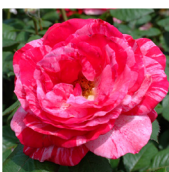


Horticulture Hints



**Spring
2018**

Landscape Gardening and Ornamentals

Spring 2018 Louisiana Super Plants

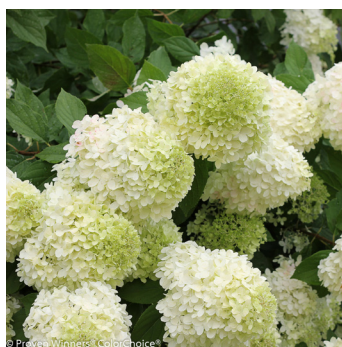
The Louisiana Super Plant program is an educational and marketing campaign of the LSU AgCenter that highlights tough and beautiful plants that perform well in Louisiana landscapes. Louisiana Super Plants have gone through several years of university evaluations or have an established history of performing well throughout Louisiana.

Louisiana Super Plants have a proven track record. They are “university tested and industry approved.” Homeowners and professionals alike can benefit from using Louisiana Super Plants to ensure successful landscaping efforts.

The 2018 Louisiana Super Plants spring selections should be available at participating area nurseries by the time the promotion begins. For more information and to see a listing of all the Louisiana Super Plant selections, visit the Louisiana Super Plants website at www.lsuag-center.com/superplants.

Limelight Hydrangea (*Hydrangea paniculata* Limelight)

- Outstanding performance in Hammond Research Station trials and landscape plantings.
- Plant in spring (late March, April and early May) when weather is milder. Plants establish better then. Large-growing plants can grow 6 to 8 feet tall and spread just as wide, creating a great impact in the landscape.
- They really do grow in full sun.
- Blooms in mid-summer after garden hydrangeas.
- Tough plants. No major pest problems.
- Not especially drought tolerant. Water as needed during dry weather.
- May develop problems with root rot if bed stays too wet. Need excellent drainage, avoid overwatering.
- Blooms on new growth. Prune if needed in late winter or early spring.



Intenz Classic Celosia (*Celosia argentea* Intenz Classic)

- Excellent summer bedding plant for sunny flower beds. Excellent heat tolerance.
- Grows about 18 inches tall and 12 inches wide.
- A spicata-type celosia (wheat celosia) with excellent vigor and lots of flowers. Blooms all summer.
- Flowers are generally rich magenta purple, but color can vary with temperatures.
- Cut flowers dry beautifully.
- Outstanding in beds or containers.
- Attracts bees and butterflies.
- The foliage stays attractive through the summer.



Previous Louisiana Super Plants Selections to Plant in Spring and Summer

Plant in a full-sun location — about 8 hours or more of direct sun: Bandana Lantanas, Compact SunPatens, Little Ruby Alternanthera, Senorita Rosalita Cleome, Serena Angelonias, Serenita Raspberry Angelonia, Luna Hibiscus, Mesa Gaillardia.

Plant in a part-shade to part-sun location — about 4 to 6 hours of direct sun: BabyWing Begonia, Butterfly Pentas (also full sun), Evolution Violet and Evolution White Salvia (also full sun).

Plant in shade to part-shade location — About 2 to 4 hours of direct sun: Kauai Torenia.



Ferns Thrive in the Shade

Many hardy ferns will thrive in the shady areas of your landscape. The different species range in size from smaller than 1 foot to as tall as 3 feet. One of the great things about ferns is that they are so easy to grow. Not prone to any major insect or disease problems, they are one of those plants you can just about plant and ignore.

The ferns contrast beautifully with coarser-textured shade-loving plants such as philodendron, aspidistra, fatsia, ginger, mahonia and aucuba. Ferns also attractively combine with shade-loving bedding plants like caladium, impatiens, begonia and torenia.

Plant ferns in areas that receive 1 to 4 hours of direct sun or dappled light. Morning sun is greatly preferred. Avoid hot, dry areas that receive several hours of direct sun in the afternoon, or areas that receive sun all day. If you want a fernlike plant for sunnier areas, you could plant yarrow (*Achillea millefolium*) or asparagus fern (*Asparagus densiflorus Sprengeri*), which is not a true fern.

Ferns do require adequate moisture and may need irrigation during hot, dry summer weather. Incorporate generous amounts of organic matter during bed preparation and keep the ferns well mulched. A 2-inch layer of mulch will help reduce the amount of watering required.

Some excellent ferns for use in the landscape include maidenhair fern (*Adiantum capillus-vernix*); holly fern (*Cyrtomium falcatum*); leatherleaf fern (*Rumohra adiantiformis*); sword fern (*Nephrolepis cordifolia*); Christmas fern (*Polystichum acrostichoides*); royal fern (*Osmunda regalis*); autumn fern (*Dryopteris erythrosora*), which is known for its coppery red new fronds; lady fern (*Athyrium filix-femina*); wood fern (*Thelypteris kunthii*); lace fern (*Microlepia strigosa*); and sensitive fern (*Onoclea sensibilis*).



Planting Flowerbeds

Plan the number and size of flowerbeds so that the maintenance they will require can be carried out not just in spring, but through the hot summer months. By all means, plant to your heart's content. But do not plant more beds than you have the time, physical ability or inclination to devote to their care and upkeep.

Think about the colors you want to use and their placement in the landscape before you go to the nursery. Use masses of colors to maximize visual impact. Use colors that combine well with the background and that pleasantly harmonize or contrast with each other. Locate color in the landscape where you want to focus the viewer's attention.

Evaluate the light conditions and determine if the bed is sunny (6 hours or more of direct sun) or shady (2 to 4 hours of direct sun) before you go to the nursery. Choose plants that will do well in the location where you intend to plant them.

Check the labels on the plants you consider using for how tall they will grow, as this is very important for how you will use them. It's not at all unusual for bedding plants to exceed the size on the tag in our area due to our long growing season and fertile soils. But it's a good guide.

Enrich flowerbeds with 2 to 4 inches of organic matter, such as compost, and general purpose fertilizer. Thoroughly incorporate them into the upper 8 inches of soil. Be sure to follow the fertilizer's packaged directions. The performance of bedding plants in your landscape depends a lot on how well you prepare the beds prior to planting. After planting transplants into the bed, apply about 2 inches of your favorite mulch.

What Is in a Name?

Knowing the proper name of a plant you want is critical to finding that plant and purchasing it. Whether you are looking at your local nursery or searching the internet, knowing the right name makes all the difference.

Things can get surprisingly complicated if you don't know the proper or complete name. Say, for instance, you walk into the nursery and ask for a jasmine. The response could be, "Are you looking for a Confederate jasmine, Asiatic jasmine, yellow jessamine, primrose

jasmine or Grand Duke jasmine?” The more precisely you know the name of what you are looking for, the more likely you are to find it.

In addition, knowing the proper name is the key to finding out information about a plant. When I get an email request for information, there is often not much I can do if the gardener does not know the name of the plant being asked about. If you get a new plant and want to look up information in a reference guide or on the internet, you have to have the right name for the plant to do it.

And then we come to the issue of common names versus scientific or Latin names. Common names are very useful, and most gardeners get by using them exclusively — but they have their limits.

Unfortunately, people generally don't like Latin names. Everyone is intimidated by those unpronounceable strings of letters that often make up the Latin names of plants. However, it's not that bad. Many names that you are familiar with and that roll easily off your tongue are Latin names, such as *Magnolia*, *Chrysanthemum*, *Lantana*, *Clerodendrum*, *Vinca* and *Verbena*, to name a few. It's just a matter of becoming familiar with them.

