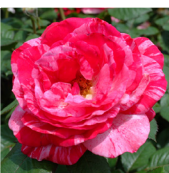
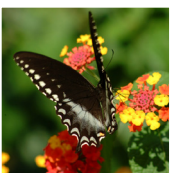


Horticulture Hints



Fall
2017

Ornamentals



Spring display of *Petunia Supertunia Vista Bubblegum*

Louisiana Super Plants: Tough, beautiful

The Louisiana Super Plants program is an LSU AgCenter educational and marketing campaign that highlights tough and beautiful plants that perform well in Louisiana landscapes.

Louisiana Super Plants selections have a history of outstanding performance in Louisiana or have gone through several years of university evaluations and observations. Louisiana Super Plants are "university tested and industry approved."

Visit www.lsuagcenter.com/superplants for more information.



Louisiana Super Plants selection for fall 2017

Petunia Supertunia Vista Bubblegum

The first petunia to be a Louisiana Super Plants selection.

Superior performance at LSU AgCenter Hammond Research Station trials. This really is one of the best performing petunias.

Vigorous mounding and spreading and grows to 12- to 24-inch height with a 24- to 36-inch spread. Space about 18 inches apart when planting.

Plant in full to part sun.

Flower production is extremely heavy over a long period.

Bubblegum pink flowers provide lots of color and hold up well to weather.

Promoted in fall in south Louisiana for planting in October through February.

Less reliably hardy in north Louisiana. Plant in spring after hard freezes in the teens are over in late February or March.

Cool-season bedding plants

Cool-season bedding plants can be planted now to make your landscape an exciting and colorful place this fall and winter and especially next spring. Careful bed preparation and thoughtful planning when selecting the plants will help make sure you are pleased with the results of your efforts.

The bedding plants we plant this time of year prefer cool to mild days and chilly to cold nights. Most of these plants are hardy down to at least 20 degrees or lower, and gardeners in both south and north Louisiana have a nice selection to choose from.

Cool-season bedding plants 4 to 8 inches tall:

Sweet alyssum, lobelia*, pansy, Johnny-jump-up, viola, primrose*, cyclamen*, petunia*, dwarf snapdragon, ornamental kale and cabbage and annual phlox.

Cool-season bedding plants 8 to 15 inches tall:

Medium-sized snapdragons, dwarf toadflax*, dwarf stock, candytuft, calendula*, bluebonnet, dianthus, sweet William, dwarf nicotiana* and California poppy.

Cool-season bedding plants taller than 15 inches:

Iceland poppy, peony-flowered poppy, toadflax*, tall snapdragons, stock, statice, larkspur, delphinium, hollyhock, sweet peas (vine) and nicotiana*.

*These plants are more reliably hardy in south Louisiana.

Cool-season bedding plants easily direct-seeded.

Alyssum, Johnny-jump-up, bluebonnet, calendula, annual phlox, nasturtium, sweet peas†, larkspur†, poppies†.

†These plants resent transplanting and are generally best direct seeded where they will grow.

Plant native shrubs this fall

Many gardeners think about planting shrubs in the spring, but fall is the best time to plant shrubs in Louisiana. There are advantages to planting woody ornamentals in the fall. First, it allows the plant to establish a root system in the new soil long before shoot growth is initiated the next spring. Root activity takes place in relatively cool soil even though the shoot at the top is not actively growing. Usually, less supplementary water will be required in late fall and early winter than in late spring or summer.

Some excellent native shrubs are available for Louisiana. Consider adding one of these species to your home landscape.



American Beautyberry

Evergreen, Semi-evergreen:		
Species	Size	Light Requirement
Coast Leucothoe (<i>Leucothoe axillaris</i>)	3-6'	Partial shade, shade
Dwarf palmetto (<i>Sabal minor</i>)	2-8'	Partial shade, shade
Dwarf yaupon (<i>Ilex vomitoria</i> , 'Nana')	2-4'+	Sun, partial shade
Florida anise (<i>Illicium floridanum</i>)	8-12'	Partial shade, shade
Fetterbush (<i>Lyonia lucida</i>)	2-6'+	Partial shade, shade
Groundsel bush (<i>Baccharis halimifolia</i>)	12'	Sun, partial shade
Inkberry/Gallberry (<i>Ilex glabra</i>)	7-10'	Sun, partial shade
Florida anise (<i>Illicium floridanum</i>)	6'-8'	Sun, partial shade
Deciduous:		
Species	Size	Light Requirement
American beautyberry (<i>Callicarpa americana</i>)	3-8'	Sun, Partial shade
Honeysuckle azalea (<i>Rhododendron canescens</i>)	8-16'	Sun, partial shade
Arrowwood (<i>Viburnum dentatum</i>)	6-15'	Sun, partial shade
Oakleaf hydrangea (<i>Hydrangea quercifolia</i>)	6-8'+	Shade, partial shade
Spicebush (<i>Lindera benzoin</i>)	3-10'	Sun, shade
Strawberry bush/Wahoo (<i>Euonymus americanus</i>)	4-8'	Partial shade, shade
Virginia willow (<i>Itea virginica</i>)	3-4'	Partial shade, shade
Winterberry (<i>Ilex verticillata</i>)	6-10'	Sun, partial shade

Time to divide Louisiana irises

Louisiana irises are at their most dormant stage in the late summer, making September and early October the ideal time to divide them. To divide your irises, dig up a clump using a shovel or turning fork. Be careful not to damage the rhizomes. Break or cut off the young rhizomes, which have green growth at their tips, from the large, old rhizomes. Discard the old rhizomes and replant the young rhizomes.



Before replanting, take the opportunity to improve the bed by digging a 2- to 4-inch layer of compost or other organic matter into the bed along with an application of 15-5-10 fertilizer or something similar. While you are doing this, do not allow the roots of the plants taken out of the bed to dry out. Put them in buckets of water or wet them down and cover them with plastic.

Plant the rhizomes horizontally about 8 to 12 inches apart with the fan of foliage facing the direction you want the plant to grow. Carefully cover all of the roots. The top of the rhizome should show above the soil surface. Mulch the bed about 3 inches deep and water thoroughly.

This is also a good time to divide other perennials that start active growth in the fall and grow over the winter, such as Easter lilies, calla lilies and anemones.



Creating bird-friendly landscapes

Birds add interest, movement, color and even beautiful sounds to our gardens. Many bird species feed on insects, and this can help hold down populations of pests that may damage plants in landscapes or gardens. So what can we do to encourage birds to live in our landscapes? The primary features the environment must provide to invite birds into the landscape include shelter, nesting sites, water and food.

Although people often provide food and water for birds, shelter and nesting sites should not be overlooked. Difficulty in finding natural shelter near the food and water sources you supply may tempt birds to look elsewhere for a more promising environment. If you can provide a place for birds to nest, you'll have the pleasure of seeing them frequently at close range and the advantage of allies in the control of insects. Adding levels to a plant community increases surface area by creating more leaves, stems, nooks and crannies on which birds can nest, feed and sing. The use of various sizes of shrubs and small and large trees planted in masses or groups will achieve this in a landscape design.

Shelter for nesting may also be provided with birdhouses or bird boxes. These human-made

structures, if properly built to specific dimensions and located in the right spot, can provide nesting sites for birds that would rarely find suitable sites in urban areas. If birds ignore the houses you've installed for them, make sure you have done everything correctly on the dimensions and location of the house. Then be patient. Decorative bird houses meant more for show than to provide a home for birds will rarely be utilized.

Include plants in your landscape that produce fruit birds will eat, such as native hollies, cherry laurel and hawthorns (*Crataegus* species). However, putting out bird feeders is another option becoming increasingly popular as a means of attracting birds into the landscape. When setting up a feeding station, be sure you are willing to make a commitment to maintain a dependable food supply and to keep the health and safety of the birds in mind.

