



## Holiday Houseplants

There is a wealth of plants to choose from to liven up your home during the holidays. Today I am going to highlight three that you should consider this Christmas season.

When you think of a Christmas time flower, the Poinsettia likely comes to mind. Originating from the southern region of Mexico, Poinsettias range from the traditional red to pink, white, peach, and even bicolor. With proper maintenance, you can enjoy your poinsettia several weeks into the new year. To extend the color of the bracts (the brightly colored modified leaves), ensure the plant is stored in a place between 68 and 72 degrees during the day and 60 to 65 degrees at night. Make sure to keep the plant away from sources of temperature change such as vents, radiators, or space heaters. To minimize early bract drop, the soil should remain moist but not soggy. Keep the plant in a bright area of the home. For more information on how to care for your poinsettia, see Extension Publication 2573, *Selecting and Maintaining Poinsettias*.



Red Poinsettia hybrid poinsettia

Common as a Christmas tree shaped topiary, rosemary provides a fragrant option during the holiday season. The best place to keep your rosemary plant is a sunny location within the home. It needs full sun for at least six hours each day. Being a Mediterranean region native, rosemary prefers well-drained soil. Make sure to water rosemary thoroughly but not too often. After New Year's, place the plant outside on the patio or porch but bring it back in if temperatures drop below 25 degrees. If you want to keep that Christmas tree shape, regular pruning is needed. Fortunately, pruned pieces can serve as an herb in your hearty winter meals.

The last plant I want to highlight is the Norfolk Island pine. Native to the South Pacific, they are often called living Christmas trees. Pot the plant in good quality, loose potting soil in a container large enough to allow growth. Norfolk Island pine prefers medium to high light conditions with daytime temperatures of 50 to 70 degrees and 45 to 65 degrees at night. Maintain high humidity to reduce needle drop-off from the trunk. Make sure to water regularly but don't let the soil become soggy. Apply a complete balanced fertilizer every third or fourth watering. Decorate with ornaments for the complete Christmas tree appearance.

For more houseplant ideas to enjoy now, see Extension Publication 2309, *Holiday Houseplants*. I hope you have a wonderful holiday season.



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## Puffy Satsumas

This time of year, one of my favorite fruits to eat is satsuma.

If you are lucky enough to have your own tree you have probably noticed that sometimes you will have several of the fruit on the tree that will be large and puffy. These satsumas seem to have thicker peeling and a puffy look. They also can be hard and won't have much taste. Most of the time this occurs in younger trees that are about one to five years old.

I have a tree that is about 20 years old, and it will have some puffy fruit every year. The cause of this can be late blooms that set during periods of warm weather. Also, after researching a bit, I found that 'Owari,' regardless of the type of rootstock that they are on, can be more prone to this problem.

In conclusion there is not much that can be done to prevent puffy fruit. The main thing you should do, as with any fruit tree, is make sure it is getting ideal fertilization, water when needed, check often for pests and hope for good growing conditions.



# Garden Calendar: December

Now is the time of year that Cabin Fever and garden catalogs in our mailboxes get us dreaming about getting out into the garden.

## Planning

- Start plans on paper for changes or improvements in the garden.
- Order seed for early planting.

## Equipment

- Repair and sharpen mowers and tools. Order new pots and markers.
- Check condition of sprayers.

## Planting

- Set out trees and shrubs.
- Plant Sweet Peas, Poppies, and Larkspur.

## Fertilizing

- January - March is the proper time to fertilize trees and shrubs.
- Apply lime to lawns if needed.

## Pest Control

- Scale on broad-leaf evergreens should be sprayed with dormant oil for control.

## Pruning

- Trim Nandinas.

## Mulch

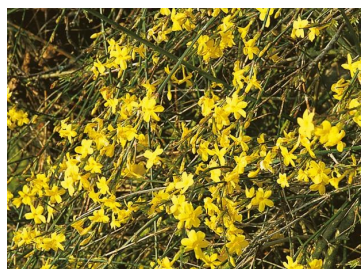
- Mulch Lilies with compost.
- Protect tender plants during periods of extreme cold.