Why, you might ask, would we deal with these unfamiliar and foreign words? They are the best names to know. Although common names are useful, they change from region to region and around the world for the same plant. Often several common names are used for the same plant or one common name is used for several different plants. You can see how easily confusion can creep into this situation.

Each plant has only one official Latin name, however, and it is used worldwide. In the age of international internet communications about plants, Latin names are becoming increasingly important to avoid confusion.

I would encourage you to try to utilize Latin names more often in your gardening efforts. Although you may hate them, scientific names are often critical to properly identifying plants. And whenever you are asking questions, doing research or looking to buy a particular plant, there are many instances where having the Latin name will make your efforts more effective.

Colorful Foliage Plants for Summer

We normally just think of foliage as green, but a number of ornamental plants are grown for their colorful foliage. Many of our best and most reliable plants for summer color rely on foliage rather than flowers to provide the color we all crave in our landscapes. All of these plants will thrive in the heat and humidity of the coming summer, and you will find many more available at your local nursery.

Confederate jasmine, Asiatic jasmine, yellow jessamine, primrose jasmine or Grand Duke jasmine?

Caladiums (*Caladium x hortulanum*)

One of the best known and most popular plants for colorful foliage is the caladium. The foliage colors are attractive combinations of green, white, pink, rose, red and chartreuse. Plant in April or May

after the weather is warm and settled where you garden. Although commonly grown in part shade to shade, the LSU AgCenter Hammond Research Station has done trials to see when cultivars are best for sunny spots. The best choices are Fire Chief, Red Frill, White Pearl, White Queen and Moonlight.



Coleus (*Solenostemon scutellarioides*)

The number of coleus cultivars available these days is amazing. Some coleus cultivars do best in partial shade, such as the Wizard series and the Kong series. But most coleus cultivars available at the nursery thrive in full sun as well as part shade.

Alternanthera (*Alternanthera*)

There are new cultivars of this plant showing up every year. They may be grown in sun or part shade. Foliage colors are generally red, yellow, pink or white and are often combined with green. Short cultivars include Little Ruby (a Louisiana Super Plants selection), Red Threads, Summer Flame and Nana Aurea. Taller cultivars are Purple Knight, Gail's Choice and Party Time. Bloodleaf, or chicken gizzard plant (*Iresine herbstii*), is similar to the taller-growing alternantheras and is also a valuable plant with colorful leaves for summer color.

Copper Plant (*Acalypha*)

Copper plant is a tall, shrubby plant that thrives in full to part sun and may persist if winters are mild. The foliage shows shades of chocolate, reddish orange, red, green, pink, yellow or chartreuse, and the leaves may be fringed or crinkled depending on the cultivar. This tough plant grows 3 to 5 feet tall and will perform all summer with little care.

More Choices

We also recommend ornamental sweet potato (*Ipomoea batatas*); Cuban Gold and Golden Edge duranta (*Duranta erecta*); Rubrum, Fireworks, Sky Rocket and Cherry Sparkler fountain grass (*Pennisetum setaceum*); Persian shield (*Strobilanthes dyerianus*); perilla (*Perilla frutescens* var. *crispa*); Variegated shell ginger (*Alpinia zerumbet*); Bengal Tiger, Phasion and Tropicana canna (*Canna generalis*); variegated cassava.

Controlling Fire Ants

Imported fire ants inflict painful stings and create unsightly mounds in our landscapes, and most of us would be happier if they weren't around. A variety of products and methods are available to control fire ants effectively. Unfortunately, no treatment will permanently eradicate them from a yard. The best product is often determined by the situation and the preferences of the person doing the treatment. When using a pesticide, always read the label very carefully before you purchase it to make sure you understand how to use it and are comfortable using it and that it is appropriate for the situation.

Baits

Fire ant baits consist of a pesticide combined with a material that fire ants will consume as food. Use fresh bait and apply it when the ground and grass are dry and no rain is expected for the next 24 hours. Apply baits when the worker ants are actively searching for food.

Dusts

Some products, such as those containing acephate, are applied as a dry dust. Ants walking through the treated soil get the dust on their bodies and transport the insecticide into the mound. Within a few days, the entire colony should be killed. To use a dust, distribute the recommended amount evenly over the undisturbed mound.

Mound Drenches

Other insecticides used to control fire ants are mixed with water and applied to the mound as a drench. These liquid mound drenches kill ants underground but must be applied in sufficient volume to penetrate the entire nest. Generally, about 1 gallon of diluted mixture is poured gently over the top of each mound.



Granules

Granular products offer another method of getting insecticide into fire ant mounds. To treat a single mound, measure the recommended amount and sprinkle it on top of and around the mound and follow the label directions.

Organic Controls

A few active ingredients used in fire ant control products, such as boric acid, pyrethrin, pyrethrum, rotenone, citrus oil extract and diatomaceous earth, are organic pesticides. Diatomaceous earth, a natural, silica-based dust, will kill some ants, but it rarely eliminates ant colonies when used alone. Avoid breathing in the dust-like particles.

Home Remedies

There are some home remedies that don't work well. Spreading grits on a fire ant mound will only feed them. Laying orange or grapefruit peels on a fire ant mound will only make them move to another spot. Shoveling one mound on top of another in an attempt to force the ants to kill each other is not effective. Do not use gasoline or other petroleum products for fire ant control. While many of these products will kill fire ants, they are extremely flammable and will kill grass and other plants.

Dealing With Spring Weeds

It is very important to focus on weed control in shrubs and flowerbeds this time of year. Cool-season weeds are actively growing as the days get longer and warmer, and they will begin to flower and set seeds. Left unchecked, the prolific seeds will lead to even more problems next spring. The seeds of warm-season weeds are germinating now.

Ideally, all of your beds should be mulched with about 2 to 3 inches of a mulching material, such as chopped leaves, pine straw, pine bark or other suitable materials. Mulches help considerably but are not totally weed-proof. If weeds do manage to make it through the mulch, dig them out promptly and make sure you get any bulbs or roots in the ground that might resprout.

You may also carefully apply a herbicide, such as glyphosate (Killzall, Eraser, Roundup and other brands) just to the weeds to kill them. Use shields or plastic bags to cover ornamentals in the bed to prevent the spray from contacting their foliage.

The use of a weed preventer, such as Preen or Amaze, will not be helpful in dealing with growing weeds. After you have weeded the bed, however, you can apply a weed-preventing herbicide to keep weeds from coming back. These products also could be applied to beds right after planting shrubs, ground covers or flowers to prevent weeds, but do not apply them to seeded beds. Follow the label directions carefully and use these products only around plants that the label indicates are tolerant of the herbicide.

As you begin to see these cool-season weeds come into bloom, don't put this job off any longer. Weeding is not the most fun or glamorous part of gardening, but a garden simply cannot exist unless you keep up with it.



Checklist for March, April and May



When you are thinking about purchasing a house, home inspections can ensure that costly repairs are not needed once you take possession of the house. In most instances, however, home buyers seldom look at the condition of the existing trees on the property. Hiring a licensed arborist to inspect the trees can save potential homeowners hundreds or even thousands of dollars in tree-related expenses. If there are trees that are going to require extensive work or removal, the price of the property can be negotiated to take such expenses into account — or you will at least be more aware of what tree issues you may have to deal with in the future.

This topic is also critical if you are thinking about building a new home on a lot with existing trees. During construction, valuable trees can be damaged by physical injury to the trunk and crown from construction equipment and soil compaction from heavy equipment. They can also be damaged by filling over the roots with soil, and roots can be cut when trenching is done to put in utility lines. Damaged trees often die within one to five years of construction, or they may survive in a weakened, less attractive state for many years.

