Horticulture Hints





Winter 2009-2010

LSU AgCenter Research & Extension

Landscape Gardening and Ornamentals

2010 All-America Selections Winners

All-America Selections is a nonprofit organization that tests newly developed cultivars of bedding plants and vegetables in garden plots all across the United States. Duplicating conditions in the average home garden, the testing program is independent and unbiased.

AAS was founded in 1932, and the first AAS Winners were announced a year later – after the results were tabulated for the first trial. AAS Winners have been introduced each year since 1933, and AAS continues as the oldest, most established international testing organization in North America.

As always, the 2010 AAS Winners were judged in side-by-side comparison tests with standard cultivars and were selected based entirely on the plants' performance. Only those few cultivars that demonstrate unique characteristics, exceptional productivity and superior garden performance make the All-America Selections list each year.

When it comes to bedding plants and vegetables, those that are All-America Selection Winners generally are considered good choices. That's not to say every winner is going to be an outstanding choice for Louisiana, and we may use them differently than gardeners in other parts of the country. For 2010, four winners have been named.

AAS Flower Award Winner – Gaillardia F1 'Mesa Yellow'

'Mesa Yellow' is the first hybrid blanket flower with a controlled plant habit and prolific flowering. Its performance was impressive at the Hammond Research Station in 2009. The 3-inch daisy-like flowers and globe-shaped seed heads offer a superior presentation of color which continues throughout the summer. The bright yellow flowers are rich in nectar and will attract butterflies. Especially notable is the improved plant habit of 'Mesa Yellow' – they do not get tall, loose and floppy. The neat, mounded plants reach about 16 inches tall and about 20 inches wide in a full sun garden location and are adaptable to smaller space gardens or any type of containers. When planted near the inside edge of the container, they will cascade down the container. They are relatively maintenance free, since they are drought tolerant and not prone to insect pests. 'Mesa Yellow' plants recover quickly from severe weather. 'Mesa Yellow' is best grown as a summer bedding plant.

AAS Bedding Plant Award Winner – Snapdragon F1 'Twinny Peach'

Kids and adults alike enjoy pinching snapdragon flowers from the sides to make the dragonhead-shaped flowers "snap." 'Twinny Peach,' however, is a snapdragon without the snap. Why? Because it is a double flower form that does not have the jaws or joints to snap. Another unique quality is the blend of peach tone colors. The soft shades of peach, yellow and light orange are distinct, and no other snapdragon offers this range of colors. Plants are compact and don't need staking, growing about 12 inches tall and 8 inches wide. Match 'Twinny Peach' with blue tones of *Salvia farinacea* or purple flowered pansies and your garden will be a knockout. In the full sun garden, 'Twinny Peach' will produce abundant flower spikes, plenty to cut and place in vases for fresh indoor bouquets. Plants will continue to flower all season with little garden care. Best planted in fall or late winter, 'Twinny Peach' will bloom over a long season.

AAS 2010 Cool-Season Award Winner – Viola F1 'Endurio Sky Blue Martien'

The color blue, true blue, is not common in flowers. That's why plants that produce blue flowers are so treasured, and 'Endurio Sky Blue Martien' is a welcome addition. This unique spreading/mounding viola may look delicate, but it delivers tough-as-nails performance in the garden. It will flower throughout the cool season from late October through April when planted in fall. It also can be planted in early spring, covering planters and landscapes

with sky-blue blooms until early May. Like all violas, the flowers are relatively small – just under an inch – but you will be amazed how they cover plants in beautiful sky blue. Spreading/mounding plants grow to 6 inches tall and 10-12 inches wide. Feel free to use it along with other cool-season bedding plants in window boxes and hanging gardens, as well as balcony and patio planters.

AAS Bedding Plant Award Winner – Zinnia 'Zahara Starlight Rose'

Zahara zinnias are the result of hybridizing *Zinnia elegans*, the garden zinnia, with *Zinnia angustifolia*, the narrow-leaf zinnia. The result is compact plants with prolific flowers and excellent disease resistance. Zahara zinnias come in a variety of colors, and its rose and white bicolor flowers make 'Zahara Starlight Rose' an excellent addition. Grown in full sun with good air circulation, they have proven resistances to leaf spot and mildew, which can devastate plants and cause early death. These superior qualities resulted in long-lasting zinnia plants that provide generous color from late spring to late summer. 'Zahara Starlight Rose' is heat and drought tolerant and easy to grow in gardens. The mature plants are midsized, about 12 to 14 inches tall and wide, large enough to make a bold statement in beds, containers or patio planters.

Louisiana Master Gardener Program

The Louisiana Master Gardener volunteer program, an educational program of the LSU AgCenter and its Louisiana Cooperative Extension Service, offers the public a wonderful combination of horticultural training and leadership opportunities. Participants not only become better gardeners, they learn how to help youth and adults with gardening needs.

Classes are offered in more than 20 parishes, with 50 parishes benefiting from Louisiana Master Gardener volunteer involvement. Classes offer 40 to 50 hours of instruction in a variety of interesting topics. As a Master Gardener, you will learn about insects and diseases, ornamental plants, fruits and vegetables, as well as how to diagnose plant problems. In addition, you will have the opportunity for increasing your leadership skills.

After successful completion of the training, participants are asked to volunteer their time and share their knowledge by assisting with the LSU AgCenter's extension horticultural education outreach program in their areas.