## Miscellaneous

- Keep bird feeders stocked. Provide water for birds.
- After freeze, check to make sure plants have not heaved out of the ground.

## In Bloom

- Camellia, Winter Honeysuckle, Winter Jasmine, and in mild winters Flowering Quince





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## Can You Save Your Vegetable Seeds?

Whether we're preparing Spring or Fall vegetable gardens or getting ready for harvest, many of us start thinking about saving seeds for the next crop. It can be very rewarding to harvest and save seeds of vegetable plants. But sometimes when we plant the seeds we saved, the results do not seem to be very like the plant we collected the seed from. Hopefully, the following will answer that question and help us decide whether or not to save seeds.

First, determine the seed source. When a seed is formed by a plant, it is the result of pollen fertilizing an egg. Whether the resulting seed produces plants identical to the plant that it was harvested from, depends on whether it is cross-pollinated, self-pollinated, or a hybrid. These three options determine whether the two sets of genes (one from the pollen and one from the egg) are likely to be identical or very different.

Cross-pollinating plants require pollen from a different plant to fertilize the egg via wind, insects, etc. Some cross-pollinated species have the female and male parts in separate flowers, such as corn, carrots, or squash, or even separate plants, such as asparagus. Others have both parts in the same flower, but the egg will accept pollen only from another flower or plant. Examples are apples and pears. Both need another variety to help set fruit. The two sets of genes in the offspring of plants tend to have a lot of variation, so that the outcome of crossing is less predictable. However, if you have grown only one variety and your neighbors have grown the same variety or are far enough away to avoid cross pollination, you can still expect fairly consistent results from that seed.

In self-pollinating plants, the eggs are fertilized with pollen from the same plant. Each offspring will have two identical sets of genes, exact copies of their parents, and very similar to each other. Since seed from self-pollinated plants will produce plants very much like the plant it was produced on, these kinds of plants are ideal for seed saving. Most peas, beans, and eggplant are self-pollinating. Heirloom plants are open pollinating and considered a seed-savers ideal plant. Heirlooms can be self-pollinated or cross-pollinated with the same variety but should be protected from cross-pollinating with other varieties in order to be "true to type". Some horticulturists define heirloom plants by the number of years the cultivar has been grown, many of these handed down for generations. Many authorities classify any cultivar developed before 1951 as an heirloom, this being the time before plant breeders introduced the first hybrid vegetable cultivars.



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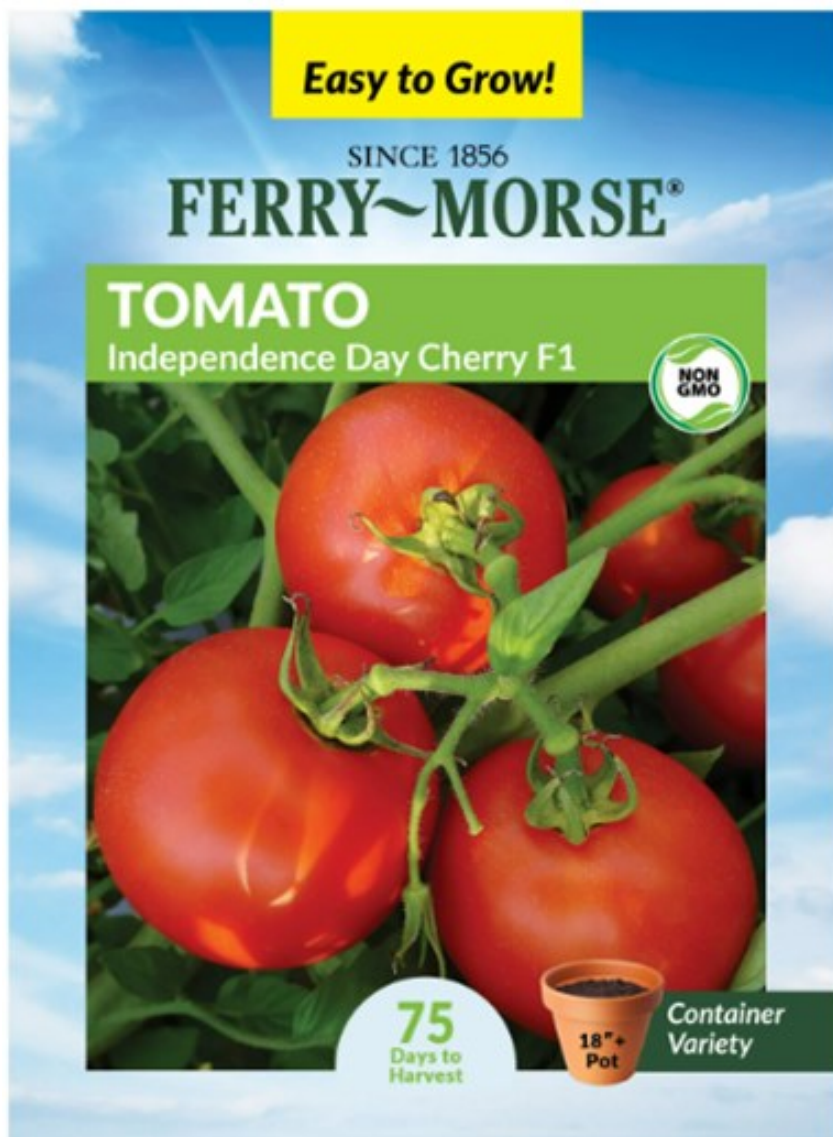
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## Continued: Can You Save Your Vegetable Seeds?