Hire a professional arborist in the early planning stages. Many of the trees on the property may be saved if the proper steps are taken. Allow the arborist to meet with you and your building contractor and make preserving trees a high priority. The arborist can assess the trees on the property and help determine which should be removed during construction and which are structurally sound and healthy and should be protected and preserved. It's too late to do anything when the trees around your newly constructed home begin to do poorly or die.

*Dan Gill
Consumer Horticulture
Specialist*



1. Plant warm-season bedding plants beginning in mid-March (south Louisiana) or mid-April (north Louisiana) and continuing through early May. For best results, plant petunias by mid-March and wait to plant periwinkles (vinca) until May.
2. After spring bulbs have finished flowering, wait until the foliage turns yellow before cutting it off. Food is being manufactured and stored for next year's blooms.
3. Mulch plants to reduce watering requirements, suppress weed growth and minimize soil temperature changes. Excellent mulches are pine straw, chopped leaves and pine bark. Mulch should be applied 2 inches thick for effective weed suppression.
4. Divide and transplant older, large clumps of chrysanthemums in early March. Failure to divide plants can result in weak, spindly growth with few flowers.
5. Coleuses are great annual bedding plants for Louisiana's landscapes. Try some of the newer sun-loving varieties.
6. Fertilize shrubs in the spring using a general-purpose fertilizer. Carefully follow the label directions.
7. Watch for insect problems this spring. Lace bugs on azaleas and aphids or whiteflies on gardenias are common. Also examine camellias, sasanquas and hollies for scale insects on the lower foliage. Control with acephate, imidacloprid or horticultural oil sprays.
8. To encourage more rapid reblooming, pinch off old flowers on bedding plants after the first flower cycle is completed this spring.
9. Roses may develop insect problems. Watch for aphids on tender new growth, thrips on flowers and cucumber beetles on foliage. Beetles are especially a problem if a vegetable garden is nearby. Treat with spinosad for beetles and thrips.
10. Garden centers will have many crape myrtles of all sizes in May and June. Plant these shrubs and trees for great flowering all summer. Most varieties also have exfoliating, colored bark.
11. If your crape myrtles have had problems with crape myrtle aphids and the unattractive, black sooty mold they cause, treat your trees now to prevent problems this summer. Apply a drench of imidacloprid insecticide, such as Bayer Advanced Tree and Shrub Insect Control or other products, to the base of the tree, and the tree will be protected from aphids all summer.

Vegetable Gardening

Spring Vegetable Garden Must Do's

Paying attention to the local forecast is extremely important in early spring. Our average last frost dates are March 15 for south Louisiana and April 1 for north Louisiana. However, there is always a chance that a freeze or frost may occur after these dates. Crops grown in the spring season are not tolerant of low or freezing temperatures, so you must pay attention to the local forecast. Make a sound decision on planting at the estimated date listed above or by waiting a bit longer. The last thing you want to do is start off the season on a bad foot and lose all of your tomatoes or cucumbers to a late freeze. Been there, done that! It is one thing to lose a crop to something out of your control, but losing a crop to impatience is never fun.

Vegetables to Plant in March

Direct-plant snap bean, Swiss chard, radish, lettuce, collard, mustard, turnip and sweet corn seeds into the ground. Plant tomato, pepper and eggplant transplants after March 15 in south Louisiana and April 1 in north Louisiana. Cantaloupe, squash, cucumber and watermelon seeds and transplants need warmer soils to perform their best. Make sure all frosts are over before planting these.

Technically, you can use the same dates given for other crops (March 15 and April 1), but to be on the safe side, you might wait a week or two extra for cucurbit crops.



... and in April

Plant snap beans, butter beans, radishes, collards, cucumbers, eggplants, cantaloupes, okra, Southern peas (field peas), peanuts, pumpkins (for an early harvest), winter squash, summer squash, sweet corn, sweet potatoes (plant roots in late April), tomatoes (transplants), peppers (transplants) and watermelons. Remember that most pumpkins require 90 to 120 days to reach full maturity, and some giant pumpkins may even require up to 160 days before they are ready to be harvested. These days must all be frost-free. If you are aiming to harvest pumpkins at or a little before Halloween, adjust your planting date according to the variety of pumpkin you are planting. Typically, small-to-medium-sized pumpkins are planted from late June to the first week of July for a Halloween harvest. Read the seed catalogues and seed packages and figure the date you should plant pumpkins based on when you want to harvest. For okra lovers, mid-April is the earliest time I would plant. Make sure the soil is warm. Planting early simply stresses okra.



... and in May

Most spring vegetables can be planted in May because the soil has warmed, and the danger of frost has passed. Plant sweet potatoes (cut vines or "slips" that grew from the potato piece you planted in April), okra, Southern peas, pumpkins, peanuts, sweet corn, watermelons, cucumbers, butter beans, squash, cantaloupes, collards and eggplant (transplants). Snap beans, butter beans, sweet corn, tomatoes and peppers (transplants) should be planted in the early days of May to prevent poor fruit set as a result of high temperatures. Sweet corn seed should also be planted early as worm control becomes more difficult as the season progresses.



Crop Highlights



Sweet Corn

Planting corn early may reduce exposure to corn earworm populations. The earliest planting should be made seven days before the average last frost date for your area. Plant every two to three weeks to provide a continuous supply of sweet corn. Remember to plant the same variety in a block of at least three rows side by side at each planting. This will help ensure good pollination and well-filled ears. Planting a yellow corn adjacent to a white corn in small gardens may cause bicolor corn ears to form because of cross-pollination. To avoid cross-pollination, wait three weeks between planting varieties.

When planting sweet corn, drop two or three seeds every 8 to 12 inches in the row and cover to about one-half inch to 1 inch deep. After the seeds germinate and the plants are 3 to 4 inches tall, thin to one plant per hill. Side-dress a 100-foot row with 1½ to 3 pounds of calcium nitrate when the plants are about 12 inches tall and again when the plants are 24 to 36 inches tall. One pint of fertilizer, or 2 cups, is about 1 pound. Three ounces of seed will plant a 100-foot row. Dust or spray silks with Sevin every two to three days after silks first appear and until silks begin to dry. This treatment will help reduce corn earworm damage. Harvest sweet corn early in the morning while it is still cool. Chill or cook the corn immediately after harvesting. Sweet corn that is ready to harvest should have a well-filled ear. Kernels should be bright and plump, and their juice should be milky.

Varieties such as Seneca Horizon, Funks G90, Gold Queen, Silver Queen (white) and Golden Cross Bantam perform well. Many other varieties are available and do well in Louisiana. Try Ambrosia, Incredible, Miracle and Delectable. Other varieties include Temptation, Obsession, Honey and Cream, Peaches and Cream, Luscious and any of the XTRA-Tender numbered series.



Snap Beans

Plant bush varieties every two weeks starting right after the average last frost date. This will provide a continuous harvest for an extended period. One-half pound of snap bean seeds will plant a 100-foot row. Plant seeds 1 to 2 inches apart in the row. High temperatures at bloom may cause many of the flowers to fall off. Generally, snap beans do not produce well when planted in late May. For best quality, harvest pods before the developing seeds cause the pod to bulge. Beans can be held for up to seven days at 40 to 45 degrees and 90 to 95 percent humidity.

Pole snap bean varieties produce larger yields because they produce for a longer period than bush varieties. Space seeds about 6 to 12 inches apart. About 2 to 3 ounces of seeds will plant a 100-foot row. For pole snaps, the All-America Selections winner is Kentucky Blue. Rattle Snake and McCaslan have both done well in Louisiana. For those who want a bean that sets well in the heat, try the vigorous yard-long asparagus bean and harvest pods when 12 to 18 inches long.