The Louisiana Master Gardener program is based on volunteer service within the community. Volunteers make a difference as they recommend noncommercial research-based gardening information at community events, parish fairs, plant clinics, school programs, garden shows and civic meetings. Citizens throughout the state are experiencing the satisfaction of being Louisiana Master Gardener volunteers.

For more information, contact your parish LSU AgCenter Extension office or visit www.lsuagcenter.com and click on Lawn & Garden and then on Master Gardener Program.

You can be in the next Louisiana Master Gardener class. I encourage you to sign up today.

Bobby Fletcher Jr., Ph.D., Assistant Director

Dealing with Insect Pests on Houseplants

Indoor outbreaks of insect pests can spread rapidly and cause tremendous damage. There's no rain to wash off insects, the climate is mild year-round and no natural predators are inside to help control insect populations once they get started.

Insects can spread rapidly because we often group houseplants together in well-lit locations close to windows or glass doors and also because we handle healthy plants after handling infested plants.

Three of the most common insect pests found indoors are mealybugs, scales and spider mites.

When you detect a pest problem, take prompt action. First, isolate the infested plant or plants. All three of these pests are contagious. Always wash your hands after working with an infested plant, especially if you are about to handle healthy plants.

Without the help of the natural controls that can be found outside, you are going to have to do the eradication job yourself on your indoor plants. If you prefer not using a pesticide, physical control is worth a try but requires effort, patience and persistence.

Spraying the plant every day with a strong stream of water (especially under the leaves) usually will get rid of spider mites. Continue spraying for at least a week. Indoors, spraying will work well only for plants small enough to move to sinks or showers. Otherwise, move plants outside to a shady area for treatment (weather permitting).

You will commonly see recommendations for controlling mealybugs with rubbing alcohol applied with a cotton swab. This can work, but you must treat the plant regularly and persistently over several weeks.

If you decide to use pesticides, you must choose materials that are labeled for use on plants indoors and are safe to use on the plant you intend to spray. Do not use sprays that are meant to be applied outside or those for controlling indoor house pests such as roaches or ants.

Always use pesticides cautiously, and follow label directions precisely. Be prepared to make several applications for complete control. Since spraying can be messy, particularly when spraying larger plants, move plants outside to spray them, whenever practical.

Camellias Part of Southern Gardening Heritage

Camellias are part of our Southern gardening heritage. A few well placed specimens will brighten up your landscape during the winter when few other shrubs are blooming.

Winter is an excellent time to select blooming camellias at local nurseries and plant them into your landscape.

Louisiana gardeners are so fortunate to be able to grow these amazing plants in our landscapes. The evergreen foliage alone is a beautiful addition to our gardens. Then, during winter, we are provided with a fantastic floral display.

The Latin name of the plant we call camellia is *Camellia japonica*. The flowers range in color from pure white to all shades of pink to the deepest red. Some cultivars are variegated with white, red and pink streaks or patches in the same flower. The form or shape of the flower can range from single to peony to formal double. Flower size can be from a couple of inches up to 6-7 inches across. The leaves are oval, pointed, dark green and glossy.

Success with camellias depends on the planting site and care provided. Part sun to part shade is best, especially for younger plants. Choose a location that receives four to six hours of direct sun in the morning and shade in the afternoon, or choose a spot that receives bright, dappled shade throughout the day. When planted in full sun, camellias are subject to more stressful conditions.

Newly planted camellias often fail to open most of their flower buds for the first few years, but this generally lessens as the plants become established.

Camellias are acid-loving plants and generally do best in soils with a pH below 7. Good drainage is essential. Do not plant camellias in areas that are poorly drained or where water settles after a rain. The addition of organic matter such as compost, finely ground composted pine bark and rotted manure to the soil in the area where camellias are planted will encourage healthy, vigorous root systems.

As with planting all trees and shrubs, depth of planting for camellias is very important. Make sure they are planted with the upper surface of the root ball even with or slightly above the soil level of the planting area. Apply mulch several inches thick around the newly planted camellia. The mulch will help maintain moisture and prevent the growth of weeds.

Tea scale is the most serious pest of camellias. These insects feed primarily on the undersides of the leaves, but in cases of extremely heavy infestations, they may also be found on the upper surfaces. The undersides of infested leaves will be covered with white and brown, slightly fuzzy masses, which eventually will lead to yellow blotches on the upper surfaces. Infested plants have poor vigor and will not bloom well.

Tea scale generally will not go away by itself. Oil sprays are effective in controlling tea scale and may be used in fall, winter and spring when temperatures are between 45 and 85 degrees. Systemic insecticides, such as imidacloprid, also can be used to control tea scale.

Feed camellias in the spring as new growth begins – about March or early April. Use a fertilizer labeled for acid-loving plants according to the manufacturer's label directions. In our area, you could use 15-5-10 with 12 percent sulfur and 2 percent iron.

Although excellent drainage is necessary, camellias need adequate water, especially during hot, dry spells during the summer. This is particularly important for newly planted shrubs during their first year in the ground.

Pruning Roses

In Louisiana, roses generally are pruned twice a year – the last week in January (south Louisiana) to mid-February (north Louisiana) and again in late August to early September.

The classic pruning technique for hybrid teas and grandifloras encourages the production of high-quality flowers with long stems for cutting. This involves rather hard pruning, back to 18 to 24 inches in the late winter and 24 to 30 inches in the late summer. The current recommendations are more relaxed, however, and involve less severe pruning. Floribundas, polyanthas shrub roses, miniatures and old garden roses require only moderate pruning to shape them and remove dead wood.

