the insect to protect it both from predators and from desiccation. Several insects may be found inside each of these spittle masses.

Adult and immature spittlebugs feed using piercing sucking mouthparts to suck out plant sap. Adult spittlebugs produce saliva which is damaging to plants, especially some grasses, and so cause more significant damage. Symptoms of this damage include yellowing of the leaves, and in severe cases may lead to dead brown patches in lawns. Centipede grass is most susceptible to damage, but St. Augustine and Bermudagrass are also sometimes impacted.

Spittlebugs are favored by wet, rainy conditions and by vigorously growing grass. Excessive thatch may also favor populations of this insect. Minimizing thatch build-up, keeping grass mowed to the proper height, and avoiding excessive watering all reduce the potential for problems with spittlebugs.

If problems with Spittlebugs are detected, they are best controlled by applying insecticides in a liquid formulation. Granules are less effective as they tend to fall below the area the insects occur. Carbaryl (Sevin) is effective at controlling this pest. Mowing and watering prior to insecticide application will make control more effective.

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Variegation in Foliage

Leaf with chimera variegation

Variegated plants add interest to the landscape by having more than one color on their leaves, and less commonly, on their flowers. Most frequently, foliage of variegated plants will be blotched, striped, or bordered with a light color. Some plant species naturally have patterns of pigmentation that are passed from generation to generation. Another type of variegation is caused by the presence of air pockets between the pigmented lower layer and unpigmented upper layer of the leaves. When light hits these transparent pockets, it is reflected causing the leaf to have a silvery appearance. Both pigmented and reflective variegation are a stable part of the genetic information for the plant and are passed from generation to generation. This variegation is often selected by growers to produce cultivars with desirable appearances.

Pattern variegation

The most common type of variegation results from a naturally occurring mutation in the plant. This leads to some areas of the plant being less able to produce chlorophyll leading to white or yellow patches or zones. This type of variegation is referred to as a chimera. Chimeral variegation can occur in different patterns. In some examples, the patches of variegation are randomly arranged on the leaf, while in others the variegation is consistent and leads to symmetrical leaf patterns. These differing patterns of variegation depend on the area of the growing tip in which the mutation occurs. In addition to variegated foliage, other useful chimeras in plants include thornlessness in blackberries, fuzzless peaches, and alteration of bract color in poinsettias.

Reflective variegation

Variegated plants may be quite attractive but may also grow less vigorously than plants that are normally pigmented. Lack of chlorophyll in some areas of the plant reduces its ability to collect energy from sunlight. This may be especially critical for plants in shady areas, as their access to sunlight is limited.

It is important to recognize that, dependent on the plant and the cause of variegation, the variegated form may be stable or unstable. Unstable variegated plants may revert to their solid green form. Environmental conditions such as light intensity, water, and temperature may play a role. Reverted shoots are easily seen as they will appear as pure green shoots emerging from an otherwise variegated plant. Due to these green shoots having more chlorophyll, they may grow more vigorously and can eventually take over the plant. Many plants will revert only on the stem and branch. These can be removed to prevent reversion of the entire plant. This typically works to slow the production of green leaf cells. While this will not stop the process of reversion entirely, it can help prolong the variegated appearance of the plant.

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Torpedograss

Torpedograss is a very difficult weed to control in home lawns across the Gulf Coast. When the perennial grass is fully mature, it can grow up to 3 feet tall, but it often goes unnoticed for some time in lawns that are kept mown. Home gardeners will usually not notice torpedograss until there is a large enough area growing and a difference in lawn color and texture gives it away. Torpedograss gets its name from its sharply pointed rhizomes (below ground stems) and stolons (above ground stems). It spreads mainly by pointed rhizomes that grow horizontally through soil that can even puncture weed barriers. The grass will form a seed head, but the seeds are reported as unviable in our climate.

Torpedograss is naturally found in areas with wet soils but can also survive drought conditions. It prefers open, sunny sites (like your lawn), but can also grow in part shade. The ability to thrive in many conditions makes it easy for it to spread throughout and thrive in different areas in your home garden – these traits also cause it to be very persistent and difficult to get rid of. There is usually little control success from hand pulling or tilling. Mechanical control can increase the spread of torpedograss when pieces of rhizomes left behind grow into new plants. For this reason, chemical control is preferred.