Tomatoes

Plant tomatoes in a well-drained site that receives 6 to 8 hours of direct sunlight. If the garden is too shady, few blossoms will form, and many of those that form fall off before setting fruit. Begin transplanting in mid-March in south

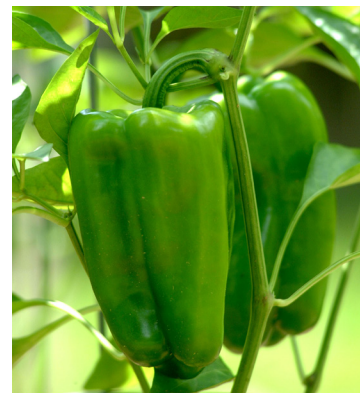
Louisiana and at or after April 1 in north Louisiana after the danger of frost is over. If a frost occurs, you will need to cover the recently planted plants! Early blight is a common disease in tomatoes. Spray with copper fungicides early in the season at the base of the plant. Switch over to garden herbicides later in the season. Scout weekly for insects. Space tomato plants 18 to 24 inches apart. Fertilize with 6 to 7 pounds of 13-13-13 per 100-foot row prior to planting and side-dress at first and second blooms with calcium nitrate or potassium nitrate.

Tomato vines may be determinate or indeterminate. Indeterminate types have a vegetative terminal bud that continues to grow. Determinate types have a fruiting terminal bud that keeps the plant from growing beyond a predetermined height. Determinate types are better suited for container gardening. Indeterminate types will need to be staked in the garden. Indeterminate varieties that grow well in Louisiana include Better Boy and Big Beef (large); Champion and Pink Girl (pink); and Sweet Million, Sweet Chelsea, Jolly, Small Fry, Juliet, Elfin, Cupid, Mountain Belle and Sun Gold (cherry). Determinants have very productive vines that grow to heights of 4 feet. Determinants should be pruned only once or twice up to the first cluster. Recommended determinate types for Louisiana include Celebrity (an All-America Selections winner for best taste), Carolina Gold, Florida 91, Mountain Spring, Cherry Grande (cherry) and Floralina. Also try Sun Master, Sunleaper, Mountain Spring and Phoenix.

Note: The tomato spotted wilt virus has nearly eliminated tomato production in some areas. If you had trouble with it, plant Bella Rosa, Mountain Glory, Amelia, Quincy and Fletcher varieties.

Bell Pepper, Eggplant and Okra

Wait to transplant or direct-seed okra, bell pepper (transplants) and eggplant (transplants) until the weather has warmed considerably. These vegetables are sensitive to cold soils and weather. Once stunted by cool weather, they recover slowly. A garden site with full sun is required for growing bell peppers. Any shade will greatly reduce fruit set. Space peppers about 18 inches and egg-



plants 18 to 36 inches apart. Okra should be spaced 12 to 36 inches apart depending on variety.

Recommended open-pollinated varieties of bell peppers include Capistrano, Jupiter and Purple Beauty. Recommended hybrid bell peppers are Revolution, Heritage, Valencia, Paladin, Plato, Camelot (X3R), Aristotle, Gypsy, Tequila (purple), Mavras (black) and the large King Arthur. Tomato spotted wilt virus has hindered bell pepper production in many areas. The varieties Stiletto, Patriot and Excursion II are resistant to tomato spotted wilt virus. Try these varieties if you have had trouble producing bell peppers.

Recommended hybrid eggplant varieties are Fairy Tale, Calliope, Classic, Epic, Dusky and Santana. Green eggplant varieties produce well in Louisiana and are less bitter than the purple varieties in hot, dry weather.



Cucurbits

Plant cucurbits outdoors well after the danger of frost is over. Do not keep transplants in pots longer than three to four weeks prior to planting in your garden.

Recommended cucumber varieties for slicing are Dasher II, General Lee, Thunder, Speedway, Poinsett 76, Slice More and Intimidator.

For pickling, try Calypso, Fancipak, Jackson and Sassy.

Recommended summer squash crooknecks are Prelude II, Dixie, Gentry, Goldie, Supersett, Destiny III and Medallion.



Recommended yellow straight-neck squash varieties are Goldbar, Liberator III, Enterprise, Cougar, Multipik, Patriot II, Superpik and Fortune.

Recommended zucchini varieties are Justice III, Independence II, Tigress, Lynx, Spineless Beauty, Senator, Gold Rush (AAS) and Payroll.

Recommended scallop or patty pan squash varieties are Peter Pan and Sunburst.

Recommended hard-shell (winter) squash varieties are Waltham Butternut, Butternut Supreme, Early Butternut, Tay Belle Table Queen, Honey Bear, Cream of Crop, Table King and Imperial Delight.

Viruses are a big problem in squash production. Try planting some of the new virus-resistant varieties, including Prelude II and Destiny (yellow crookneck); Liberator and Conqueror (yellow straightneck); and Declaration, Payroll, Judgment III, Revenue and Independence (zucchini).

Recommended cantaloupe varieties are Ace, Aphrodite, Athena, Primo, Magnum 45, Super 45, Ambrosia, Earlidew (honeydew type) or Honey Max (honeydew type).

Recommended watermelon varieties are Crimson Sweet (OP, which designates an open-pollinated variety), Jubilee II (OP), Fiesta, La Sweet (OP), Jamboree, Jubilation, Patriot, Regency, Royal Star, Royal Jubilee, Royal Sweet, Sangria, Stars 'n Stripes and Starbrite. Seedless varieties include Revolution, Summer Sweet 5244, TriX Carousel 212 or 313, Cooperstown and Millionaire. Sugar Baby is a recommended icebox

watermelon, while Summer Gold and Tender Gold are recommended yellow melons.

Apply 2 to 3 pounds of 8-24-24 or similar fertilizer per 100-foot row before planting. Side-dress with 1½ to 2 pounds of a complete fertilizer (13-13-13) per 100 feet of row when vines begin to run. Remove all but three to four well-shaped fruits from each plant when they reach 4 to 5 inches in diameter.

Pumpkins are much like winter squash, but the flesh often is coarser and stronger. Good varieties to try include Atlantic Giant, Prize Winner, Aladdin, Big Autumn, Merlin, Autumn Gold, Magic Lantern, Orange Smoothie, Sunlight, Early Abundance, Darling, Munchkin and Baby Boo. For more information, search the LSU AgCenter website with the keywords "2016 pumpkin variety" to find an article on pumpkin evaluations.

Cucurbit hints: Don't be concerned if the first several squash fruits fall off the plant before they reach an edible stage. The first flowers to form in early spring squash are the female flowers with miniature fruit. Male flowers do not form at that time, so no pollination takes place. In a few days the male flowers appear and normal fruit set begins. In summer, the process reverses with the male flowers usually developing first and the females later.



Cucumber yields may be doubled by growing plants on a trellis. To get cucumber vines to climb a trellis or fence, you may need to tie them to the trellis in the beginning. Once they catch hold, they will continue to climb.

Use pesticides on cucurbits late in the afternoon so as not to reduce the bee population. And be very careful to follow recommended rates and not use pesticides that are particularly harmful to bees in your vegetable garden. Side-dress cucumbers, squash, watermelons

and cantaloupes with 1½ pounds of calcium nitrate per 100-foot row as vines begin to run. Weekly applications of a general-purpose fungicide (Daconil or Maneb) starting at first bloom will protect the foliage and improve yield. Plastic mulch will reduce fruit rot and enhance the production of cantaloupes and the other cucurbits.