Roses are pruned primarily to: remove dead wood, stimulate new growth, and control size and shape. Cut the bush back to the desired height (usually 2 to 3 feet for hybrid teas and grandifloras). Remove all dead wood, diseased canes and twiggy growth. Cut each remaining cane back to just above a bud (preferably facing away from the middle of the bush).

Some rose cultivars (ramblers, some climbers and some old garden roses) bloom prolifically in the spring and early summer and then stop. These roses bloom on growth they made the summer before and generally are not as popular as repeat-blooming roses that bloom all summer. They should be pruned, as needed, in early to midsummer soon after they finish their bloom season. Do not prune them now, or you will reduce or eliminate flowering this spring.

Landscape Considerations and Choosing a Professional

People often take a spontaneous approach to landscaping, but planning can lead to more success.

Whether it's planting a simple flower bed or the whole front yard, don't just hop in the car and drive off to the nursery one sunny morning. In the frantic rush to plant something in the landscape, don't forget that the more thought you put into your planting decisions, the more satisfactory the results are likely to be.

First, analyze your landscaping needs to decide what planting needs to be done and the purpose it will serve. Determine, for instance, whether you need to screen unsightly views, remove overgrown shrubs, create shade or privacy, provide an area for children to play, create an area for outdoor living, give your home a more attractive appearance or whatever else.

Once you've decided the function and location of new plantings in your landscape, consult landscaping books to help you refine your design ideas and gardening books written for our area to help you select the right plants. Also, talk to knowledgeable people such as local gardeners you know, extension agents with the LSU AgCenter and garden center and nursery staff members.

Consider the future maintenance of your new exterior plantings. Select insect- and disease-resistant plants that are well adapted to our area to minimize the need for using pesticides.

In addition, make sure the plants you select will not grow too big for the location where you intend to put them. Always ask how large a plant will grow before you choose it. This will reduce the need to constantly prune plants that grow too large for their location.

Remember to select plants for your landscape that will thrive in the growing conditions of the location where they will be planted. Consider the amount of sun and drainage they will receive and whether they are hardy enough to survive winter without protection, for instance.

If you need help developing a design for your yard, landscape professionals often work with homeowners who don't have a clear idea of how to create an attractive, functional landscape. One of the benefits of hiring a landscape professional is the chance to ask questions and receive advice, and no project is too small. If your budget is limited, a professional can help you set priorities and schedule your plan in phases. Professional landscapers often may be as familiar with building codes and deck and swimming pool construction as they are with horticulture and the aesthetics of gardening.

Choosing the Right Landscape Professional

If you'd like to hire a landscape professional to help design your landscape but you don't know where to begin, here are some helpful tips.

- Ask your friends, neighbors and colleagues for recommendations. Your best bet is to select an experienced, well-established firm with a past history of completing projects similar to yours.
- Arrange a meeting with two or three different companies. Don't feel shy asking about the training and educational background of the people who will be working for you. Get a feel for how well you could work with the individuals and how well they understand what you want. Ask for references, and check with the Better Business Bureau.
- Make sure the company or individual you're dealing with has his or her Louisiana landscape architect license or landscape horticulturist license, which is required by law. A licensed landscape architect has a degree in landscape architecture and can sell you an original design whether he or she does the installation or not. Landscape horticulturists may help you develop a design, but only as part of a package that includes the plants, materials and installation. Since landscape horticulturists are not required to have any design training to get their licenses, carefully ask them about their training and experience in doing designs. The primary benefit of using any of these experts is to draw on their knowledge, experience and creativity.
- Before you make a final decision, obtain a written estimate, including a projected date of completion. Make sure the contract you sign for installation includes a detailed list of all plants, materials, work to be done and specifications, as well as any guarantees on plants and other materials used in the landscape.

Selecting and Caring for Your Holiday Tree

Christmas trees are an important part of holiday celebrations for many people. Selecting a Christmas tree that's right for you and then taking proper care of it once you get it home are important considerations if you want one that maintains itself and stays attractive throughout the Christmas season.

Selecting a Tree

Decide where you will display your tree before you begin shopping so you will have an idea of the size you need and whether all sides must be suitable for viewing. Remember to avoid placing the tree in areas that will tend to dry the tree, such as near heat sources (warm air vents, heaters, etc.).

Look for a tree that is clean, healthy, well-shaped and has a straight trunk near the bottom. It should have pliable needles, a strong fragrance and good color characteristics for the type of tree you purchase.

Other buying tips include:

- Test for freshness by making sure the needles are not brittle. Run your hand down a branch. The needles should adhere to each twig. Shake or bounce the tree on the ground lightly to see if most of the needles are firmly attached (some needle drop is normal and to be expected).
- Many types of trees are used as Christmas trees. Make sure the tree you select has limbs strong enough and arranged in such a way to hold and display the ornaments and strings of electric lights you want to use.
- Louisiana-grown Christmas trees will have been harvested in recent days and generally are the freshest cut trees available. Cedar, Leyland cypress and Virginia pine are types of trees commonly grown in Louisiana. Other types of trees, such as the popular Frasier fir, will not grow in our climate. They must be grown farther north and are shipped into our state.
- For those who want to combine buying the freshest Christmas tree possible with a wonderful family activity, consider visiting one of the many Christmas tree farms that let you choose and cut your own.

You can find a listing of Louisiana Christmas tree farms by parish at www.southernchristmastrees.org/LAfarms.html.

Caring for Your Tree

Regardless of the type of tree you cut or purchase for the Christmas holidays, it will require proper care to stay fresh, attractive and safe throughout the holiday season.