Hybrids result from crossing two different self-pollinating, 'pure line' plants. All of the first-generation plants from this cross will contain the exact same two sets of genes (one from each plant) and will be identical to each other. This first generation is what you buy in a seed packet marked "Hybrid" or "F1". To simplify, let's describe how an F-1 hybrid comes to be by using the following example. A plant breeder observes a particularly good growth habit in a plant, but with poor flower color, and in another plant of the same type he sees good flower color but poor growth habit. Now the breeder wants to combine the best traits (habit and flower color) of each plant into one plant. The best plant of each type is then taken and self-pollinated (in isolation) each year and, each year the seed is re-sown. Eventually, every time the seed is sown the same identical plants will appear. When they do, this is known as a 'pure line.' Thus, two 'pure line' plants are crossed to produce F1 hybrid seed.

Many of the good characteristics we enjoy in vegetables have been acquired through this type of plant breeding. However, the next generation (seeds produced by the hybrid seed vegetables or F2 hybrid) will contain a random mixture of genes from the two original parent plants resulting in plants that may have a whole range of desirable and undesirable characteristics. Because of these potential undesirable traits, you should not save seed from F1 hybrid plants if you want to be certain that the plants grown from that seed will be the same as their parents.

The advantages of planting F1 hybrid seeds are numerous. Varieties have been developed for color, production, size, disease resistance, etc., many traits that heirlooms lack. But the biggest disadvantage of hybrids is that seeds from these plants can produce undesirable results. If you want to be certain that the plants will be the same as their parents, self-pollinating plants or heirlooms are a good choice.





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## Preparing for A Spring Garden

If you want a spring garden, the best time to plan is now. The best place to start is with a soil test. Completing a soil test right now allows you to get your results back within a reasonable time and start preparing your garden ground.

Once you have established your area for your garden and completed the soil test it is important to plow or spade the area in preparation for spring gardening. This helps break up the ground and helps aerate the soil to help prevent compaction. Soil compaction can cause roots to have difficulty growing, developing, and obtaining oxygen. Having the soil loose and being prepared for gardening is a perfect time to collect the sample for the soil test.

As soon as your soil results come back you can begin the preparation process. If the soil pH needs adjusting, that will most times start with adding lime to your soil, because we tend to have acidic soil here in south Mississippi. To help with this you add the recommended amounts of lime. Do not exceed more than 50 lbs. per 1,000 sq. ft. at one application. If more than 50 lbs is recommended, come back six weeks later and reapply. We like to adjust the pH because acidic soil does not allow for good plant growth. Acidic soils reduce root growth and make plants more susceptible to drought stress and low absorption of soil nutrients.

