



Carolina Silverbell

Have you ever wanted to plant a dogwood but wasn't sure if the tree would survive? Afterall, dogwood-growing success depends greatly on the environment in which it's planted. I've visited with many people over the years who had planted a dogwood only to see its demise in a short amount of time. However, there is a great substitute and that's the **Carolina silverbell**, *Halesia carolina*.

Silverbell is a native, deciduous, understory tree that grows to 35 feet in height under ideal growing conditions. It can be found along streams, bottomland edges, and rich woods growing near dogwood, magnolia, and American beech. Its small, white, bell-shaped flowers hang from the branches in early spring, and green pods with corky wings are produced in late summer.

Although considered an understory tree, Silverbell can withstand a variety of light exposure and soil conditions. It does, however, prefer partial sunlight and moist,



well-drained soils. It has a broad, oval form and is used effectively as a specimen tree, one that you can be proud to have in your landscape. So, consider planting a Carolina silverbell. It's a great replacement for dogwood, cherry, crabapple or other trees with similar characteristics.



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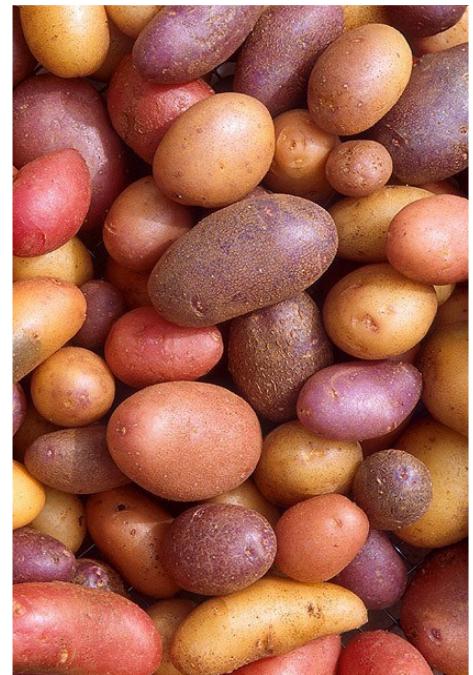
Spud-tacular Potatoes

From its humble beginnings in the Andes Mountains of Peru, the potato has become one of the world's staple foods. Baked, fried, mashed, or stuffed - you name it, and people will eat it. The average American consumes 126 pounds of potatoes each year. Sounds like a lot until you hear about the 745 pounds per capita consumption in Belarus!

The potato is a great vegetable. It is rich in protein, carbohydrates, minerals, and vitamins such as riboflavin, niacin and Vitamin C. Plus, by selecting the right colored varieties, you can add antioxidants.

Varieties commonly grown in Mississippi include: 'Red LaSoda', 'LaRouge', 'Superior', 'Atlantic', 'Norchip', 'Kennebec', and 'Yukon Gold.' These all have white flesh except 'Yukon Gold' which is buttery yellow.

If you want to be the star of the potato patch this spring, plant some 'All Red' which has red skin and red flesh. 'All Blue' has blue skin and blue flesh. These plus some of your white-fleshed varieties will make a truly patriotic potato salad for the Fourth of July picnic. These specialty potatoes will have to be ordered.



January through early March is the best time to plant in Mississippi. You can also plant them in the fall if you can get seed stock. Potatoes prefer loose, loamy, well-drained soil. Planting in heavy clay can result in a bumpy looking potato. Plant your potatoes on a raised bed that is 12-15 inches high to prevent damage during heavy spring rains. Most roots and all tubers will develop at the same level and above the level that the original seed potato was planted.

Buy certified disease-free seed potatoes from local farm supply stores or through mail-order catalogs. Do not use potatoes from the grocery store (unless they are organically grown) because they have been treated with a chemical to inhibit sprouting. Cut the seed potatoes into 1-1/2 to 2 ounce seed pieces with at least one 'eye' on it. Store the cut potatoes in a warm spot for a few days to heal over the cut surface.

Plant your potatoes in a trench 10-12 inches deep with the seed pieces 10-12 inches apart and cover with 3-4 inches of soil. As the plants grow taller, gradually fill in the trench with soil around the plant. Some gardeners prefer to cover with straw mulch instead of soil. This makes harvesting easier. Each potato plant will produce 2-4 pounds of potatoes.

Potatoes are a cool-season crop and grow best when the day temperatures range from 60-65 degrees and night temperatures are between 45-55 degrees. Tuber production will stop when the temperatures exceed 85 degrees.

Harvest at the appropriate time for the type of potato you want. 'New' potatoes are harvested in May while baking potatoes are harvested sometime in June. Use a spade or fork to dig up the potatoes. Immediately use any injured potatoes before they rot. Store the good potatoes in a cool (40-50 degree), dark, humid place. Remember the old-fashioned root cellar. Store the potatoes in the dark because light will cause them to turn green and make them inedible.

It is still cold at night but the soil is warm enough to get potatoes growing. Make the effort to grow your own potatoes and be the envy of the neighborhood. If you need more information, contact your local Extension office.