If you buy your tree several days before it is to be decorated, store it outside in the shade in a big tub of water.

Before you put the tree in water, cut the butt of the tree at a desired point above the original cut to open the end of the trunk and allow the tree to absorb water. It is better to do this once you get the tree home rather than having it done where you purchase the tree. In the time it takes you to get home, the cut surface of the trunk can seal over with sap. The fresher the cut is when the trunk of the tree is put in water the better it will drink. Place the freshly cut trunk into a bucket of water immediately after cutting the trunk and keep the bucket full of water until you bring the tree indoors. While the tree is outside, you may wish to occasionally spray water on the branches and needles to keep it as fresh as possible. Just make sure it has time to dry before you bring it indoors to decorate.

Once you set your tree up indoors you must maintain an adequate water level in the tree stand. This is the most critical part of taking care of a cut Christmas tree. A tree in good shape can take up water remarkably fast, so check the tree stand at least once a day.

Check the water level two hours after setting up the tree. Then check the water level at least once daily to see if it is above the bottom of the tree trunk (while you are under there, it's a great chance to shake a few packages). It is not uncommon for trees to take up a quart to a half-gallon of water daily.

The addition of a preservative to the water is optional. A preservative may help the tree to stay fresh somewhat longer, but it is not nearly as critical as simply keeping the tree provided with fresh water.

Never let your tree stand go dry. When this happens, the cut stump forms a seal of dried sap, preventing the tree from absorbing water later when the stand reservoir is refilled. An adequate supply of water will prevent the needles from drying and the boughs from drooping. A Christmas tree with moisture in its branches also reduces the flammability of the tree and thus increases safety.

Eventually, you will notice that the tree stops drinking water and you don't have to add any more to the tree stand. At this point, the tree will begin to dry out. Watch the tree closely, and when the needles begin to become dry, brittle and dull the tree becomes more of a fire hazard. Watch the tree vigilantly and plan on taking it down soon after you notice this happening.

For safety, check lights and wiring that you use to decorate the tree for worn spots and cracks. Avoid placing electric toys directly under the tree. Leave the lights on only when the family is in the room with the tree. Never leave the lights on when you are not at home or after you have gone to bed. Reducing the time the lights stay on helps the tree retain its moisture.

One last point; don't feel guilty about having a fresh Christmas tree. These trees are specially grown on farms to be harvested and used for this very purpose. This is a viable agricultural industry that provides a good living to many American families.

An environmentally aware youngster once told me that she didn't want a Christmas tree because we are losing our forests. It's important to remember that forest trees are not being cut down by the commercial Christmas tree industry.

Checklist for December/January/February

1. Most spring flowering bulbs can be planted through early December. Tulips and hyacinths must be refrigerated for six to eight weeks before planting in late December or early January.
2. Remove old flowers from your cool-season bedding plants to extend blooming and improve flower performance.
3. Plant gladiolus in late February in south Louisiana. Prolong the blooming season by planting at two- to three-week intervals for a couple of months.
4. Mulch shrubs and flower beds to get plants off to a good spring start and minimize weed problems.
5. Watch azaleas in February and March for lacebugs. These pests cause the foliage to have numerous small white spots, and they feed underneath lower foliage. Control with horticultural oil sprays or Orthene.
6. A late winter planting of petunias will provide an excellent flower show for spring. Consider the Wave series.
7. Winter is a great time for planting trees. Some excellent native species for Louisiana include Nuttall oak, Shumard oak, winged elm, southern red oak, willow oak, red maple, southern magnolia, baldcypress and mayhaw.
8. February is the ideal time to fertilize trees.
9. January and February are good months to prune landscape trees and any deciduous and evergreen plants that don't flower in the spring.
10. Clean and sharpen tools before you put them away. Wipe the metal blades with an oily cloth, which coats them with a thin layer of protective oil to help prevent corrosion. Coat wooden handles with protectants such as a sealer, tung oil or varnish.
11. February is a good time to plant container or bare-root roses. Bare-root rose bushes should be planted by the end of February. Early planting allows rose bushes to become established in their new locations before they begin to bloom. This increases the number and quality of flowers, and each bush is more prepared to deal with summer heat when it arrives in May. Plant roses in sunny, well-prepared beds that have excellent drainage

Dan Gill
Consumer Horticulture

Turfgrass and Lawns

December begins a bleak time for warm-season turfgrasses. Most turfgrasses should be dormant or at least close to this stage.

Because the grasses are not actively growing, nitrogen fertilization should cease on home lawns unless they are overseeded with ryegrass. Nitrogen fertilizer on dormant turfgrasses can lead to increased brown patch and winter kill. Also, nitrogen applications during this time have a greater potential for movement into groundwater.

Although many home lawns do not require regular mowing or fertilization, now is an excellent time to have your soil tested. Bring 1 pint of soil to your parish LSU AgCenter office. Soil samples should be a composite of soil plugs 3 to 4 inches in depth from various places around the lawn. Specify the type of grass you are growing on the soil test form at your local parish office.

Although I understand the purpose of overseeding (green lawn in winter), I am not a big fan of overseeding home lawns. Overall, overseeding is not beneficial to your summer turfgrass and actually can be detrimental to the lawn by delaying spring green-up and causing other negative effects.

If you have chosen to overseed with ryegrass, however, apply 2 to 3 pounds of ammonium nitrate or equivalent fertilizer per 1,000 square feet every four to six weeks to maintain desired growth and color.