Water is not food, but it can make a feeding station more attractive. By providing water, which birds use for both drinking and bathing, you may encourage birds to stay in your yard. Several commercial watering trays are available, but you can use almost any shallow container so they can drink and bathe. Make sure you regularly add fresh water to the bird bath and clean it as needed.

It is true that birds are often included on lists of common garden

pests. Birds eating newly planted seeds or pecking at or feeding on fruit or vegetables often frustrate gardeners. Despite these occasional problems, the presence of birds is almost universally welcome among gardeners.

Watch out for cool-season pests

Louisiana's relatively mild winters allow us to have blooming flower gardens from fall through spring. We also have lots of ever-green trees and shrubs that retain their foliage through the winter, and some of those, such as the camellia, even bloom merrily despite whatever cold we have.

Unfortunately, many insects are active during the cool season as well. Caterpillars chew holes in the leaves of bedding plants. Treat with a Bt (*Bacillus thuringiensis*) insecticide as needed. This naturally occurring bacterium only attacks and kills caterpillars and is environmentally friendly.

Snails and slugs are not insects, but they are active during mild, wet winter weather and chew holes in leaves. To trap snails and slugs, bury a bowl up to its rim in garden beds where snail and slug damage has been observed. Fill it half full with beer. Place the traps in late afternoon or early evening. Snails and slugs are attracted to the yeasty smell of the beer, crawl down into the bowl and cannot crawl back out. You may also apply baits in areas where snails and slugs are active. Use a lower-toxicity bait that contains iron phosphate regularly when they are a problem.

Scales commonly are seen on woody plants like trees and shrubs.



They feed on the sap of the plants and weaken them. Scale-infested plants often have sooty mold fungus on them. This fungus does not attack the plant — it is growing on the sugary excretions of the scale insects. Horticultural oil sprays are a good low-toxicity insecticide. They kill scale insects by coating and suffocating them rather than with toxic chemicals. Make sure you spray plants thoroughly and make two or three applications.

Aphids will show up in multitudes clustered on the new growth and flower buds and under leaves. Light horticultural oils and insecticidal soaps are two low-toxicity options for controlling these sucking insects.

Fragrant cool-season bedding plants

Lots of cool-season flowers can be planted in the fall. Color always seems to be the dominate factor when selecting these plants, and providing color to the landscape really is the plants' primary function. But many of these plants are also fragrant. What a delight it is to walk out on a mild winter or spring day and catch the honey fragrance of sweet alyssum drifting in the air.

The following plants should be planted into well-prepared beds or containers located in full- to part-sun locations, although alyssum and nicotiana will also grow well in partial shade.

One of the most outstanding fragrant cool-season annuals is stock (*Matthiola incana*). These plants produce spikes of double, and occasionally single, flowers in shades of magenta, rose, purple, pink and white from a basal rosette of green or silvery leaves. The fragrance is intense.

Sweet alyssum (*Lobularia maritima*) is useful in the cool-season garden for its low-spreading growth habit. This trait makes it excellent when placed in the front of flower beds as an edging or planted on the edges of raised planters, containers and hanging baskets where it will cascade beautifully over the sides. Sweet alyssum literally covers itself with small flowers in shades of white, pink, rose, lavender or purple. The pleasant fragrance is reminiscent of a honey scent that permeates the air, especially on warm days in enclosed spaces.

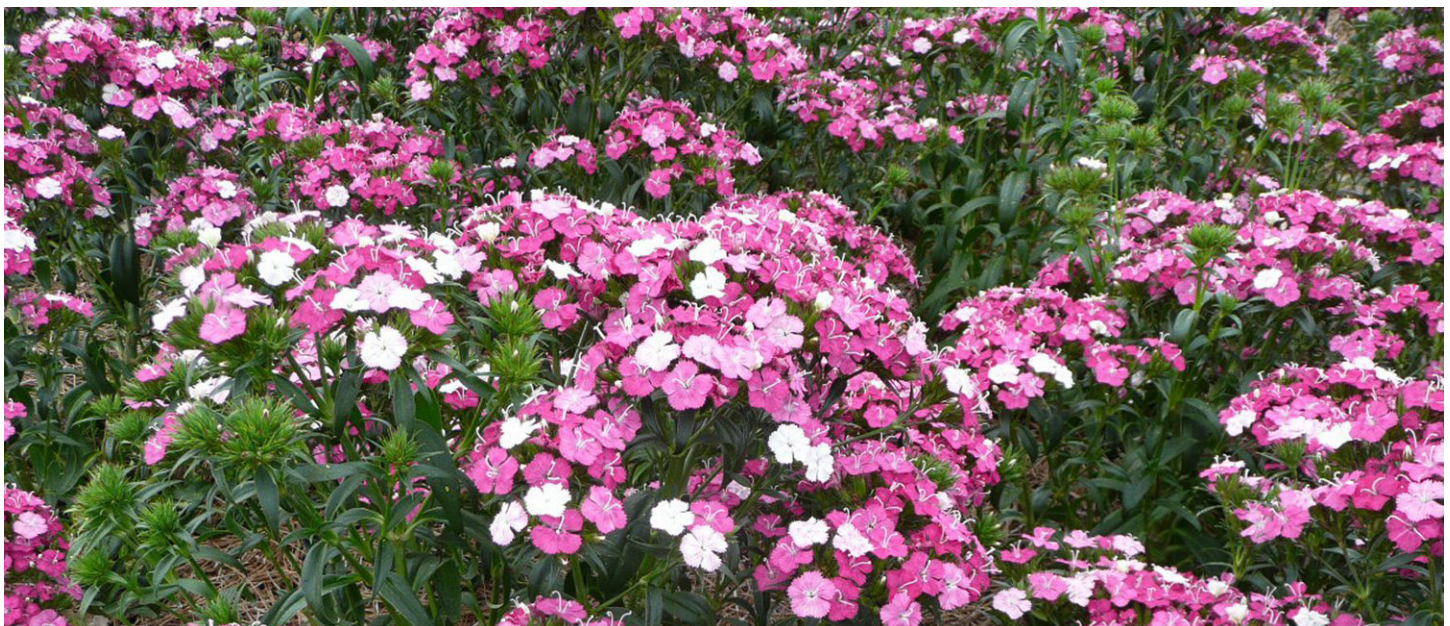
Dianthus, or pinks, produce a sweet, spicy fragrance often compared to cloves. Fragrance is highly variable among different types, so smell the flowers at the nursery for at least a light scent. The common bedding dianthus are generally cultivars of *Dianthus chinensis* and its hybrids with *D. barbatus*, and many do smell nice. Telstar produces a light scent, comes in a variety of colors and is the best performer of this species in our area.

Also nice is the Louisiana Super Plants selection Amazon series. There

are three attractive colors. The plants produce large, round clusters of flowers on 18-inch stems. The flowers are quite fragrant and irresistible to butterflies.

Nicotiana is related to tobacco and is commonly called flowering tobacco. It produces a rosette of hairy medium-green leaves with taller stems loosely adorned with flaring five-petal bells. As in the dianthus, fragrance varies from one type to another. Gardeners often don't appreciate the fragrance of petunias until they first encounter it. Most petunias have a light fragrance if you smell the flowers, but occasionally their perfume fills the air on mild, sunny days.

Finally, you simply could not have a fragrant cool-season flower garden without sweet peas (*Lathyrus odoratus*). This vining annual produces flowers that are good for cutting, come in an astounding array of colors and are as fragrant as they are beautiful. Seeds should be planted in November in well-prepared soil in a location that receives a little shade in the afternoon beside something on which the vines can climb, such as a fence or trellis. The seeds will germinate in fall, and the plants will grow slowly through the winter. If temperatures in the teens threaten, cover the vines if possible. Flowering generally begins in March, with the peak occurring in April and ending with the heat of May.



Rose Magic

Trees and shrubs for fall and winter color

You can include many trees and shrubs in your landscape that will provide significant color in fall and winter year after year.