Lima Beans (Butter Beans)

Lima beans require warmer soil than snap beans to germinate, so wait until early to mid-April when the soil warms to at least 70 degrees before planting. Bush varieties to plant are Henderson's Bush, Fordhook 242, Thorogreen, Bridgeton, Nemagreen, Dixie Butterpea or Baby Fordhook. Plant lima beans every two weeks through mid-May to extend the harvest. One-half pound of seed will plant a 100-foot row when three or four seeds are planted every 12 inches within the row. Recommended pole lima beans are King of the Garden, Carolina Sieva, Willow Leaf, Christmas and Florida Speckled. Plant seeds 6 to 12 inches apart. One-quarter pound of seed will plant a 100-foot row.

Sweet Potatoes

Plant seed potatoes (roots) during April and into May. Purchase weevil-free seed (root pieces). Transplants (the vines or slips) should be ready to cut in four to five weeks. Sweet potato slips (transplants) can be set out in late April if the soil is warmer than 70 degrees. Cut plants from plant bed about 1 inch above soil line and transplant.

Cutting rather than pulling helps reduce sweet potato weevils and many disease problems. Cuttings develop feeder roots within a day or two if the soil is warm and moist. Holding the cut slips in the shade for two to three days before transplanting will help increase survival. Use a low-nitrogen fertilizer, such as 6-24-24 or 8-24-24, at 2 to 3 pounds per 100-foot row as a preplant fertilizer.





Okra

The soil needs to be warm (65 to 75 degrees) for okra seeds to germinate. Soak seeds overnight in tap water to soften seed coat before planting. Plant only 2 to 3 times as deep as the seed is wide. Keep soil moist until the seedling emerges.

Recommended varieties are Emerald, Annie Oakley (hybrid), Cowhorn, Cajun Delight-AAS, Red Burgundy and Clemson Spineless.

Peanuts

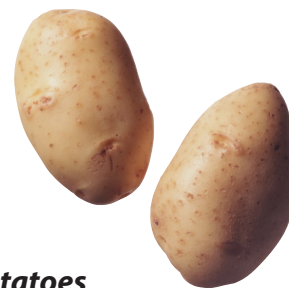
Shell peanuts and plant about four seeds per foot of row. Plant peanuts in April and May. Spanish peanuts have the smallest seeds. Runner types have intermediate-size seeds, and Virginia types have the largest. Fertilize lightly with 1 to 2

pounds of 8-24-24 or similar fertilizer per 100-foot row. Soil should be high in calcium. Try not to follow peanut crops with tomato crops. Rotate out of the nightshade family between seasons to reduce soil-borne disease buildup.



Onions, Shallots and Garlic

Harvest mature onion, garlic and shallot bulbs during the early summer. When mature, the tops begin to turn yellow or brown and fall over. Pull them, trim tops and roots and lay the plants on top of the row or place in burlap sacks for a couple of days to let them dry if weather permits. Then store them in a cool, shaded and well-ventilated place. Ideal storage for onions after drying is at a temperature of 45 to 50 degrees in a place with 65 to 70 percent relative humidity.



Irish Potatoes

Begin digging 90 to 110 days after planting. Plant tops start turning yellow as tubers reach maturity. Allowing the potatoes to remain in the ground a few days after tops die or after tops are cut will help set or toughen the skin and reduce skinning, bruising and storage rot.

To keep potatoes for several weeks, allow cuts and skinned places to heal over at high temperatures. Then store them in a cool, dark place with high humidity. Do not store where they will receive light because they will turn green and develop an undesirable taste.

*Dr. Kathryn Fontenot
Vegetable Crop Specialist*

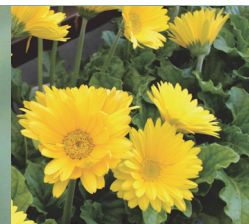
Let these
LSU AgCenter
service labs
help you
grow!

Start with the soil. Don't guess, soil test. The LSU AgCenter Soil Testing Lab can eliminate the guesswork and reveal exactly how much fertilizer, lime or sulfur is needed for specific plants to be grown in a particular type of soil.

If your plants get sick, accurate and rapid diagnosis of the problem is important for selecting the best management practices at the most effective time. The LSU AgCenter Plant Diagnostic Center can help.



LSU AgCenter Soil Testing
& Plant Analysis Lab



LSU AgCenter Plant
Diagnostic Center



LSUAgCenter.com

LSU AgCenter Soil Testing Lab | 225-578-1219 | www.LSUAgCenter.com/SoilTest
LSU AgCenter Plant Diagnostic Center | 225-578-4562 | LSUAgCenter.com/PlantDiagnostics

How to Plant Seeds

Before sowing seeds, locate a bright, sunny place to keep the seedlings. Seeds require moisture and light to germinate. Choose a location that is close to a water source because newly planted seeds have to be watered every day. Make sure to choose a tray that can drain excess water. Beginners should consider easy-to-germinate seeds like basil or cucumbers for the spring season.

Step 1: Buy germination media at your local nursery. You'll need a bucket to mix the media and water before filling up your tray. Germination media often comes dry and feels like sawdust because it contains dried peat moss and needs added moisture.

Step 2: Add water to the germination media. Use your hands for this process. Break up large and small clumps. You want the media to feel heavy. This is when it has soaked up sufficient water. When the media has absorbed enough water, it will hold together when you lightly ball it up in your hand.

Step 3: Fill your seeding tray with media. Using your hands, gently press the media into the cells until each cell is completely filled.

Step 4: Make a slight indentation in the media of each cell, about one-quarter of an inch deep, and place one seed in each cell. For large seeds the hole can be deeper. A good rule of thumb is to only plant seeds twice as deep as they are wide. It's OK if more than one seed goes in a cell. You'll just have to thin the seedlings to one plant per cell after they germinate.

Step 5: Using your fingers, lightly rake the media back over the seeds and water the entire tray thoroughly. Keep watering the tray daily. Your seeds should emerge one to two weeks after planting.

*Mary Sexton
Extension Associate*



Become a Louisiana Master Gardener

Whether you are a seasoned gardener or just beginning to sprout your gardening skills, you can become a Master Gardener. The Louisiana Master Gardener program, implemented by the LSU AgCenter, is a statewide educational and service program for gardening enthusiasts. Contact your parish LSU AgCenter extension agent for more information or visit our website.



LSUAgCenter.com/MasterGardener
LMGCoordinator@agcenter.lsu.edu

Louisiana Master Gardener is an educational program of the LSU AgCenter



Turfgrasses and Lawns

Spring Lawn Weed Control

Herbicides can be effective tools for reducing weeds in your yard, but the best way to manage weeds is to grow a thick, healthy lawn. Lawns that are managed properly are lush and healthy with few weed problems.

Visit www.lsuagcenter.com and search for "Louisiana Lawns Best Management Practices" for more information on growing a beautiful lawn.

Pre-Emergence Herbicides

Weed preventers or pre-emergence herbicides can be helpful in preventing the emergence of several summer annual grasses and broadleaf weeds. Pre-emergence herbicides may be applied safely in late winter to early spring to all established Southern lawns.

Most pre-emergence products for home gardeners are granular and should be applied with drop or broadcast spreaders and "watered in" soon after application. These types of herbicides kill weeds as they germinate, so application timing is extremely important. You have to apply before the weeds, such as crabgrass, germinate.