Postpone any permanent warm-season turfgrass establishment from seed until next spring. Sod, such as St. Augustine, can be laid during winter, if necessary, but remember to keep it moist to prevent drying out and dying. Establishment is best left until mid-spring, well after spring green-up.

Brown patch disease can come and go throughout the winter if the weather is mild. Treatment with fungicides containing captan, chloroneb, fenarimal, fludioxonil, flutolanil, iprodione, mancozeb maneb, myclobutanil, PCNB, polyoxin D, propiconazole, pyraclostrobin, thiophanate-methyl, thiram, trifloxystrobin and triticonazole will reduce the spread of brown patch. Damage from brown patch will slow spring green-up, and affected areas will remain unsightly until warmer spring weather conditions allow for turfgrass recovery.

Warm-season turfgrasses may show signs of green-up in southern Louisiana in late February. Do not push turfgrass growth with fertilizer at that time. Fertilizer applied too early will feed the winter weeds, and fertilizer applied too heavily will result in lush growth that is more susceptible to injury from late frosts or brown patch. Let the grass green up gradually, and do not fertilize until after the first mowing.

Broadleaf weeds and annual bluegrass can be managed with applications of atrazine in St. Augustine, centipede, zoysia and dormant Bermuda grass. Application of weed and feed products should be delayed until late March or early April in Louisiana.

Ron Strahan
Weed Scientist

Vegetable Gardening

Vegetables to plant in December . . .

Onions (transplant), shallots (sets or green transplants), spinach, endive, escarole and cabbage (seed or transplant).

Root crops and greens may be started.

Lettuce, cabbage, broccoli, Brussels sprouts and cauliflower seed may be planted in south Louisiana cold-frames or protected areas to produce transplants for spring harvest.

Start shiitake mushrooms or at least cut the mushroom logs.

Order seeds now for 2010 garden crops.

. . . and in January

Beets, carrots, radishes, turnips, cabbage, broccoli, mustard, spinach, kale and Irish potatoes.

Transplant onions, shallots and celery.

Start shiitake mushroom logs or cut logs while dormant.

Seed in cold-frame, hotbed, greenhouse in January: tomatoes, peppers, eggplants, cabbage, broccoli, Chinese cabbage, cauliflower and lettuce.

. . . and in February

Beets, broccoli, cabbage, carrots, turnips, mustard, spinach, parsley, Chinese cabbage, radishes, Irish potatoes, leaf lettuce, head lettuce, tomatoes, eggplants, snap beans and sweet corn in extreme south Louisiana during the last part of the month.

Transplant broccoli, cauliflower, cabbage and lettuce.

Plant seed sweet potatoes on warm (70 degrees) raised beds for slips.

Crop Highlights

Onions. Transplant pencil-size onion plants from mid-December through January. Fertilize with 6 to 7 pounds of a complete fertilizer such as 8-24-24 or 13-13-13 per 100 feet of row about two weeks before transplanting. Space plants about 3 inches to 4 inches apart in the row. Several drills may be planted on a row with 6-inch to 12-inch spacing between drills.

Side-dress onions, shallots and garlic when growth starts in early February. Use 1 pound of 34-0-0 per 100 feet of row. Two additional side-dressings at two-week to three-week intervals will increase bulb size.

Onions, shallots, leeks and garlic do not compete well with weeds. Try to control weeds in November to early December. Once the cool, wet weather sets in, it's hard to control weeds. Spray onions, shallots and garlic with malathion to control thrips.

Shallots. Shallot sets can be planted any time during the winter. If you have some growing in the garden, replant several as you harvest by separating plants and cutting them back and re-transplanting them. They will continue to divide and make several more plants. By doing this, you can have shallots through spring. Separate plants in December and January for next year's sets.

Tomatoes. December is a good time to look through seed catalogs. Recommended indeterminate varieties are Big Beef, Champion, Terrific, Monte Carlo, First Lady, Husky Gold, Sun Gold, Better Boy, Jet Star (low-acid) and Pink Girl.

Recommended determinate types are Celebrity, Quincy, Amelia, Crista, Bella Rosa, Mountain Fresh, Mountain Delight, Mountain Spring, Sunbeam and Top Gun. Other varieties are Mountain Belle, Jolly, Sweet Million, Juliet and Spectrum 882.

Nurseries and garden centers are encouraged to handle some of the newer varieties. Try some Bella Rosa, Crista, Quincy, Top Gun or Amelia as spotted-wilt-virus-resistant tomatoes.

Cabbage, broccoli, cauliflower and Chinese cabbage. Cabbage planted now may encounter low temperatures. Temperatures in the low 20s will injure some of the cabbage, and lower temperatures will freeze many varieties. Recommended varieties for winter production are Bravo, Solid Blue 780 and 790, Cheers, Blue Vantage, A&C #5+, Emblem, Vantage Point and Rio Verde. A&C #5 is the hardiest. For reds, try Cardinal, Red Rookie 831 or Red Rookie.

Bolting in cabbage often occurs in Louisiana. Bolting is caused by exposure of plants to daily temperatures of around 45 degrees and lower for several weeks. Flower stalks may not show until heads begin to form.

These cole crops usually will produce well in Louisiana in the spring, but time is important, especially with cauliflower and broccoli. They need to be planted early enough to produce before temperatures get too high.

Each of these vegetables can be planted directly in the field in January, but cauliflower and Chinese cabbage should not be transplanted out until February.