Garden Calendar: January

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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How Cold Temperatures Affect Citrus

Considering the recent “hard freeze” throughout the state and particularly down south where we grow citrus, it is important to understand how cold temperatures may affect your citrus trees. The temperature at which tissue of a given plant will freeze and the degree of the damage sustained are functions of several factors in addition to the species and variety involved.

Among the citrus types most easily killed or damaged by freezing weather are lemons and limes. Temperatures in the high 20s will kill or severely damage these plants. Sweet oranges and grapefruits are somewhat more cold-hardy and usually require temperatures in the mid 20s before incurring major damage to large branches. Mandarins (satsumas) are quite cold-hardy, usually withstanding temperatures as low as the upper teens or low 20s without significant wood damage. In fact, satsumas and kumquats have the greatest degree of cold hardiness. In general, it is recommended citrus trees be protected when the temperatures are expected to go below 27 degrees for an extended period. In addition, citrus trees can better withstand cold weather when they are dormant.

The freezing temperature reached, the duration of the minimal temperature, how well the plant became hardened or conditioned to cold weather before freezing temperatures occur, age of plant (a young trees are not as hardy as mature trees), and tree health are all factors in the potential for freeze damage. Wind or air movement is another important factor. On a windy night with clear or cloudy skies, leaf temperature will be about the same as air temperature. On a cold, clear night with little or no wind movement, however, leaf temperature can easily drop several degrees (3 to 4 degrees) below the air temperature because of supercooling caused by frost.

While the temperature ranges given above seem low, those given are only for leaf or wood damage. Citrus fruits easily freeze at 26 to 28 degrees when these temperatures occur for several hours. Ripe fruit can withstand lower temperatures more than green or immature fruit because sugar lowers the freezing point of the juice in the fruit, reducing the chances of freeze. If you have no way of protecting your citrus from freezing temperatures, it may be best to pick as much of the fruit as possible before extended freezing temperatures occur. I recommend checking the weather daily for changes in temperature leading up to a potential freeze to help make your decision.

So, what can you do to protect your citrus trees? If you have citrus growing in pots, move them inside your garage, greenhouse, or Florida room; for in-ground trees, cover, if possible, with a light blanket, sheet or plastic but remove them when temperatures get above freezing; use old-style Christmas lights to produce heat in the tree but, LEDs are NOT recommended; use other heat sources, if feasible and safe, such as a blower heater; water (overhead irrigation or similar) can be sprayed over the tree to add an endothermic layer of ice to the tree. However, IF water is sprayed over the tree for protection, it must be started right before freezing and continued until temperatures are above freezing. Using irrigation for protection is much more suited for commercial growers. Keep in mind ice will add more weight to limbs.

There is no benefit to pruning a freeze-damaged plant until spring growth commences, and the full extent of injury is determined. Pruning might be counterproductive by stimulating faster bud activity before the danger of additional frost/freeze events have passed. If your citrus dies back below the graft union, any new growth produced will be the old parent plant or rootstock and not like what you currently have. This fruit is usually bitter and not very good so, you may have to start over with a new tree.

Fruit	Temperature (degrees F)
Grapefruit	23-24
Orange	23-24
Kumquat	16-17
Lemon	26-27
Lime	28
“Satsuma” mandarin orange, fully dormant	18
All other mandarin oranges	22-23

Minimum freeze temperatures for citrus.



Typical freeze damage to citrus fruit (orange).



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January Planting Guide

While gardening is often thought to be a spring and summer activity, there are several vegetables that can successfully be planted and grown in the cool winter months (includes days until harvest).

Onions

Candy- 85
Crystal Wax- 65
Granex 33- 125
Granex 429- 125
Super Star- 100
Texas Grano 1015Y- 115

Kohlrabi

Beas- 42
Kolibri- 45
Konan- 45
Terek- 40

Lettuce

Bibb Type Varieties
Butter Crunch- 46
Rosaine- 50
Butterhead Type Varieties
Adriana- 48
Skyphos- 47
Leaf Type Varieties
Green Ice- 50
Starfighter- 52

Romaine Type Varieties

Green Forest- 56
Thurinus- 56

Spinach

Acadia- 45
Olympia- 45
Chesapeake- 45
Dixie Market- 42
Melody- 42
Skookum- 35
Whale- 37

Irish Potatoes

Kennebec- 90
LaChipper- 110
Norland
Norchip- 85
Red Gold- 70
Red LaSoda- 100
Red Pontiac- 100
Superior- 105

English Peas

Alaska- 52
Green Arrow- 70
Little Marvel- 70

Carrots

Yaya- 56
Hercules- 65
Bolero- 75



For more information about vegetable varieties:

Variety Recommendations for Mississippi Vegetable Gardens (Publication 3744) https://extension.msstate.edu/sites/default/files/publications/P3744_web.pdf

For more information about planting dates & zones:

Mississippi vegetable gardener's guide (Publication 3616) https://extension.msstate.edu/sites/default/files/publications/P3616_web.pdf



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Growing Stone Fruit Trees on the Gulf Coast

What is a stone fruit? A stone fruit is a generic term used to describe fruits such as peaches, nectarines, plums, cherries, apricots, etc., that feature a layer of fleshy, edible pulp surrounding a hard pit (the "stone") that shields and protects a seed. Within these various tree species, hundreds of cultivated varieties (cultivars) have been developed to give growers and homeowners more options. Taste, texture, color, cold-hardiness, sugar content, fuzz on a peach, or a pit that does or doesn't stick to the fleshy pulp, etc. have all been considered when developing these new cultivars. There are many great choices but, we have to choose wisely.