Residents in the New Orleans area and the southernmost areas of the state should have already applied pre-emergence herbicides in late January or early February and then followed with another application in mid-April. From Alexandria to Baton Rouge, residents should apply around Feb. 14 with a follow-up application in late April. If you live in north Louisiana, try to get these herbicides applied in late February to early March with a follow-up application by mid-May. Some pre-emergence herbicide trade names to look for are Scotts Halts, Barricade and Hi-Yield Crabgrass Preventer Plus Lawn Food with Dimension. Consult product labels concerning rates and application techniques.

Post-Emergence Herbicides

Post-emergence herbicides are used to kill weeds that already have emerged in the lawn. Winter broadleaf weeds usually are prevalent in the late winter to early spring throughout the state. These broadleaf weeds often can be controlled by using selective liquid post-emergence trimec-type herbicides that contain formulations with these three weed-killing ingredients: 2,4-D; dicamba; and mecoprop.

Some examples of broadleaf herbicides are Bayer Advanced Southern Weed Killer for Lawns, Ortho Weed B Gon Max for Southern Lawns and Ferti-lome Weed Free Zone. Product manufacturers will often recommend a follow-up spray two or three weeks after the first application. Broadleaf weed killers are widely available and can be used on most Southern grasses. Injury can occur, however, when using them on St. Augustine grass and centipedegrass as the weather gets warmer in late spring.

Atrazine is very effective on winter broadleaves and also controls annual bluegrass. This herbicide is consistently one of the most effective herbicides on winter broadleaf weeds in the LSU AgCenter lawn weed management trials. Atrazine does not control wild onion, false garlic or blueeyed-grass, which is actually an iris.

The herbicide may be safely applied on St. Augustine grass, centipedegrass and zoysia, as well as dormant bermudagrass, during the late winter to early spring. Most garden centers have a good supply of atrazine on their shelves.

Clean your sprayers thoroughly with an ammonia solution if the same sprayer is used for applying insecticides or fungicides on landscape plants. It is best to buy a sprayer specifically dedicated to weed killers to avoid accidental injury to desirable plants. As always, be sure to read and follow product label recommendations before using any pesticide.

Weed and Feed Products

Weed and feed herbicides can be used at the times recommended for the first fertilizer application of the year. Apply weed and feed in the New Orleans area from mid- to late March. For north Louisiana, mid-April is the time. Just be aware that applying weed and feed too early (late February to early March) may encourage outbreaks of large patch disease.

Fertilizing the Lawn

Lawns vary in the amount of fertilizer required during the growing season. See the table below for information regarding the number and timings of fertilizer applications recommended for lawn species grown in Louisiana. Bermudagrass and St. Augustine grass require the most fertilizer compared to other lawn grasses. Centipedegrass and zoysia only require one to two applications of fertilizer per year.

Lawn	Number of Fertilizer Applications/Year	Recommended Months
Bermudagrass	3	March/April, June, and August (optional September)
Centipedegrass	1 to 1.5	April and possibly June at half the fertilizer rate
St. Augustine grass	3	April, June and August
Zoysia	2	April and July

Choosing a Fertilizer

A spring application of weed and feed could serve as your first fertilizer application. For future applications during the growing season, consider using 3:1:2 or 4:1:2 ratios of N-P-K as a guide for the analysis of fertilizers to choose for the lawn. For example, a fertilizer with an analysis of 21-7-14 is a fertilizer with a 3:1:2 ratio.

Soil tests would be helpful to determine exactly what nutrients are needed to make your lawn beautiful. Contact your parish extension office to learn more about testing your soil today.

Dr. Ron Strahan
Turfgrass and Weed Specialist

Common Plant Disorders in Home Vegetable Gardens

Many environmental factors can cause plant disorders that mimic disease symptoms. These include drought, excess water, soil compaction, air pollutants, heat or cold damage, herbicide damage, improper soil pH and nutrient deficiencies or toxicities. These disorders are non-infectious and do not spread from plant to plant. They generally appear when home vegetables are exposed to improper growing conditions. Symptoms caused by abiotic agents occur all at once and may appear on a wide variety of vegetables. Plants weakened by adverse growing conditions may be further predisposed to attack by pathogens. Some of the more common disorders of garden vegetables are described below.

Blossom-End Rot

Blossom-end rot results from a calcium deficiency in young, rapidly expanding fruit. Tomatoes, eggplants and peppers are highly sensitive to blossom-end rot. Drought stress or extreme fluctuations in soil moisture or excessive nitrogen fertilization may worsen blossom-end rot. Blossom-end rot is more common in coarse, sandy soils and soils with a low pH. Sunken, dry leathery areas develop on the blossom end of ripe and green fruits. Soil analysis is required to know the calcium content and soil pH. If calcium is low, lime application may be required. Add organic matter to improve the texture and water-retaining capacity of sandy soils. Prepare well-drained beds or raised beds to promote good water drainage. Avoid water stress and irrigate plants regularly to maintain a uniform moisture level in the soil. Use a nitrate source of nitrogen.



Blossom end rot on a ripened tomato.

Nutrient Deficiency

All vegetables are susceptible to nutrient deficiencies. Improper soil pH, soil composition and inadequate fertilization may lead to a nutrient deficiency. Symptoms include stunting, yellowing, marginal bronzing, interveinal chlorosis and deformed leaves and fruits. Soil pH plays an important role in the availability of nutrients required for healthy plant growth. Remember to get your soil tested on a regular basis.



Interveinal chlorosis caused by nutrient deficiency.

Herbicide Injury

When used exactly as prescribed, herbicides rarely cause problems on non-target plants. Injury can occur, however, if they are used or applied incorrectly or when they are blown by the wind to non-target areas, which is called herbicide drift. Herbicide damage can be difficult to diagnose because symptoms often resemble those of infectious diseases and symptoms vary depending on the plant. Common leaf symptoms associated with herbicide damage are leaf distortion, twisting, curling, spotting, vein bleaching and mottling. Adventitious leaf growth also may occur. Brittle shoot tissue is common in cucurbits, tomatoes and peppers. Some of the most common herbicides that cause plant injury are Roundup (glyphosate); MCPPE; Weedone (phenoxy acid); paraquat; and 2, 4-D.



Tissue deformation caused by root uptake of 2, 4-D herbicide.



Bleaching of young tissue caused by herbicide drift.

Sunscauld

Sunscauld, or sunburn of tomatoes, peppers and eggplants, is caused by direct exposure of the fruit to sunlight. Sunscauld occurs when plants have lost leaves because of diseases, excessive pruning or high winds. The fruit exhibits a large, light-colored, paper-like area on the side exposed to direct sunlight.



Sunscauld caused by direct exposure of the fruit to sun.

Oedema (Edema)

Oedema occurs when plants take up more water through the roots than they can use or release through their leaves. Oedema occurs when the soil is warm and saturated while the air is cool and humid. Blisters form on the upper or lower sides of leaves. Tomatoes, leafy greens, brassicas and cole crops are very sensitive to oedema.

Frost or Freeze Injury

Symptoms of cold damage depend on the vegetable and the season. Warm-season vegetables, such as tomatoes, peppers, snap beans, cucurbits, okra, basil and other tender herbs, are more sensitive to cold weather than cool-season crops, including broccoli, cabbage, onions, peas and many leafy greens. Seedlings, young plants, flowers and mature fruit are very sensitive to cold damage. Blistering, water-soaked lesions, plant collapse and soft rots are common cold damage symptoms. Cover plants with plastic or cloth sheets when cold evenings are predicted. Watering plants at the soil line before a freeze can help to protect plants. Wet soil absorbs more heat than dry soil and will radiate the heat during the night.