Although less than spectacular this far south, late November is when the leaves of some deciduous trees turn various colors as they get ready to drop. A few of the trees that reliably color up well in Louisiana include: ginkgo (*Ginkgo biloba*); sweet gum (*Liquidambar styraciflua*); Chinese pistachio (*Pistachia chinensis*); Callery pears, such as the Bradford pear (*Pyrus calleryana* Bradford); black gum (*Nyssa sylvatica*); crape myrtle (*Lagerstroemia indica*); dogwood (*Cornus florida*); Japanese maple (*Acer palmatum*); southern sugar maple (*Acer barbatum*); and some oaks. Generally, the farther south you live in Louisiana, the less fall color you will see.

Plants also provide color in fall and winter with fruit. Hollies, with their brilliant red berries, are notable in this regard. Excellent choices for Louisiana include the popular Savannah holly and Foster's holly (*Ilex x attenuata* Savannah and Fosteri), both small trees. A great thing about holly berries is that they are excellent wildlife food for birds. Shrubby hollies also produce colorful berries. Varieties include Burford, Dwarf Burford, Nellie R. Stevens, Needlepoint, Dixie Star, Dixie Flame and many others.



For flowers in the fall and early winter, choose sasanquas (*Camellia sasanqua*). Sasanquas are one of those indispensable shrubs for Louisiana landscapes and bloom from October well into December. Dwarf types stay under 3 feet, and standard varieties slowly grow from 10 to 12 feet tall and can be trained as a clipped hedge, large shrub or tree shape. Camellias (*Camellia japonica*) will begin to bloom in November and continue through the winter until spring. The outstanding Shishi Gashira camellia is a Louisiana Super Plants selection. It is a low-growing cultivar that produces deep pink flowers from October to January.

Roses are also important for fall and early winter color. Everblooming roses put on a wonderful show in October and November and will often continue to bloom through mid-December and beyond, weather permitting.

Although generally not known for their fall blooming, azaleas that bloom during seasons other than spring are becoming more popular. Particularly notable are some of the Robin Hill azaleas, such as Watchet and Conversation Piece, the popular Glen Dale cultivar called Fashion and many others. The Encore azalea series is also well known for fall bloom.



Corn Maze

at Burden

Corn Maze Festival

Oct. 7 • 10 a.m.-5 p.m.

Enjoy some crazy, mazy family fun as you find your way through the maze. Test your skill at the giant sling shots, climb Hay Mountain, visit the farm animals and take a hayride. Other activities include pumpkin decorating, children's zipline, corn crib and more. Concessions available.

Corn Maze Saturdays

Oct. 14, 21 & 28 • 10 a.m.-5 p.m.

The fun continues every Saturday in October.
Bring the family and enjoy games, food ... the maze and more.

Night Maze & Bonfire

October 28 • 6-9 p.m.

Cozy up to the bonfire and listen to live music. Climb Hay Mountain, decorate a pumpkin, try your hand at glow-in-the-dark bowling and more. Make s'mores and enjoy other concessions.

Admission to each event is \$10 per person. Free for children 3 and younger.



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Checklist for September, October and November



1. Begin preparing beds for fall planting.
2. Take soil samples from landscape beds and submit them to the LSU AgCenter Soil Testing and Plant Analysis Laboratory for analysis. Check with your parish LSU AgCenter extension office for more information.
3. Fall is a great time to plant hardy trees, shrubs, ground covers and vines.
4. Plant spring-flowering bulbs in your gardens from late October through early December. Exceptions are tulips and hyacinths, which must be refrigerated and planted in late December or early January.
5. Garden mums make a great addition for fall color. Check at your local retail garden center for availability.
6. Watch azalea plantings for early fall infestations of lace bugs. Control with acephate, horticultural oil sprays (bifenthrin, cyfluthrin or permethrin) and other recommended insecticides.
7. Build a compost pile out of leaves, grass clippings and remains from your vegetable garden.
8. September is a good time to divide and transplant Louisiana irises. Fertilize your irises in October.
9. Many of the summer-blooming perennials are finished or finishing up their floral display for the year. Cut back the flower stalks and old faded flowers to keep the plants looking attractive.
10. October weather can be dry. Water plantings as needed. Pay special attention to any newly planted areas. It generally is best to water direct-seeded beds of flowers or vegetables lightly every day to make sure the seeds do not dry out.
11. Prune everblooming roses by early September.
12. Fall is an excellent time to plant many herbs in the garden. A few herb plants provide a lot of harvest, so don't plant more than you can use. Herbs to plant now include parsley, sage, thyme, dill, cilantro, rosemary, oregano, borage, fennel, nasturtium, French tarragon, chives, mint and catnip.
13. Trees that provide good to excellent fall color in Louisiana include baldcypress, Nuttall oak, Shumard oak, cherry bark oak, flowering pear, Chinese pistachio, ginkgo, Japanese maple, sweet gum, sumac, red maple, Southern sugar maple and hickory.



Dan Gill
Consumer Horticultural Specialist

Vegetable Gardening

We hope the only fall you experience this season is your fall vegetable garden! The fall vegetable garden is relatively easy to plant and care for. Insect and disease pressure are reduced during this season as compared to spring and summer. The insects that give the most trouble in the fall season are worms, caterpillars and loopers. Most fall crops are leafy and require five to seven hours of sunlight. Water is most critical during the first two weeks after planting, after which 1 inch of rain per week will suffice. Read on for more tips on growing individual fall crops.

Vegetables to Plant

September

Beets, broccoli, Brussels sprouts, cabbage, Chinese cabbage, cauliflower, collards (transplants or seeds), endive, carrots, English peas, snow peas, garlic, kohlrabi, lettuce, mustard, onions (seeds, late September), parsley*, snap beans*, radishes, rutabaga, shallots, spinach, Swiss chard, turnips and kale.

October

Cabbage, broccoli (transplants), mustard*, turnips, collards, kale, parsley, shallots, radishes, beets, spinach, leaf lettuce, Chinese cabbage*, celery, onions, Swiss chard, garlic*, carrots and endive*.

November

Beets*, shallots, Swiss chard, spinach*, kale, radishes, mustard, carrots and turnips.

**Plant during the first part of the month.*

Crop Highlights

Onions (Bulbing)

Plant onion seed for transplants from mid-September until mid-October. Keep the soil moist because seed coats are hard. It may take two weeks for onion seeds to germinate to a stand. Onions can be transplanted into the garden from mid-December through January. You also may sow directly in the row and later dig up and transplant. Onion transplants that are the width of fine hair actually are better than

stocky transplants the size of a pencil. They tend to bolt less!

Short-day varieties to plant:

Red: Red Creole C5, Pinot Rouge, Red Burgundy.

White: Super Star Hybrid (All-America Selections), Candy (golden), White Bermuda or Georgia Boy.

Yellow: Granex 33, Texas Grano 1015Y, or Savannah Sweet.

Fertilize plants sparingly prior to planting in the ground. This will prevent excessive growth, premature seed stalk development and bolting. About 2 to 3 pounds of 0-20-20, 7-21-21 or 8-24-24 per 100 feet of row are sufficient. Side-dress onions during the spring just before they bulb. Side-dress two additional times at two- to three-week intervals. Follow the same schedule for bulbing shallots.

Green Shallots

Shallot sets can be planted any time during the fall or winter. Replant bulbs as you harvest by separating plants and transplanting some of them again. By doing this, you'll have shallots throughout the spring. The largest shallot bulbs for sets are made by transplanting from mid-November to December.

Garlic

Separate garlic bulbs into individual cloves during October. Tahiti and elephant garlic are the largest and mildest of the recommended garlic varieties. The Italian and Creole varieties are smaller and stronger.

Check the Louisiana Department of Agriculture and Forestry Market Bulletin's website (<http://www.la.gov/about/market-bulletin/>) for possible sources of sets or visit your local hardware store.