Here's the issue. We can't grow all of these species here on the Gulf Coast and certainly can't grow just any cultivar of these species that we want. There are environmental requirements that have to be met in order to grow them successfully. Apricots and cherries are two stone fruit trees that really won't do well for fruit production this far south. Tart cherries can be grown in far north Mississippi but, they're not recommended to be grown in central Mississippi much less here. And certainly no sweet cherries. Although we're very limited on nectarine and plum cultivars, there can be some success in a given year depending on the cultivar you choose and temperatures. Dr. Eric Stafne, MSU Extension Fruit and Nut Specialist, provides a nice summation in Publication 3778, *Fruit and Nut Review - Peaches, Nectarines, and Plums*.

"One important consideration is the chill hour requirements of different cultivars. In general, chill hours refer to the number of hours below 45 °F a plant is exposed to during the winter months. This exposure to cold temperatures is required for fruit trees to break dormancy. Average winter chilling hours for various Mississippi locations are Hattiesburg, 400 to 600; Jackson, 600 to 800; Mississippi State University, 800 to 1000; and Holly Springs, 1000 to 1200. A peach cultivar that requires 1000 chill hours to break dormancy probably will not grow very well in Hattiesburg because it will not get enough chill hours. On the other hand, a peach cultivar planted in Holly Springs that requires 500 chill hours will have its chill hour requirement satisfied around Christmas and start blooming during the next warm spell in January. Blooming this early would risk the blooms dying in the next cold front."

To put this into perspective when choosing a cultivar, the distance between Hattiesburg and Jackson is 90 miles and there is a 200 chill hour difference in average. Hattiesburg to Gulfport is 70 miles so it's likely, in some years, our total chill hours would be less than the average in Hattiesburg. This just means some years will be more productive than others depending on the species and cultivar you choose.

I've seen Redhaven peach trees for sale locally but, I will not say where. It's a very tasty peach! Redhavens have a 900 chill hour requirement. The likelihood of this variety producing here on the Coast is practically non-existent. Likewise, a Gulfking (350) and Flordacrest (425) peach would do great here but, in north Mississippi they would most likely meet their chill hour requirements too early resulting in the same, no production.



Peaches, nectarines, and plums, grow well throughout Mississippi if late spring frosts or freezes do not damage blooms or young fruit. Cultivars are limited for us in south Mississippi so do your research, pay attention to chill requirements. Plant them in well-drained soil and you'll have some tasty stone fruit in no time.



Calendar of Upcoming Events

DATE	EVENT
Jan. 10th	<p>Crosby Arboretum's Second Saturday Stroll: Botany Field Walks for the Plant Passionate Person 9:30—11:00 a.m. Join Arboretum director Pat Drackett on a field walk to explore the native plants in the Arboretum exhibits, learn tips for their identification, and discuss the uses of native plants in the home landscape, including those which are edible or have high wildlife value.</p> <p>Members free; non-members \$7.</p> <p>*To register for this and other events at the Crosby Arboretum, visit http://www.crosbyarboretum.msstate.edu/events-page</p>
Jan. 17th	<p>Crosby Arboretum's Happy Gardener Special How to Repair, Sharpen and Care for Mower Blades and Garden Tools 9:30—11:30 a.m. A well-maintained tool makes for a happy gardener! Join Arboretum Grounds manager, Forrest Blass, and Master Gardener, Frank Jackson, as we learn all about the safe and proper care of the tools that make gardening life so much easier. Don't miss this opportunity to gain experience from the pros. Bring in your favorite (or most neglected) implement and learn the skills to bring it back to life. Limited to 15 participants.</p> <p>Members \$5; non-members \$10.</p>
Jan. 24th	<p>Crosby Arboretum's Smart Landscapes: Planning Your Home Landscape for Spring 10:00—11:00 a.m. Join Arboretum director Pat Drackett as she guides you through the principles of smart landscape planning and how you can get a jumpstart on implementing your spring gardening projects by planning in the dormant season.</p> <p>Learn a stepwise process for taking an inventory of your existing landscape, identifying problem areas, and reviewing your wants and needs, and developing a phased approach to creating a more sustainable, low maintenance, and attractive landscape.</p> <p>Members free; non-members \$7</p>
Jan. 29th	<p>Blueberry Workshop 8:00 a.m.—noon. Forrest County Extension will host a Blueberry workshop at the Extension office located at 952 Sullivan Dr., Hattiesburg. For more information call 601-545-6083.</p>

On behalf of the MSU
Extension Staff who help make
this newsletter possible, we
wish you all a very
Happy New Year!