Ozone Damage

Ozone is the most damaging air pollutant for plants in the United States. Ozone is the active form of oxygen, and it causes a variety of symptoms in plants, including interveinal (between leaf veins) necrosis; superficial tissue collapse; silver or white flecking; and colored (tan, red brown or purple) markings on the upper surfaces of leaves. Snap beans, edamame and potatoes are very sensitive to ozone pollution. Ozone is produced when sunlight reacts with nitrogen oxides and hydrocarbons. The burning of garbage and the combustion of coal or petroleum fuels form hydrocarbons. Ozone is moved to ground level by turbulence generated during electrical storms. Ozone levels are usually highest from 11 a.m. to 5 p.m. and during the summer when daylight hours are extended.

Dr. Raj Singh
Director of Plant Diagnostic Center

Fruits

Caring for Freeze-Damaged Citrus Trees

The past few winters have generally been above normal from a temperature perspective. But this season we saw a return to more normal temperatures for a Louisiana winter. Average low temperatures in the northern two-thirds of the state are usually in the mid- to upper teens, while the lower third can have temperatures in the low 20s during the winter. Of course, temperatures this low will negatively impact unprotected citrus trees throughout the state. How much damage there is to the tree depends on a number of factors, and the expression of that damage may take several months to be visible. Factors influencing the freeze damage include minimum temperature, duration of the freezing temperatures and how acclimated the tree was prior to the freeze. Other factors influencing the susceptibility of trees to freezing temperatures include tree vigor, scion variety, rootstock, crop load, tree health and soil conditions.

Citrus trees differ from other fruit crops grown in Louisiana because they grow year-round, while deciduous trees shed their leaves and enter a dormant stage. This active, green tissue is what makes citrus susceptible to winter cold. So how is a citrus tree damaged by freezing temperatures? The injury occurs from ice formation in the intercellular spaces of the plant tissue, which results in disruption of cell membranes and damage to cell walls. Visually, this damage appears as dark, water-soaked areas on the leaf surface that may or may not turn brown after thawing. Entire leaves that are frozen will usually turn tan to brown in color. It is important to note when the damaged foliage falls from the tree. Timing gives us an indication of whether the tree also had wood damage. Leaf drop within a few days indicates that the wood was likely not damaged or killed, but leaf retention on the twigs usually indicates that some wood damage has occurred. While it can be quite frightening to watch all of the leaves fall off your tree, you can expect the tree to recover and put out new growth in the spring if the wood remains healthy.

Like leaves, damage to twigs often appears as water-soaked or discolored areas. The larger branches and trunk will generally have patches of dead bark that have split or curled and dried up. Some damaged areas will ooze sap and may have the appearance of a canker. An easy test for wood damage is to scrape the outer layer of bark with a knife or fingernail. If the underlying tissue is green, in most cases this is indicative of live wood, while tan or brown tissue indicates dead wood.

Whether you protect your trees or not, at some point most citrus tree owners will have to deal with a freeze-damaged tree. You can be encouraged by the fact that as long as the damage was not too severe, your tree will fully recover with a little care from you. One of the important things to remember about dealing with freeze damage is to not rush to prune the tree before you know the extent of the damage. It may be several months before we know if partially damaged limbs are going to heal themselves or die. No attempt should be made to

prune or even assess damage from the freeze until spring when new growth appears. Some of the new growth initiated this spring may collapse and die as the wood feeding the growth dies from freeze injury.

Trees that have shed all their leaves commonly have sunburn on the southwest side of large limbs and the trunk. These areas had been protected from the sun by the green foliage prior to the freezing event. Whitewash can be applied as a precautionary treatment to prevent this from occurring.

After the freeze damage is visible and it is time to start pruning, you should prune only living tissue. It is better to cut back to a crotch than leave a short stub. On limbs with vigorous shoots, cut the limb back just above one of the shoots. On trees with significant crown damage, cut the tree back to the uppermost sprout above the graft union. If the tree has been killed to the ground or below the graft union, then you must decide between pulling the stump out of the ground and planting a new tree or allowing a root sucker to develop and then grafting when it is large enough.

Trees that have lost all their foliage will not be using as much water, so you will probably have to reduce your irrigation to prevent waterlogging the soil. Over-irrigation at this time can induce root damage and encourage growth of root-rotting organisms. It can also move nutrients below the root zone. Irrigation should be less frequent, and smaller amounts of water should be applied until trees have regained their normal foliage development.

You will need to alter your normal fertilizer regime, as you may be dealing with a much smaller tree. Reduce fertilization amounts until the tree has grown back to its original canopy size. It is better to fertilize more often at a reduced rate than to make one large application. Watch for micronutrient deficiencies, such as zinc, manganese, boron or iron deficiencies, as these will often occur because of the drain on the tree from the rapid growth required to replace lost foliage. These can be easily corrected with a foliar spray rather than a ground application.

Freezing events can have a devastating impact on citrus trees, but a healthy tree can recover quickly from cold damage if given proper care. How quickly the tree recovers is dependent on the extent of freeze damage and how much care it receives after the event. Defoliated trees with minor twig damage will typically recover in one year. Trees with more extensive damage will require at least two years or more.

*Dr. Charlie
Graham
Fruit Extension
Specialist*



How does your garden grow?

With research-based information from
LSU AgCenter gardening experts

Try LSU AgCenter Publications

The LSU AgCenter offers a wealth of research-based information on gardening and other topics that affect your life every day.

Visit our online store
for publications that
interest you.



LSUAgCenter.com/OnlineStore

Primocane-Fruiting Blackberries

Primocane-fruiting blackberries produce fruit on current-season canes (primocanes) and second-season canes (floricanes), if desired, while all other blackberries fruit only on the floricanes. Primocane-fruiting blackberries are adapted to a diverse range of climates, particularly because cold hardiness is not an issue when plants are grown for a primocane crop only.

Most of the currently available primocane-fruiting varieties were developed at the University of Arkansas, and many of the statistics about them are in reference to the growing season there. For example, the floricane crop of Prime-Jan and Prime-Jim — the first commercial varieties released in 2004 — is from June 3 to July 6 in Arkansas, thus overlapping with other fresh market blackberries. Harvest on primocanes begins in mid-July there.

The primocanes of Prime-Jan and Prime-Jim tend to branch naturally, producing a couple of branches near the base. Soft-tipping primocanes at 3 feet early in the season, however, increased branch and flower numbers, resulting in a threefold yield increase compared with untipped canes.

Research indicates primocane-fruiting blackberries easily can be manipulated to adjust harvest time. Removing primocanes to create a delayed flush of growth will delay harvest. Row covers or tunnels that increase temperature will advance primocane growth and harvest. Soft-tipping height and frequency can affect cane architecture and season. Management techniques along with new varieties of primocane-fruiting blackberries will have a great effect on blackberry production worldwide.

Flowering and Fruiting

Prime-Jan and Prime-Jim bloom on the floricanes beginning in early to late April in Arkansas. The time from flowering to black fruit is similar for both cultivars, averaging 57 days. Reported yields range from 1,500 to 5,300 pounds per acre in Arkansas. Berry size on floricanes ranged from 3.7 to 6.4 grams. Double-cropping (floricane plus primocane crop) did not reduce the primocane crop.

In warmer climates, like Louisiana, primocane-fruiting blackberries can be double-cropped. Harvest on the floricane crop is at the same time as other blackberry types, such as the fresh market blackberry variety Navaho that is considered to have much better fruit quality. Also, the yield of the floricane crop in Prime-Jan and Prime-Jim is not as high as that typically found in other erect blackberry varieties. Although the primocane crop overlaps with other varieties, the fruiting season of the primocane-fruiting types is longer.