Plant cloves about 1 inch deep and 4 to 6 inches apart in the row. Several drills may be planted on one row. Allow 6 to 8 inches between



drills. Fertilize before planting with 4 to 5 pounds of 8-24-24 per 100 feet of row. Side-dress with nitrogen after garlic is up and again in February and March just before the bulbs swell.

Lettuce

September is the best month to plant lettuce. Head and semi-head lettuce should be planted so it is harvested before a hard frost. Plant heading varieties 12 inches apart in the row. They may be double-drilled. Side-dress lettuce three to four weeks after transplanting and repeat two to three weeks later. Lettuce seeds should be lightly covered for best germination, but some varieties require sunlight, so read the seed packet!



Recommended varieties

Semi-head: Green Forest, Buttercrunch (All-America Selections), Oak Leaf or Parris.

Leaf: Simpson Elite, New Red Fire, Red Salad Bowl, Nevada or Sierra.

Head: Great Lakes or Ithaca.

Romaine: Green Towers, Bambi (dwarf romaine) and Cimmaron

Endive or escarole: Salad King or Full Heart.

Greens

Keep the soil moist. Avoid thick plantings of greens. Space plants 3 to 4 inches apart. For weed control, a trifluralin herbicide, such as Treflan, can be incorporated before planting. Double drills may be planted on one row, allowing 10 to 12 inches between drills.

Recommended varieties

Collards: Blue Max, Champion or Top Bunch.

Mustards: Green wave, Red giant, Golden frills, Tendergreen and Florida Broadleaf.

Broccoli, cabbage and cauliflower

Transplant in September. Space cauliflower 18 inches apart, cabbage 12 to 18 inches apart and broccoli 12 inches apart. Broccoli and cabbage can be double drilled.

Both shallow-rooted crops respond to fairly high rates of fertilizer, 4 to 6 pounds of 8-8-8 or 3 to 4 pounds of 8-24-24 per 100 feet of row. Side-dress with 2 pints of calcium nitrate per 100 feet of row about two to four weeks after transplanting. Side-dress again at two-week intervals two to three more times. This will increase yield. Chinese cabbage is an excellent crop for fall gardens. Seeds are planted in September. Solid heads form 55 to 60 days after seeding.



Recommended varieties

Broccoli: Packman, Castle dome, Green Magic, Windsor, Diplomat, Patron and Gypsy. **Cauliflower:** Snow Crown (All-America Selections), Majestic, Freedom, Cumberland, Candid Charm and White Rock.

Cabbage: Bravo, Rio Verde, Thunderhead, Emblem, Blue Vantage, Cheers and Vantage Point.

Chinese Cabbage: Toy Choi, Rubicon.

English peas and snow peas

Plant English peas, snow peas and other peas with edible pods during September. The key to success is to plant early enough so they bloom before frost and late enough so they aren't blooming when temperatures are too high.

Space peas 1 to 2 inches apart. About 2 to 4 ounces of seeds will plant a 100-foot row. Between 70 and 80 days are required from planting until harvest. Staking or trellising peas, even the bush types, will help to increase the chances of success.



Spinach

Spinach requires cool, fertile, well-drained soil with a pH of 6 to 7. Wait until temperatures cool for best germination.

Apply 4 to 5 pounds of a complete fertilizer like 13-13-13 per 100 feet of row about two weeks before planting. Side-dress spinach with 2 pounds of calcium nitrate per 100 feet of row. Start side-dressing about one month after seeding. This will keep it growing quickly, making it tender and improving quality. An additional side-dressing after harvest will improve yields on second cuttings.

Plant seeds about a half-inch deep and thin plants to 1 to 3 inches apart in the row. Because seeds are slow to germinate, be sure to keep soil moist. Double drills may be planted on one row. Allow 8 to 12 inches between drills.

Recommended varieties

Melody and Tiger Cat.

Pumpkins and winter squash (harvest not planting)

Harvest pumpkins and winter squash after they have developed a hard rind and are the appropriate color for their varieties. If the rind



cannot be easily penetrated by the thumbnail, the fruit is mature. Leave about 3 inches of stem attached to the fruit. If stored in a cool, dry place (off the ground and floor, if possible), these cucurbits will keep well for several months.

Watch out for worms. If they eat all of your foliage, you will have sunburned pumpkins (just like in watermelon).

Carrots

Start directly seeding carrots during September and continue to plant throughout the fall season. Form high, well-drained rows. Thin seedlings to about 2 inches apart. If you have heavy clay soils, simply cover the seeds with a loose potting mix. Clay soils tend to form a crust and prevent the seeds from emerging.

Recommended varieties

Danvers 126, Thumbelina and Purple Haze (All-America Selections), Apache, Maverick, Yellow sun, Kaleidoscope, and Deep purple.

Beets

Directly seed beets from the fall through the winter. The soil needs to be cool before beets will germinate. If soils remain warm, store beet seed in the freezer or place beet seed in a moist paper towel for 48 hours in the refrigerator prior to sowing.

Recommended varieties

Ruby Queen, Scarlet Supreme, or Solo.

*Kathryn Fontenot, Ph.D.
LSU AgCenter Extension
Vegetable Specialist*



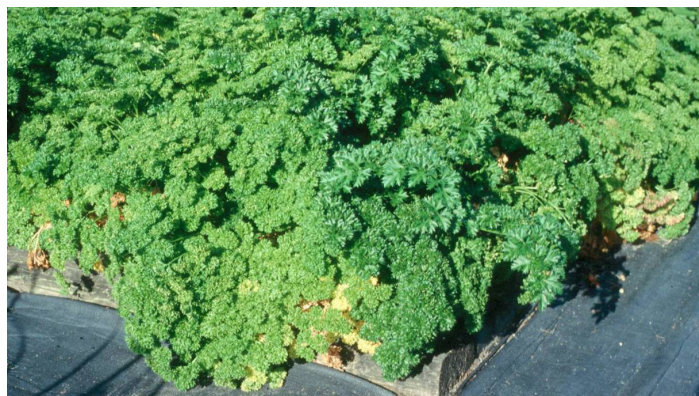
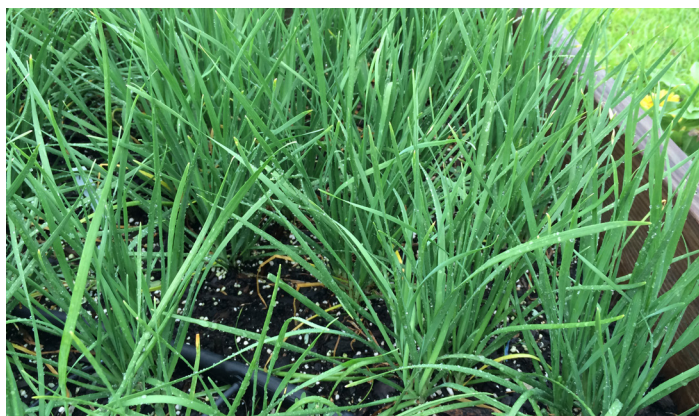
LouEASyana GARDENING

It's time to replant herbs. If you had any spring-planted herbs, chances are that they are no longer performing well because of the heat. Now is the time to replace them. With summer coming to a close, we will have an easy time growing cool-season herbs.

Popular herbs for fall production in Louisiana include: parsley, rosemary, cilantro, dill, oregano, borage, chives, chamomile and fennel.

Herbs can be planted from September through February. Plant them in a location that gets sun most of the day and has good drainage. Besides being edible, herbs attract pollinators to your garden. Allowing herbs to bloom will attract bees, butterflies and more.

Even if you don't have space for a garden bed, you can still grow herbs! They will grow nicely in a large pot placed in a sunny location. You can also plant several herbs in one pot. Think about placing a tall herb like rosemary in the center and planting trailing herbs like oregano around the rim. Don't forget mulch! A few inches of mulch will help retain moisture in the soil and keep weeds at bay. Pine straw and leaves are cost-effective options for mulch in garden beds and containers.