Irish potatoes. Begin planting Irish potatoes around mid-January in south Louisiana and around the first of February in north Louisiana. Fertilize at the rate of 7 to 8 pounds of a complete fertilizer (8-8-8, 13-13-13) or 8-24-24 per 100 feet of row before planting. Side-dress with 1 pint of 34-0-0 when plants mark the row.

Cut seed potatoes into blocky pieces that weigh about 1½ to 2 ounces each or are about the size of an egg. Be sure each seed piece has at least one eye; this is where the plant will originate. Place cut side down. Irish potato plants may be nipped back by a light frost, but damage is usually not serious, and new growth will be produced. Plant seed pieces 10 to 15 inches apart in the row. Between 7 and 8 pounds of seed potatoes will plant 100 feet of row.

Miscellaneous

Transplant Production

Seeds of cole crops such as cabbage, broccoli and cauliflower will germinate satisfactorily in cool soils (temperatures from 45 to 50 degrees). But they germinate more quickly at higher soil temperatures. After germination, grow plants at 70 degrees to 80 degrees for about two months for best results.

Tomato, pepper and eggplant seeds germinate best at soil temperatures of 65 degrees to 75 degrees. Grow transplants at 65 degrees to 75 degrees during the day and 60 degrees to 65 degrees at night for eight to 10 weeks. Temperatures much lower than this will slow, and possibly stunt, peppers and eggplants.

A common problem is not having enough light to develop a stocky transplant, especially in a window or inside a house. Provide full sunlight all day when seedlings first appear. If light is low, keep plants cooler and drier.

Dr. Jimmy Boudreaux

Growing Plums

Plums have been grown in the Southeast for many years.

The prune-type plum (*Prunus domestica*), although important in the United States among the 18 species found worldwide, is grown very little in Louisiana. The Japanese plum (*Prunus salicina*), the leading fresh market plum grown in the country, is the primary type of fruit produced in the state.

There are few to no producers across the Southeast who rely upon Japanese plums as their primary fruit crop because of inconsistent cropping. Culturally, plums have similar requirements to peaches, including rootstocks, training/pruning, pest management, fertility, water requirements and harvesting.

Most Japanese plums are not self-fruitful but have been shown to be cross-fruitful in all combinations. Honey bees appear to be the main pollinator. Some fruit set may occur when pollinated with the wild plums.

Cropping ability in many plums is very high, and fruit thinning must be done to obtain large fruit and keep limbs from breaking. Fruiting occurs both on spurs and along the previous season's shoots. Plums are precocious, often fruiting in the second year after planting.

There are a number of major obstacles that make plum production a risky endeavor. Early flowering, resulting in crop loss from freezes in late winter and early spring, is perhaps the most serious problem.

The high susceptibility of Japanese plums to the Prunus disease complex, particularly bacterial, creates major problems with tree longevity in the Southeast. In general, varieties of Japanese plum have relatively short tree longevity (often four to 10 years).

Bacterial canker (*Pseudomonas syringae*) and plum leaf scald are the two most serious diseases affecting plums. Plum leaf scald disease is a part of the phony peach complex associated with *Xylella fastidiosa*, a bacterium. Black knot (*Apisporina morbosa*), a fungal disease, also can reduce tree production and longevity. The diseases of concern also include bacterial spot, *botyrosphaeria rot,* brown rot and oak root rot.

The insects that are of major concern to plum growers are plum curculio, San Jose scale, mites and peach tree borers. Control of these pests is not difficult, but timing, method of application and knowledge of the insect's biology are critical.

Plums commonly are propagated onto the same rootstocks used for peaches and nectarines. Where plantings are made on old orchard sites, 'Guardian' peach rootstock is preferred. 'Lovell' and 'Halford' peach have been and continue to be the most commonly used rootstocks for the Southeast.

Home gardeners may still wish to grow some Japanese dessert plums even though they are difficult to manage and will require some crop protectant sprays. There are a number of varieties worthy of trial. Those include 'AU-Cherry' (self-fertile), 'AU-Roadside,' 'AU-Rosa,' 'AU-Rubrum,' 'Crimson,' 'Homeside,' 'Byrongold,' 'Morris,' 'Ruby Sweet,' 'Bruce' and 'Black Ruby'. 'Ozark Premier,' although trees usually are short-lived, can provide a few seasons of excellent fruit. 'Homeside' has a lot of 'Ozark Premier' characteristics including good flavor.

Most Japanese varieties recommended are only partially self-fruitful. Therefore, two or more varieties should always be used in home plantings for cross pollination. 'Methley', one of the most popular of home fruit varieties, is self-fruitful and can be grown without the use of additional pollinators. Ripening times below are for coastal Louisiana.

Plum cultivars with the *AU* prefix are out of the breeding program at the Auburn University, and 'Robusto,' 'Segundo' and 'Byron Gold' are from the University of Georgia breeding program. The Auburn plums pollinate each other with the same being true for the Georgia cultivars.

'AU-Homeside' produces a light red plum with amber flesh. Fruit size is oval and about 2 1/3 inches in diameter. Fruit is attractive, and overall quality is good. Ripening date is mid-June, and fruit tends to size well before color is achieved. Trees are not vigorous. 'AU-Homeside' is resistant to plum leaf scald.

'AU-Producer' has dark red skin, and the flesh is also red. Fruit size is small, round and less than 2 inches in diameter. Fruit quality is high, and the plums ripen in mid-June. Tree vigor is moderate, but trees tend to require heavy thinning. 'AU-Producer' is resistant to plum leaf scald.