After the soil has been hopefully adjusted properly you can also apply a broad-spectrum herbicide to help keep the weeds at bay before planting. Just before or at the time of planting you can then add the recommended amounts of fertilizer the soil test suggests. On those test results you will also find suggested times of when to fertilize.

		Recommendations			
Crop		Nitrogen (N)	Phos (P <sub>2</sub> O <sub>5</sub> )	Potash (K <sub>2</sub> O)	Lime
Field: 1	Date	Sample: 1942			
St. Augustinegrass	May 1	1.0 lbs/1000 sqft	0.0 lbs/1000 sqft	1.8 lbs/1000 sqft	0 lbs/1000 sqft
	Jun 1	1.0 lbs/1000 sqft	0.0 lbs/1000 sqft	1.2 lbs/1000 sqft	

If you are not sure or would like suggestions, please see your local Extension Agent for soil sample readings, fertilizer recommendations and help calculating your fertilizer rates.





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## Pine Beetles

The number of calls fielded recently regarding dead or dying pine trees has been numerous, and there are a few culprits to possibly blame for this. Luckily the window of infestations has come and gone, so most of the damage that will be done, has been done. Which culprit caused the damage specifically isn't as important as someone may think. The culprits can include southern pine beetle, ips beetle, or black turpentine beetle.

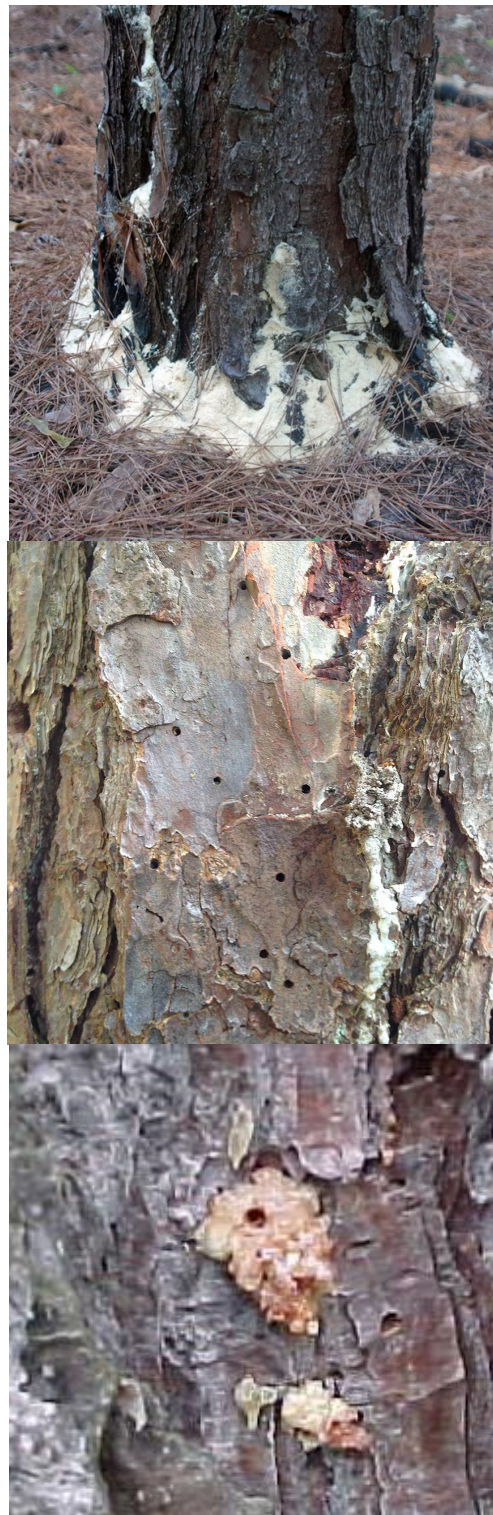
Drought is a fairly common stress in the late summer and early fall, but this year was particularly dry. Whenever you have something that stresses a tree, whether it's extreme heat and drought combined like we experienced this summer, or new construction, the tree will be more susceptible to insects and diseases. Most of the damage seems to primarily be the work of the Ips beetles, also known as the engraver beetles.