*Mary Sexton, M.S.
Extension Associate*

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Fall Lawns in Louisiana

Should you fertilize your lawn during fall?

Louisiana usually stays warm well into the fall, and lawns continue to grow until nighttime temperatures dip into the 50s. So be sure to mow and water your lawn as needed to keep it healthy.

However, it is likely time to put up your fertilizer spreader. Fertilizing warm-season grasses during the fall with high-nitrogen, summer-type fertilizers or winterizing fertilizers containing high levels of nitrogen are not recommended for Deep South lawns.

Stimulating fall growth of St. Augustinegrass, centipedegrass and zoysiagrass with nitrogen leads to increased brown patch disease and winter kill. Bermudagrass may be fertilized into September, but I would not make any more applications of high-percentage nitrogen fertilizers after late August on St. Augustinegrass, centipedegrass or zoysiagrass.

If you would like to extend the green color in home lawns this fall, apply foliar iron spray or spreadable iron granules. This will give you a nice flush of green color without increased growth.

Do you need to “winterize” the lawn?

I’m sure that you have heard of winterizer fertilizers. Potassium, which is the last number in the analysis on fertilizer bags, is actually the nutrient associated with winter hardiness and increased disease resistance with turfgrass. There is definitely an advantage to having the correct amount of potassium in the soil. Get a soil test before applying high-potassium fertilizer because there is no advantage to applying excessive amounts of this nutrient. If a soil test indicates that potash is lacking, choose a potassium-containing fertilizer with zero nitrogen — or a very low percentage of it — during the late summer or early fall because we are not trying to stimulate growth for the reasons discussed above. If a soil test calls for potassium, you can apply it during September while temperatures are still warm and the lawn is still growing. Very slow growth occurs as day lengths get shorter by late September and October.

If you bag your lawn clippings, remember this important fact: **The removal of grass clippings from lawns can severely deplete the**

soil of potassium. Grass leaves and stems contain very high levels of potassium. Keep in mind that when a lawn is mowed appropriately, it is better to leave clippings to decompose on the lawn as a good source of turf nutrients, which include potassium. Clippings from a lawn that is mowed regularly have only a small role in the overall buildup of thatch in turfgrass.

Speaking of soil tests...

Fall is the best time of the year to get your soil tested by the LSU AgCenter Soil Testing and Plant Analysis Lab.

Soil testing really is the first step to a beautiful lawn next spring and is the best way to determine exactly what your lawn needs to become thick and healthy. If you haven’t tested your soil in the past several years, do it now.

To test your soil, submit a pint of soil to the LSU AgCenter Extension Service office in your parish. The pint should be a composite of soil samples collected from several different areas in the lawn. You only need to go about 4 inches deep. Also, to simplify the soil sampling and submission process, there are pre-addressed submission boxes with sampling instructions at several garden centers throughout the state. There is a small fee for testing.

The sample results will be sent to your home mailbox and email in about two weeks. An LSU AgCenter extension agent can help you interpret the results from the soil sample. The sample results may indicate that lime is needed to increase soil pH. If so, fall and winter are good times to apply lime because it takes several months to activate in the soil. Elemental sulfur may be recommended to reduce soil pH in alkaline soils.

Ron Strahan Ph.D.
*Associate Professor, LSU AgCenter
Weed Scientist/Turfgrass Specialist*



Strawberries for Homeowners

Strawberries have traditionally been a popular fruit for fresh use, freezing and processing. Ninety-four percent of United States households consume strawberries. According to the United States Department of Agriculture, the annual per capita consumption of fresh and frozen strawberries is 4.85 pounds. Strawberries, like many fruit crops, are a bit challenging to grow in Louisiana because of insect and disease pressure. Our hot, humid weather and mild winters are an ideal climate for many bacterial and fungal diseases, as well as insects, mites and — lest we forget — weeds.

Matted row system

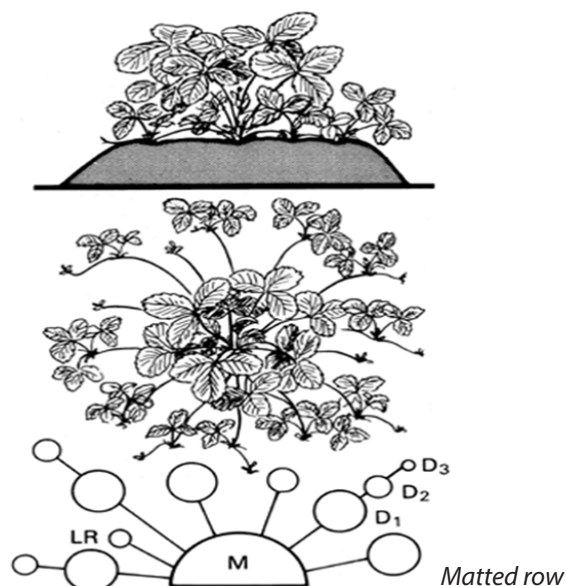
The matted row system consists of rows 12 to 24 inches wide that are allowed to fill in or be renewed with runner. Plants in new plantings should be spaced 18 to 24 inches apart in the row. For maximum yield in the first fruiting season, cultivars with low runner-making ability should be set at 18 inches, while most cultivars may be set 24 inches apart. The more narrow beds (12 to 18 inches) should be 36 to 42 inches between beds, depending on equipment size and slope of the field. For wider beds and steeper slopes, rows 48 inches apart should be considered.



Matted row production system. Note straw mulch between rows to promote clean berries, reduce disease and provide dry walkways for pickers.

In the matted row system, growers strive for three to four profitable crops from a single planting. With this system either fall or spring planting dates can be used. Traditionally, early spring has been used for the matted row system. Planting should be completed as early as possible in the spring to allow plants to become established before hot weather. Flowers should be removed the year of planting to allow plants to use food reserves for top and root growth.

Fields are renewed or renovated each year. If properly renovated and maintained, fields planted in the matted row system generally produce three to four profitable crops. If disease, insects or weeds heavily infest a planting, renovation may not be economically justified. Locate new plantings on a clean site.



Matted row strawberry production system practices/activities	
Yields	5,000 to 12,000 lb. or 3,600 to 8,600 qt./A.
Harvest	Generally concentrated over a two- to three-week period. Berry size declines as season progresses. Uses Eastern type cultivars.
Planting	Typically spring planted and kept for three to four years. Variable plant stands.
Weed control	Very difficult as there are no good establishment-year herbicides. Soil fumigation is a pre-plant option. Effective weed control in established plantings is also difficult.
Irrigation	Commercial production requires a sprinkler system for irrigation and frost protection.
Fertilization	Dry fertilizer pre-plant and periodic fertilization during the growing season.
Renovation	Annual restoration of beds by narrowing rows, thinning out plants, herbicide application and fertilization immediately following harvest.
Beds	Planted either on flat ground or raised beds.
Soil surface	Bare ground. May require mulching with straw or pine needles to keep fruit clean.
Frost	Must use sprinkler irrigation or floating row cover (thermal blanket) to protect against spring frosts.
Pests	Diseases and insect pests tend to build up with time. Plants are more susceptible to certain diseases during the hot summer months. Cultivars used have more disease resistance.

Purchasing and storing plants

Purchase plants that are certified to be free of insects, diseases, nematodes and viruses from a reputable nursery. The extra cost for certified plants is worth the expense when you consider the cost of labor to replant and the delay in harvest that diseased or low vigor plants bring about. Plants should be ordered one year in advance to ensure the availability of the desired cultivar.

Inspect plants immediately upon their arrival to determine their overall condition and the presence of disease or insect problems. Split a few crowns of dormant plants to see if they have a healthy white color. Check the leaves and roots of freshly dug plants for signs of excessive drying during shipping. If there are signs of damage, notify the nursery immediately. Purchase only freshly dug plants from nurseries that do not have a history of anthracnose-infected plants. In general, the farther north the nursery is located, the less likely it is that plants have been exposed to anthracnose.