Unfortunately, there are no effective selective herbicides available for use in St. Augustine or centipede lawns. Herbicides with the active ingredient quinclorac can be used selectively on Bermudagrass and zoysia lawns for suppression when applied according to label. Sometimes the only chemical option is to use a non-selective herbicide (glyphosate or imazapyr) to spot spray areas, and then to replant your lawn. In certain cases with very bad infestations, it may be best to kill an entire lawn area and re-sod. Regardless of your course of action, managing this tough weed will require constant vigilance and action. Always read and follow herbicide labels and contact your local Extension office if you need guidance before application.

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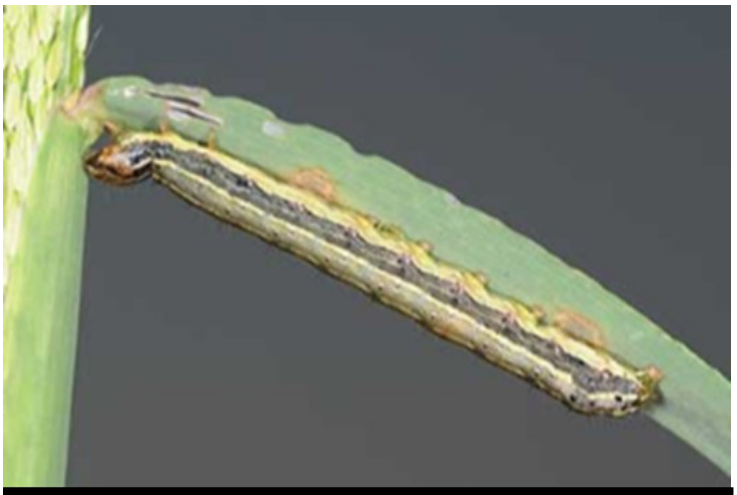
Fall Armyworms



Like most caterpillars, fall armyworms eat 80 to 90% of the total leaf area they will consume in their final two or three day as caterpillars.

Fall armyworms are extremely damaging insect pests of Mississippi hayfields and pastures and in Bermuda turfgrass settings. These caterpillars feed on lush, tender grass/plant leaves, primarily Bermuda grass, crabgrass, and sorghum/sudan type grasses in our area. Producers and landowners should look for fall armyworms throughout the growing season and be ready to treat quickly when damaging infestations occur.

Fall armyworms are unpredictable pests. In some years, high populations do not occur until early fall. In other years, damaging infestations appear as early as June. I have observed army worms from June – December at various times over the past few years in South Mississippi.

Fall armyworm caterpillars vary in color depending on their stage of development and diet. Most are green or tan, but some can be dark brown to almost black, especially late in the year when numbers are high. The body is punctuated with dark spots, and mature caterpillars are about 1-1/2 inches long. Fall armyworm moths are about three-fourths of an inch long when resting with their wings folded. The forewings are gray to dark brown, but the underwings are white. You will not often see the moths unless you go out at night with a spotlight to look for them or happen to flush one from its daytime resting place.

Fall armyworm moths lay their eggs in clusters. The eggs hatch in 2–5 days, and the newly emerged larvae scatter out and begin feeding. They usually begin by feeding on the underside of the leaf blade. Their feeding habits result in tiny, white “windowpanes” in the leaf blades or a white frizzing of the leaf tips. Experienced producers watch for this white frosting or frizzing of the leaf tips as an early warning of fall armyworm infestation.

Caterpillars take about 14 days to complete their larval development, and it takes about a month to complete a generation. About 80 percent of total leaf consumption occurs in the last 2–3 days of the caterpillar stage. This is why fall armyworm damage can occur so quickly; grass that looked fine on Friday morning can be nothing but stems by Monday afternoon.

There are several options for effective management of fall army worms. To find what best suits your situation please check out the following MSU Extension Publications: Fall Armyworms in Hayfields and Pastures, Publication 2331, Control Insect Pests in and around the Home Lawn, Publication 1858. You may also contact your local MSU Extension Office to discuss treatment options with your agent.