'AU-Roadside' produces a magenta fruit with a red flesh color. Fruit size is less than 2 inches in diameter and is oval in shape. Fruit quality is very good. Ripening date is mid-June. Tree vigor is high. Fruit tends to be too soft for commercial shipping. 'AU-Roadside' is resistant to plum leaf scald.

'AU-Rosa' produces red fruit with some light yellow areas. Fruit size is 2 inches in diameter and round in shape. Fruit quality is good, and fruit are attractive. Fruit ripen in mid-June.

'AU-Rubrum' produces fruit with maroon skin color and red flesh. Fruit size is 2 inches in diameter and round in shape. Ripening date is mid-June. Tree vigor is good.

'Byrongold' produces a fruit with yellow skin and flesh. Fruit will develop a red blush during the latter part of ripening. Its shape is round, and the fruit is 2 inches in diameter. Fruit are very firm and are of good quality. Ripening date is late June to early July, and fruit achieve color before they are ripe. Tree vigor is high, but it will have some problems with leaf scald. Chilling requirements are around 450 hours.

'Excelsior' is an old native plum discovered by George Tabor of Glen St. Mary's Nursery. Both the flesh and fruit are yellow. The fruit size is about 2 inches. The flesh is somewhat translucent and watery. The tree requires about 400 hours of chilling in order to set fruit.

'Methley' is an older variety that is no longer recommended because of small fruit size, lack of firmness and susceptibility to plum leaf scald and other diseases of bacterial origin. It is self-pollinating.

'Ozark Premier' produces a purple/red colored fruit with red flesh. It is not recommended because of susceptibility to plum leaf scald.

'Robusto' has a ripening season in early June. The tree blooms in early

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Corrective Pruning on Mature Pecans Trees

Large pecan trees seldom need major pruning. If they do, however, late winter, when the trees are dormant, is the normal time to prune – although pruning can be done anytime it is necessary.

Mature trees are pruned to decrease shading, to remove bad limb angles, to remove dead limbs and to remove lower branches to accommodate lawn equipment. Also, any limbs endangering structures or power lines need to be periodically pruned to avoid damage from falling limbs.

A certain amount of corrective pruning must be done each year to maintain tree health. Narrow crotches should be removed, and complete branches should be routinely eliminated in the center of the tree to improve sunlight penetration. Branches that rub against each other also should be eliminated. Cuts should be made to the nearest crotch to prevent re-growth of suckers.

Pruning mature trees can be expensive but is necessary.

Hurricanes and severe thunderstorms damage large pecan trees in a variety of ways including uprooting trees, structural limb breakage, defoliation and loss of fruit. General objectives for pruning storm-damaged trees are to: remove dead, weakened or damaged branches; improve branch spacing and remove weak crotches; improve tree stability by reducing wind resistance; and increase sunlight to the interior portion of the canopy.

Dehorning or pollarding, which is the most severe type of heading cut where large limbs are cut back leaving several stubs, should be avoided, if possible. Large cuts generally result in the tree being vegetative for several years before production returns on the new growth.

Even heading cuts to remove small branches (2 to 3 inches in diameter) to a stub generally will stimulate vigorous, upright, poorly spaced and weakly attached shoots just below the pruning cut.

It is best to prune pecan trees using thinning cuts that remove a branch at its attachment point to another branch or to the trunk without leaving a stub. Thinning cuts are made to improve structure and to reduce height, spread, branch weight and wind resistance. This is partially accomplished by redistributed energy that would have gone into vegetative growth of headed limbs to the remaining surrounding branches.

Selecting Pecan Trees for the Home Landscape

For homeowners, your decision to plant a pecan tree in your landscape probably should be based on the shade tree value, with nut production being a potential bonus.

Large pecan trees are very difficult to manage for diseases and insect pests, and that affects nut production in residential areas. Common nut diseases, insects and animal pests such as squirrels, crows, and bluejays generally will eliminate the pecan crop of yard trees.

Pecan scab disease is the main limiting factor to pecan production in Louisiana. Choosing pecan varieties with good scab resistance will help control the disease, but wet summers still can cause the crop to be destroyed. Resistance to scab disease can change, and the disease resistance may disappear with time. Providing full sun and air circulation for pecan trees will help reduce humidity and disease severity. Keeping the lower limbs pruned 6 to 8 feet above the ground also will help provide good air circulation around trees.

If nut production and kernel quality are the major objectives, plant grafted varieties. They differ greatly in nut quality, size and attractiveness as shade trees, so growers need to select the specific variety for their needs. Using grafted trees will help ensure early production and high nut quality.

The Elliott variety currently has the best scab disease resistance. Sumner, Cape Fear and Caddo are varieties that formerly had good scab resistance but can get severe scab disease in some locations especially during wet summers. The Jackson variety has shown some potential as a yard tree – although it is only moderately resistant to scab disease. Highly scab susceptible varieties such as Desirable and Schley should be avoided.

Native pecans also can be used in yard plantings, since many of the native pecan trees have good scab resistance. The main disadvantages of native trees are that the nuts are often small, trees frequently take longer coming into production and the characteristics of the tree are not known until the tree has been growing a number of years. Nut quality is variable but at least acceptable.

Ungrafted seedling trees make good landscape trees, however, because they characteristically have strong, fast growth and a natural central leader without training. Seedlings usually are better in structure and appearance than grafted improved variety trees.

Pecan trees should be purchased from a reputable nursery, usually as bare-root trees. Avoid “bargain” trees from outlets not equipped to provide good protection from excessive heat, drying and freezing.