Dormant matted row plants should be set as early as possible. This enables plants to become established and to produce runners before hot, dry weather arrives. Freshly dug plants should be planted as soon as possible after arrival from the nursery. If plants cannot be set for several days, store them in a cool (32 to 34 degrees), moist place. Store plants in their shipping containers to maintain moisture, but do not add water because the plants may rot. Freshly dug plants may be lightly misted with water and the shipping boxes reclosed. Most nurseries dig matted-row plants while they are dormant and hold them until planting time in cold storage at a temperature of about 30 degrees and a relative humidity of 85 to 90 percent. A little ice formation in the crate is not serious because temperatures must be as low as 21 to 23 degrees to cause serious injury to plant tissue.

Storage temperatures above freezing may cause mold, storage rot and drying. When dormant nursery plants arrive, place them in storage immediately and hold them in the dormant condition until planted. A refrigerator or standard cold storage

is satisfactory for holding strawberry plants for a few days.

If planting must be delayed and cold storage facilities are not available, heel-in the plants in a well-drained location protected from both sun and wind. When plant roots are very dry, soak them in water for several hours before heeling-in. To heel-in plants, separate bundles and place the plants in a V-shaped trench that is deep enough to spread out the roots when the crowns are at ground level. Pack soil firmly around the roots and leave plants heeled-in until ready for field planting.



Variety selection

Appropriate variety (cultivar) selection is vital to the success of any strawberry enterprise. Because strawberry cultivars are extremely sensitive to local conditions, a cultivar that performs well in one location may do very poorly in another area. Cultivars that perform quite satisfactorily in the northern part of Louisiana may fail miserably in the southern portion. Because of these differences in cultivar performance, growers are strongly advised to consult with local experts, such as other successful growers or the county extension agent, before planting a large acreage of an untried cultivar. It is always advisable to plant a small area one-quarter acre or smaller of a new cultivar before planting it on a large scale. It is suggested that growers select cultivars with good disease resistance in order to protect against large-scale plant losses.

Cultivars differ greatly in important characteristics such as yield potential, fruit quality and size and disease resistance. Generally, it is desirable to grow at least one early, one midseason and one late-season cultivar to spread out the harvest season. Growing cultivars with different ripening seasons is also a form of insurance if poor weather conditions prevent a good harvest during the ripening period of one cultivar or another. Early season cultivars may ripen one to two weeks earlier than late season cultivars. Day-neutral cultivars offer the potential for fall fruit production. New varieties are continually released, so growers should also check the latest nursery catalog descriptions.

Planting

Planting date. Traditionally, matted row cultivars are planted in early spring as soon as the ground can be worked. For annual hill culture, freshly dug plants have been successfully transplanted from late September to early November. Earlier planting dates are recommended for northern Louisiana, while coastal regions have a much more extended planting season. Those plants that are set earlier tend to grow larger and produce more berries than those set later. On the other hand, later-set plants may be more easily picked, have a larger fruit size, and may ripen earlier.

Plant spacing. The size of farm equipment and tire spacing must be taken into account when planning the spacing of row centers. Most annual hill systems use a double row with plants typically spaced 12 to 14 inches apart in the row and 14 to 15 inches between rows on a bed. This spacing can be adjusted to compensate for the plant vigor differences between cultivars.

Transplanting. Soil should be worked to a depth of 6 to 8 inches before planting and should contain adequate moisture. If plants are not in plastic bags, the roots must be kept moist. White secondary roots are killed in less than a minute in hot, dry air. Therefore, it is best to plant on a cool, cloudy, still day if possible. Plants should be soaked in water prior to transplanting to ensure the best water status for establishment. Special care should be taken to ensure that plants are set

at the proper depth. Do not bend or twist roots during planting.

A spade or shovel or hand trowel can also be used for planting strawberries. Make a V-shaped opening. Insert the strawberry plant with roots fanned out and at the proper depth. Firm soil around the plant with your foot or hand.

Fertilization

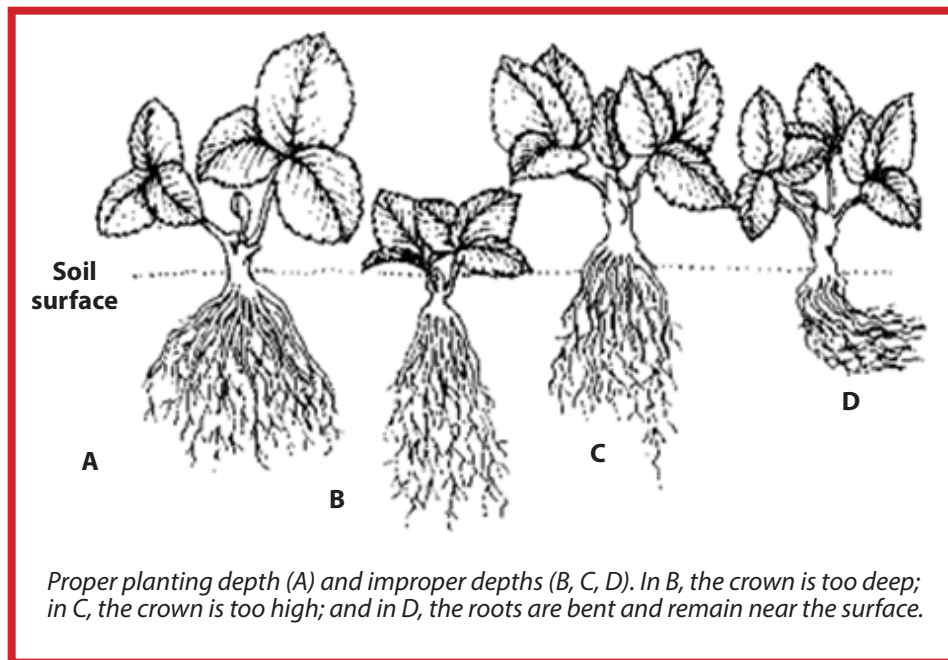
Matted row fertilization (new planting). At least 10 days before planting, broadcast and incorporate starter fertilizer based on a soil test. The pH should be corrected to 6.0 to 6.5 before planting. Fertilization of new planting should be based on soil test recommendations.

Thirty days after planting, broadcast 30 pounds actual nitrogen per acre down rows (90 pounds ammonium nitrate per acre). This application encourages vegetative growth and early runner development. If a band application is made, be careful to keep fertilizer at least 4 inches away from plants to avoid injury from fertilizer burn.

In late August, broadcast over beds a total of 40 to 50 pounds of actual nitrogen per acre (120 to 150 pounds of ammonium nitrate per acre).

A split application 3 to 4 weeks apart is recommended to facilitate more uniform nutrient uptake (60 to 75 pounds of ammonium nitrate per acre can be applied in mid-August and 60 to 75 pounds of ammonium nitrate per acre can be applied in mid-September). These applications are for flower bud development. Apply fertilizer when leaves are dry and brush off or wash off foliage to avoid fertilizer burn.

On very sandy soils broadcast over the beds 15 to 20 pounds of actual nitrogen per acre (45 to 60 pounds ammonium nitrate per acre) in January. This application influences fruit set and size as well as new foliage development. Winter applications on heavier soils may give larger but softer fruit and may increase problems with fruit rot. Apply fertilizer when leaves are dry and brush off or wash off foliage to avoid fertilizer burn.



Proper planting depth (A) and improper depths (B, C, D). In B, the crown is too deep; in C, the crown is too high; and in D, the roots are bent and remain near the surface.