Engraver beetles hit small clusters of trees and don't produce as many generations annually as the southern pine beetle. Ips beetles typically move later in the summer and produce less generations per year than the more destructive southern pine beetles. Determining if the infestation is by an engraver beetle or the southern pine beetle is relatively easy. The galleries created underneath the bark by the southern pine beetle leave loopy S-curved chambers, while engraver beetles leave straighter, X- or Y-shaped chambers.

A third type of pine bark beetle, the black turpentine beetle, is the rarest of the pine bark beetles in Mississippi and is mostly found in the lower third of the state. Regardless of the type of beetle, each one is lethal to pines.

Insecticides are not very effective, nor economical, as getting good coverage and the frequency of spraying a large, mature tree can be extremely tough to do. There is one somewhat viable option for high-value trees however, Verbenone. This synthetic pheromone product mimics the beetles message to other beetles that the tree is full and there is not enough food supply, and other beetles should look elsewhere. This may be a viable option for some homeowners in the future as a preventative course of action when stress becomes evident.

You can spot infested trees when their crowns go from dark green to yellow-green to red, and eventually to brown. Once the crown begins to change color, it's too late to save it. Removal is necessary, especially if the now dead tree is a safety concern around structures, playgrounds, or areas where human activity can be detrimentally affected.





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## Managing Livestock and Forages in Drought Conditions

My Father-in-Law often says in our area “we are always three weeks away from a drought”. In our sandy soils that’s pretty accurate, but the past 4-6 months we have seen drought and heat conditions reach record proportions across our region.

According to data from the National Weather Service precipitation maps, here in Stone County we are roughly 25 inches behind our yearly average of rainfall. We have received around 40 inches on average across the county as of today’s map. Our long term average is 65 +/- inches per year. The rains in November offered some relief but did not pull us out of drought conditions..



The timing of this drought, from mid summer well into fall, has impacted summer grazing, hay crops, and winter grazing. We are seeing lower hay yields that are less quality. Short grass pushed producers to begin feeding hay 30-60 days sooner than typical, and winter pastures are delayed in the best scenarios while many producers have not even planted yet.

The October cool snap and first frost likely took away the last little bit of warm season grasses that anyone was holding on to. The best part is that at least now pig weeds will die!!! As we navigate through what seems like new territory, there are a few things to keep in mind:

- Even with some recent pullback we are still at all time highs for many livestock market sectors. Don’t let animals you can’t properly manage loose weight and value. Hard culling or reducing numbers is a viable production decision.
- There is no such thing as good quality hay to cut after September 1, and this year that date was even earlier. Every scenario is different but be ready to supplement animals in some way to help them maintain and grow. Most types of livestock in our area require roughly 2.5% of their bodyweight daily in dry matter intake along with proper levels of protein, energy, and other nutrients that vary with age, and production expectations.
- Assistance on beef cattle nutritional needs can be found at :  
<http://extension.msstate.edu/publications/publications/beef-cattle-nutrient-requirements>
- More information on livestock nutritional needs and other management information can be found at:  
<https://extension.msstate.edu>
- Many ponds are shallow and muddy. We are aware of some animal health issues from this. Offer access to fresh water where possible.
- For winter pasture planting my mindset and advice to producers is to know your budget, and if you need to plant into dry ground, only plant what you could afford to replant if it is a total loss. Current local conditions make me feel like we are seeing 10-30% stand loss but that could worsen over the next few weeks.
- **Many producers with cattle, horses, sheep, and goats, along with other livestock, are eligible for assistance from FSA through the Livestock Forage Disaster Program. Contact your local FSA office for details specific to your area. For additional information about LFP, including eligible livestock and criteria, contact the Pearl River, Hancock, Stone County USDA Service Center at 601-795-4409 ext. 2 or visit [fsa.usda.gov](http://fsa.usda.gov)**

My Father-in-Law also says “every day it doesn’t rain we are one day closer to the next rain” .