Bare-root trees can be planted anytime while they are fully dormant, but February is the best time to plant, because it provides enough time before spring for roots to become established. Trees planted early in the planting season will be established sooner and will develop new roots faster to support the spring growth.

Container-grown trees can be planted anytime of the year, but winter or early spring planting is best to give time for the trees to adjust to their new environment before hot, dry weather.

Pecan trees that have the roots packaged in a plastic sleeve filled with potting soil should not be confused with container-grown trees. Trees packed in plastic sleeves will need to be handled the same as bare-root trees.

Proper planting is important for a strong, vigorously growing pecan tree. A moderate-size tree will suffer less transplant shock and usually will become established and grow faster than a large tree. The ideal bare-rooted pecan tree is 4 to 6 feet.

Nursery stock should be ordered in early fall to ensure acquisition of selected varieties. Plant at least two varieties to ensure adequate pollination.

Planting Pecan Trees

The survival of newly planted pecan trees depends largely on the care they receive from the time they leave the nursery until growth begins in the spring. For the best results, observe the following instructions:

Plant the trees as soon as possible after purchasing. Dampen the packing medium when the trees arrive. It is important to keep the roots moist at all times.

Trees need to be stored properly if they are not going to be planted immediately. Roots should be kept out of the sun and drying winds. Exposure will dry out roots and decrease survival potential. Trees should be stored under shade with the roots completely covered with moist soil, peat, sphagnum moss, sawdust or similar material.

Before planting, remove packing material that was placed around roots to keep them moist. Using a handheld pruning shear, cut off all broken or injured roots. A healthy rootstock should have numerous, pencil-sized, lateral roots and a strong taproot. The new roots generally will develop on the larger lateral roots. Soak the roots for 1-2 hours in water before planting the tree.

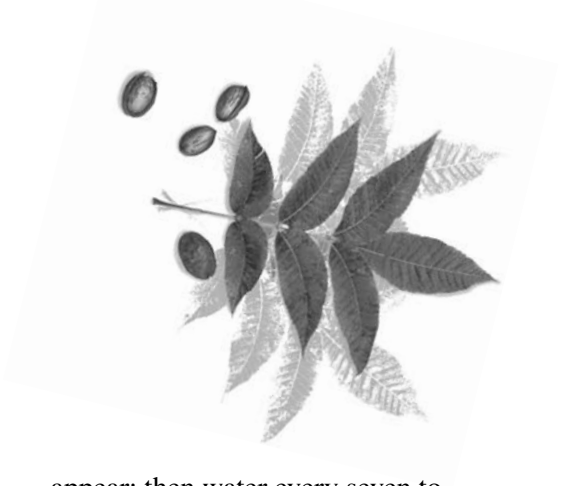
Dig the planting hole large enough to arrange the roots in their natural position without cramping, usually 2-3 feet wide and deep enough to accommodate the length of the tap root. The final position of the tree in the hole should be the same depth as when it was growing in the nursery. This area can be distinguished by the difference in bark color. Trees planted too deep or too shallow will grow poorly or die.

Spread lateral roots out and work the original soil removed from the hole around the roots as you fill the hole. Do not push the lateral roots down against the tap root. Fill the hole about three-fourths full of soil, and pour water into the hole to settle the soil and eliminate air pockets. After the water settles, finish filling the hole with loose topsoil. Do not tramp the soil; this may damage the lateral roots and compact heavy soil. If the hole is too deep and the tree settles after planting, lift the tree to the original soil line before growth begins in the spring.

Prune one-third to one-half of the top portion of the tree off to compensate for loss of a major part of the functioning root system when the tree was dug out at the nursery. Prune all lateral branches to 6-inch stubs. Growth on these stubs the first year or two will help protect the trunk from sunscald. Other ways to avoid sunscald are to wrap the trunk loosely with aluminum foil, burlap or heavy paper or to whitewash the trunk to reflect sunlight.

Do not mix barnyard manure or commercial fertilizer with soil when backfilling, because this may burn the roots. About 1/4 pound of urea or similar nitrogen formulation and 1/8 pound zinc chelates per tree may be applied shortly after leaves appear.

Maintaining adequate moisture throughout the first year is essential for tree growth and survival. The functioning root system is limited during this time. Any drought stress will greatly reduce the growth of the tree and retard its development. Water thoroughly monthly until leaves



appear; then water every seven to 10 days. Thorough watering to the full depth of the roots is essential. If poorly drained soil is used, avoid pooling water around the base of the tree for more than two hours.

Keep soil free of weeds in an area extending at least 3 feet from the trunk. This can be accomplished by using herbicides, weed barrier cloth or an organic mulch. Trees can be mulched with a 6-inch layer of pine straw, leaves or well-composted bark. Organic mulches help hold soil moisture and limit growth of grass and weeds around the newly planted tree.

Periodically check the trees for damage from insects, borers, rodents, deer, rabbits and diseases. Take corrective action at the first visible signs of damage.

Charles J. Graham
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March and requires from 400 to 500 chill hours. The fruit are red, and the flesh is yellow.

'Santa Rosa' produces a purple/red colored fruit with red flesh. Santa Rosa is an older cultivar that is no longer recommended because of susceptibility to plum leaf scald and other diseases of bacterial origin.

'Segundo' is a red plum with yellow flesh. It needs about 400 to 500 hours of chilling to produce fruit. Ripening time is mid- to late June, and the fruit are somewhat soft.

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Horticulture Hints

Winter 2009-2010

LSU AgCenter
Research & Extension

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