Renovation

With proper annual renovation, matted row strawberry beds can be maintained and remain productive for several years. Renovation is essential because older plants have reduced vigor, and overcrowding occurs within the beds, which results in lower yields. Fruit size, quality and yield decrease when the plant population becomes too great. Only five or six plants per square foot are needed in the spring for best yields. Disease problems also increase when plantings become too dense, making foliage and fruit slow to dry after rains and more difficult to adequately spray. Renovation thins the beds and invigorates the remaining plants. Thinning to control plant density is important because beds that retain too many plants yield small berries that are difficult to find under the dense foliage. The cost of renovating is considerably less than the cost of setting a new field. The renovation process should begin immediately after harvest is complete. A suggested program includes the following steps:

Controlling weeds at renovation. Check the current small fruit pesticide guide for pre-renovation herbicide application recommendations. It is typical to wait five to seven days after herbicide application, then mow off plant tops 1 to 3 inches above the crown without damaging the crown. Set your mower height so that the old leaves are removed but the new expanding leaves are not cut. A rotary mower does a good job. If there are thin areas in the rows, runners should be trained into them before rows are narrowed.

Fertilizing the planting. A soil test taken several weeks before harvest ends will help determine phosphorous and potash needs. Application of 25 to 40 pounds of actual nitrogen per acre may be made before plants are mowed.

Narrowing rows. Shortly after mowing (allow the tops to dry), narrow the rows that have become rather wide. This is done by using discs to remove plants from both sides of the row or by using a rototiller with the middle tines removed. Narrow the beds and remove plants, leaving one side of the row so that young daughter plants are retained instead of the older mother plants in the center of the row. Where supplemental irrigation is available to stimulate runner plant development during the summer, rows are commonly narrowed to 6 to 12 inches. If rows are not to be irrigated during the summer, they should be narrowed to a width only slightly less than desired for picking. With plantings that have fruited two seasons or more, growers often cut narrow "slots" in row middles with tiger blades. Because more quality berries are usually produced at matted row edges, cutting narrow slots in row centers helps thin middles and gives desirable extra edges.

Thinning plants. For best production, do not have too many plants in the rows. A heavy plant stand should be thinned enough to allow newly formed plants to be about 5 to 6 inches apart. Extensive hand thinning is not practical on large plantings.

Cultivating. Work in straw between rows and throw a limited amount of soil over the row by cultivation. The controlled application of one-half inch to 1 inch of soil over the plant bed will help produce replacement roots at the very top of the root zone on older plants and help provide a rooting medium for new runner plants.

Controlling weeds. Pre-emergence weed control by herbicide application should begin immediately after the preceding steps.

Irrigating. Water is needed to activate weed control materials, to incorporate fertilizers and to make plants grow. Do not let plants go into stress during summer months. Cultivate to reposition runners into rows until plant stand is sufficient. Aim for production of four to six plants per square foot of row. An eventual row width of 15 to 24 inches will likely provide more marketable fruit than wider plantings.

Matted row weed control. Weeds must be controlled for successful strawberry production. Weed competition can affect both berry size and number, which may severely decrease yields. Weeds also make it harder to pick strawberries and detract from the appearance of the farm. Preplant fumigation with methyl bromide eliminates most weeds but should not be considered as a long-term weed-control program. Begin a carefully scheduled herbicide program at planting.

Although chemicals do not completely eliminate weed problems, if used properly they make weed control much easier. If used improperly, even approved herbicides may damage strawberries and may be ineffective on weeds. Successful chemical weed control depends upon applying the prescribed amount of the right herbicide at the appropriate growth stage of both weed and strawberry plant.

Most strawberry herbicides effectively prevent emergence of seedling weeds, but they do not kill those that are already established. For weed control in a commercial planting, use a four-phase program: site cleanup, pre-plant soil fumigation, treatments after planting and cultivation as needed.

Hand and machine cultivation is minimized by fumigation and timely use of herbicides, but in most cases some cultivation will be necessary. Cultivate as needed when weeds become a problem. Do not cultivate for the sake of cultivating. This practice reduces the effectiveness of the herbicide applied before cultivation and exposes weed seed for germination. Consult your county extension agent for current weed control recommendations on strawberries.

David Himelrick
Fruit Crops Specialist



Plant Disease Management in Home Vegetable Gardens

Vegetables grown in home gardens are susceptible to several disease fungi, water molds, bacteria and viruses. Plant diseases are infectious and able to spread from plant to plant. Some pathogens attack a wide variety of plants but others are host-specific.

Plant pathogens can attack all plant parts, although many only attack selected tissues, such as roots or leaves. Plant diseases occur in the home vegetable garden when environmental conditions are suitable for pathogens to develop on susceptible hosts. Plants weakened by adverse conditions may be further predisposed to attack by pathogens.

Successful disease management begins with accurate identification of the cause of the problem. Knowing the common diseases of individual crops aids greatly in disease identification and management. Many diseases are readily identified by observing the pathogen's characteristic signs and its symptoms.

Prevention is the key to successfully managing plant diseases in the home garden.

When available, resistant or tolerant varieties should be chosen. Insects can introduce viruses and bacteria into a plant and cause disease. The principal methods to manage diseases spread by insects are to remove infected plants as soon as they are observed and to prevent insect infestations with insecticides.

Choose a well-drained planting site, or plant on raised beds that allow for adequate drainage. Water on a regular basis, but do not overwater. If a disease occurs, avoid planting the same or other susceptible plants in the same location in the following year. Good sanitation practices, including cleaning tools, may reduce the spread of disease. Manage weeds as they can harbor both viruses and their insect vectors.

Common plant diseases of home vegetable gardens

Leaf spots/blights.

Anthrachnose, leaf spots, leaf blights and fruit rots are caused by a variety of fungi and bacteria. Symptoms vary depending on the pathogen and include circular to irregularly shaped brown spots (lesions) on the leaves, stems and fruit. Spots may be surrounded by yellow or greasy water-soaked halos. On fruit, spots may be raised and crusty (bacterial diseases), smooth and sunken (anthrachnose) or dark and water-soaked (soft rots) (Figure 1).



Figure 1. Tomato early blight

Downy mildew. This disease is caused by various “water molds” that commonly occur on the cole crops, cucurbits, onions, lettuce, spinach, sweet basil and other leafy greens. The first symptom usually is the appearance of pale green to light yellow spots on the upper leaf surfaces. As the disease progresses, the spots turn yellow and angular to irregular in shape. During moist weather, downy pale gray to purple growth and spores (called sporangia) form on the undersides of the spots. Leaves eventually wither and turn brown. Spores are disseminated primarily by wind and rain, and the disease develops during periods of cool, wet weather — except for downy mildew on cucurbits, which can develop and grow at temperatures as high as 90 degrees. Moisture on the leaves is required for disease development (Figure 2).



Figure 2. Sweet basil downy mildew

Powdery mildew. This is a type of fungal disease that is common on a variety of vegetables, including beans, peas, okra, tomatoes and all of the cucurbits. On many vegetables the first symptoms are yellow spots on the upper surface of older leaves. As the disease progresses, grayish or whitish powdery growth is visible first on the upper surface of infected leaves. When disease pressure is high, whitish powdery growth appears on the undersides of the leaves, and spots are observed on stems and fruit, although fruit symptoms on most vegetables are rare. Fruit become sunburned because heavily infected leaves usually drop prematurely. Disease develops most frequently on plants grown in shade or partial shade when temperatures are moderate to warm and humidity is high (Figure 3).



Figure 3. Chayote powdery mildew

Phytophthora root rot. Root and crown rots commonly affect plants in the home garden, particularly in poorly drained sites with compacted soils. The first noticeable above-ground symptoms generally include wilting of the leaves, particularly during the heat of the day, and stunting of the plants. Additional symptoms, such as defoliation and dark, elongated lesions on the stems, are observed in the later stages of disease development. Dark reddish-brown lesions are observed on the roots. In case of *Phytophthora* infections, the outer layer of the root (cortex) easily sloughs off, resulting in rat tail-like symptoms (Figure 4).