Date of first bloom on primocanes ranged from June 16 in Arkansas to July 14 to 22, depending on primocane management treatment. Fruit harvest on primocanes began on July 17 in Arkansas and continued until frost, although fruit numbers were greatly reduced during higher temperatures in August, indicating pollen germination, stigma receptivity and pistil density were reduced when temperatures exceeded 84 degrees. Yield ranged from 200 to 2,700 pounds per acre, and berry size ranged from 2.0 to 3.7 grams in Arkansas.

Primocane Management

The effects of “soft-tipping” primocane-fruiting blackberry primocanes (removal of 1 to 2 inches) on yield and berry size depended on when it was done. “Soft tipping” late, when flower clusters appeared or later, reduced primocane yield and berry weight.

The primocanes of Prime-Jan and Prime-Jim tend to branch naturally, producing a couple of branches near the base. Primocanes that are not summer-pruned can reach more than 6 feet tall. Generally, primocanes that are soft-tipped to 3 feet produce up to three times the yield of untipped canes. This higher production results from more branches per cane and more flowers on soft-tipped canes.

Crops should be expected the year after planting. A simple two-wire trellis is recommended to prevent the vigorous canes from bending over and to prevent wind damage.

Off-Season Production

In primocane-fruited blackberries, fruiting season can be modified by advancing or delaying primocane growth using row covers. Primocane-fruited blackberries also can be manipulated to produce fruit at most times of the year in tunnels. With row covers, primocanes tend to grow faster than those without row covers and thus bloom earlier.

Flower bud initiation in primocane-fruited blackberries may be day-neutral and dependent on primocane age as it is in primocane-fruited raspberries. The chilling requirement of the floricanes of Prime-Jim seems to range from 100 to 300 hours.

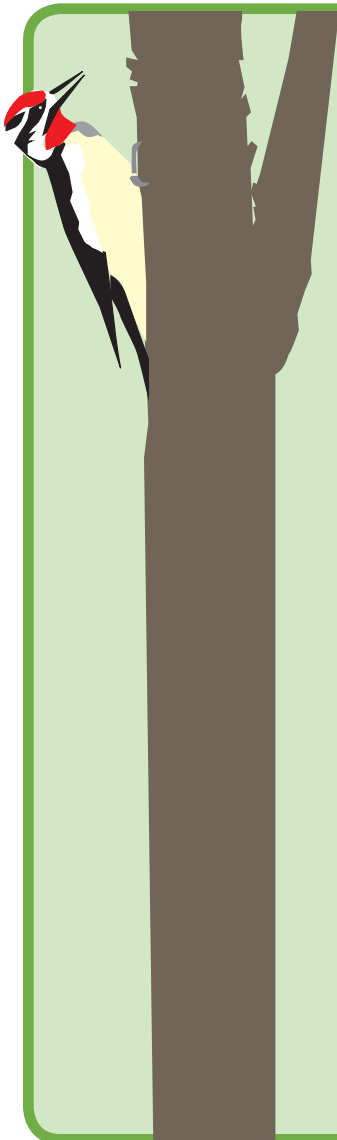
Research indicates primocane-fruited blackberries easily can be manipulated to adjust harvest time. Removing primocanes to create a delayed flush of growth will delay harvest. Row covers or tunnels that increase temperature will advance primocane growth and harvest. Soft-tipping of canes is necessary to manage primocane growth and to increase yield, but tipping height can affect cane architecture and season. In addition, double-tipping, where primocane branches are soft-tipped also, shows great promise for increasing production.

Prime-Ark Freedom is a new variety developed by the University of Arkansas and is the world's first thornless primocane-fruited blackberry. Freedom is the fourth in the university's Prime-Ark line. PA Freedom is intended for home garden use and possibly local markets because it does not store well for shipping. Freedom follows the release of Prime-Ark 45 in 2009.

Osage is the newest thornless floricanes-fruited blackberry. In Arkansas, Osage ripens between Natchez and Ouachita, with June 10 as the beginning harvest date. Its yields have been consistent and good, comparable to and higher than Ouachita. Berry size is medium, 5 grams, slightly smaller than Ouachita. Flavor is a key attribute of Osage, which has lower acid flavor and notable flavor components coupled with high sugar levels. It has great post-harvest handling potential.

Other Arkansas floricanes-fruited blackberry varieties to consider include, in order of ripening at the test location in Clarksville, Ark.: Natchez, June 5; Osage, June 10; Ouachita, June 12; Navaho, June 20; and Apache, June 25.

*David Himelrick, Ph.D.
Fruit Crops Specialist*



Sapsuckers Appear in Early Spring

If you listen quietly during March and April, you may hear a distinct tapping sound in your neighborhood trees. A bird called the sapsucker is creating this tapping sound. Sapsuckers are migrating birds that spend their summers in the northern part of the country and the winters and early springs in the southern parts. Because the sapsucker is here for a short amount of time, you may miss seeing the bird itself. But if you look at your neighborhood trees or those in the forest, you may notice the distinct patterns they leave behind on the trunks.

The sapsucker will typically drill horizontally parallel rows of holes in the trunks or branches of trees. The tree will begin to ooze sap and sugars from those holes. The sapsucker will come back to the drilled holes and suck up the sap, which oozed out along with the insects that the sugars attracted.

The sapsuckers tend to be attracted to maple, ash, elm and oak trees. Typically, the health of the tree will not be compromised by the damage caused by the sapsucker as long as the damage occurs on the trunk or larger branches. However, as the sapsucker begins to drill on smaller or younger trees or smaller branches of a larger tree, this may have a detrimental effect. Oak trees are typically better at handling the damage caused by the sapsuckers.

The scars of the holes drilled by a sapsucker may be seen for many years after a bird has fed on that tree. If damage caused by the sapsucker is new and fresh wounds become intolerable, you may discourage the birds from continuing to drill on that tree.

Dan Gill gives the following advice: "You may wrap the trunk and major branches with burlap held in place with duct tape. Leave this in place for about a month. The sapsuckers feed here for just a few weeks before migrating north to follow spring. This will discourage the birds from drilling in that particular area of the tree."

If you enjoy watching birds in your backyard and the damage is not great, then take the opportunity to enjoy the backyard wildlife. You will be able to hear their rhythmic tapping in the trees and enjoy their unmistakable black, white and red coloring.

*Lee Rouse
Horticulture Extension Agent*



INNOVATE EDUCATE IMPROVE LIVES

At the LSU AgCenter, we're helping Louisiana grow in areas that improve your life and contribute to the economic well-being of the state. Our research and educational programs provide the tools you need to live well and thrive in a growing, changing world.



LSUAgCenter.com

School of Plant, Environmental and Soil Sciences

Horticulture Division

155 J. C. Miller Hall - LSU

110 LSU Union Square

Baton Rouge, Louisiana 70803

Horticulture Hints



**Spring
2018**

Visit our LSU AgCenter Store
www.LSUAgCenter.com/OnlineStore

Prepared quarterly by:

Kathryn Fontenot, Ph.D., Community/School Vegetable Gardens

Dan Gill, Consumer Horticulture

David Himelrick, Ph.D., Fruits

Ron Strahan, Ph.D., Lawns

Mary Sexton, Horticulture

Charlie Graham, Ph.D., Fruits

Raj Singh, Ph.D., Plant Diseases

Lee Rouse, Horticulture

Parish agents, please adapt these suggestions to your area before disseminating.

School of Plant, Environmental and Soil Sciences
155 J. C. Miller Hall - LSU, 110 LSU Union Square, Baton Rouge, Louisiana 70803
(225)578-4070; Fax: (225)578-1068

The LSU AgCenter and LSU provide equal opportunities in programs and employment.