Figure 4. Okra *Phytophthora* root rot

Southern blight. The fungus attacks the lower stem of a variety of vegetables at or near the soil line during warm and wet conditions. Infected plants rapidly wilt and collapse. Closer examination of the base of a diseased plant reveals a lesion that girdles the stem. When conditions are very humid and moist, white fungal strands (*mycelium*) and specialized tan-colored overwintering structures (*sclerotia*) are observed on the base of the plant (Figure 5).



Figure 5. Tomato southern blight

Southern bacterial wilt. Southern bacterial wilt of tomatoes, peppers, eggplants and potatoes is caused by the soil-borne bacterium. Bacteria enter the roots through wounds. Wet soils and high temperatures favor disease development. Disease severity often is higher in soils infested with root-knot nematodes. Infected plants initially go limp but recover overnight. As the disease progresses, plants rapidly wilt and die. Dark brown sunken lesions may be observed on the bases of infected tomato plants. When stems

of wilted branches are cut in a 1- to 2-inch cross section and suspended in clean water in a glass container, milky threads of bacteria stream from the cut stem (Figure 6).



Figure 6. Tomato southern bacterial wilt

Plant viruses. Viruses can infect many types of vegetables. Typical virus symptoms include mosaic, mottle and ring spot or line patterns on the foliage or fruit, leaf distortion and distorted fruit. Some common viruses found in home gardens are cucumber mosaic virus, impatiens necrotic spot virus, tobacco mosaic virus, tomato spotted wilt virus (Figure 7) and tomato yellow leaf curl virus (Figure 8). Viruses are spread primarily by various insects, of which aphids, whiteflies and thrips are the most common. Many viruses also can be transmitted by seeds or mechanically in sap or on pruning shears or hands. Keep in mind that some symptoms caused by viruses look similar to the symptoms caused by nutrient deficiencies or herbicide injuries. Once infected with a virus, a plant cannot be cured.



Figure 7. Tomato spotted wilt disease



Figure 8. Tomato yellow leaf curl disease

Fungicides available for disease management in home vegetable gardens

Many fungicides and some bactericides are available to aid in the management of these plant diseases, but they should always be used in conjunction with cultural practices intended to modify the environment to make it less conducive to disease development. Some of the common fungicides include captan, chlorothalonil, copper, mancozeb, myclobutanil, neem oil, phosphorus acid, potassium biocarbonate, propiconazole (sweet corn only) and sulfur. For complete detailed information on use of fungicides, refer to LSU AgCenter Plant Disease Management Guide (www.lsuagcenter.com).

*Author and Photo Credit: Dr. Raj Singh
Plant Doctor, LSU AgCenter*

Gardening is For the Birds



When gardening to attract wildlife, such as birds, butterflies and other insects, certain considerations must be made. Just like a great host offers snacks and drinks and rolls out the proverbial welcome mat to friends, the same principles apply when inviting wildlife into your yard. Various bird species are among the most sought-after friendly garden guests because of their natural music and vivacious colors. The three main components to keep in mind when attracting birds to the backyard are water, food and cover. Providing precisely what birds need will make them feel at home in your home.



After a good soaking rain, the mud puddles in your yard become social spots for wildlife who congregate at the puddles. To mimic these puddles in your garden, consider incorporating ponds, birdbaths or fountains. Providing a place for birds to drink and bathe will encourage them to visit the area. When adding a water feature to the garden, keep in mind that stagnant water features won't attract birds nearly as well as something that provides the sound of trickling water. You can direct birds that are unfamiliar with your landscape to your yard by providing an audible signal to the water source. Also consider providing a shallow source of water typi-

cally less than 1 inch deep and a surrounding area that is free of vegetation. Doing so allows birds to bathe in the water while avoiding potential predators that could be lurking in deeper water or surrounding bushes.

Along with a drinking and bathing source, provide birds with a food source to encourage their presence. There are various types and styles of feeders that can be added to the garden and filled with countless blends of seed. Another option for the creation of a food source is planting native trees and shrubs, such as parsley haw, elderberry, white oak or cedar. These trees and shrubs, along with purple coneflower, black-eyed Susan or mulberry trees, provide food by directly providing seed or berries for the birds to consume. Other plants will play host to soft-bodied insects, such as caterpillars or other larvae, delivering a nice protein source to feast on. When gardening for the birds, keep in mind that some insects you see as problematic may coax more amiable garden friends into your yard. If you spray insecticides indiscriminately, you will be reducing the food for birds to consume. This is not to say that you will not have any birds or wildlife in your yard if you happen to spray insecticides, but employing the birds as free labor may prove to be more enjoyable.



After supplying food and water, provide cover and hiding places to welcome the birds. This will offer protection from larger predators and severe weather issues. It is important to have a diverse selection of plants, not only for food, but also for habitat. Adding shrubs and trees of varying heights and densities will give more options for birds to hide, forage and play. If these trees and shrubs are able to provide a safe place to hide from predators, then it could very likely be an acceptable place for adult birds to raise their young. Trees and shrubs that host caterpillars will be an added bonus if the birds decide to raise their fledglings in your yard because these soft-bodied insects make excellent food for young baby birds.

Now that you've established your yard as a hub for bird activity through your gracious hosting abilities, you can relax and enjoy the sights and sounds of your new friends.

Lee Rouse
Assistant County Agent, Horticulture

LSU AgCenter Home Vegetable Garden Survey

Would you please help us to better serve you? Your responses to this questionnaire will allow us to evaluate and adjust our service to best help you.

The LSU AgCenter's Louisiana Cooperative Extension Service has encouraged the use of several practices for improved production and quality of homegrown vegetables. The purpose of this survey is to obtain information on the way you garden. If you grew a home vegetable garden in the past year or two, please fill out the following survey and return to Kathryn Fontenot at the address listed at the bottom of this survey. Thank you for your time!

1. Please list your parish _____
2. Since you started gardening, indicate the extent to which you have used the following LSU AgCenter/Louisiana Cooperative Extension Service recommendations.

Practice	Never	Rarely	Sometimes	Often	Always
Extension-recommended vegetable varieties	☐	☐	☐	☐	☐
Extension insect control recommendations	☐	☐	☐	☐	☐
Extension disease control recommendations	☐	☐	☐	☐	☐
Fertilized according to results on a soil test	☐	☐	☐	☐	☐
Extension-recommended planting dates	☐	☐	☐	☐	☐
Extension-recommended irrigation practices	☐	☐	☐	☐	☐

3. To what extent did your garden contribute to the following?

Contribution	Never	Sometimes	Always
Fresher vegetables	☐	☐	☐
Better quality vegetables	☐	☐	☐
Savings on food costs	☐	☐	☐
Pleasure and pastime	☐	☐	☐
Improving family nutrition	☐	☐	☐
Better availability of uncommon vegetables	☐	☐	☐
Organically grown vegetables	☐	☐	☐

4. How much do you think the dollar value of your garden crops is each year?

\$ _____

5. What is the size of your garden? Length = _____ Feet Width = _____ Feet

6. How productive would you say your garden was this past year? (Circle one.)

Better than average Average Less than average

7. When do you work in the garden? (Select all that apply.)

Season	Never	Sometimes	Always
Spring	☐	☐	☐
Summer	☐	☐	☐
Fall	☐	☐	☐
Winter	☐	☐	☐

8. The age of the primary gardener is _____ years old.

9. The primary gardener is: (Circle one.)

Male Female Both

10. Where you live is mostly: (Circle one.)

Rural Suburban Urban

Thank you for your help.

Please return before November 1, 2017.

Mail to:

Kathryn Fontenot
School of Plant, Environmental and Soil Sciences
155 J.C. Miller Hall
Baton Rouge, LA 70803
Or email to kkfontenot@agcenter.lsu.edu

School of Plant, Environmental and Soil Sciences

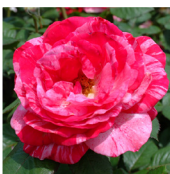
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Horticulture Hints



**Fall
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Prepared quarterly by:

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