Horticulture Hints

LSU AgCenter Research & Extension

Winter 2011

Landscape Gardening and Ornamentals

Dealing With Insect Pests on Houseplants

Indoor outbreaks of insect pests can spread rapidly and cause tremendous damage.

The rapid spreading occurs 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. Close and regular inspection of your plants indoors is the best defense against insect outbreaks.

Mealybugs are small, oval, soft-bodied insects that usually are less than one-eighth inch long, distinctly segmented and covered with white powdery or cottony waxy secretions. They are sucking insects that feed on the plant's sap and don't move around much on the plants. They typically occur in groups or clumps. Look for white cottony masses in the growing points of plants, in their crowns, under their leaves and where the leaves join the stem of the plant.

Scales are related to mealybugs and also are sucking insects. They are covered with a dome-shaped waxy coating that is most often white, tan or brown, depending on the type of scale. Once they are large enough to notice, they are stationary. Their immobility and waxy covering make them difficult to notice, and once you do see the strange bumps or dots on the plant, you would never think that they are insects.

Mealybug or scale-infested plants often will have shiny, sticky leaves. Even the floor or table the plant sits on may become sticky. This is the result of the accumulation of honeydew, a sweet, sticky excretion of the insects, on surfaces under the plant.

Spider mites are very tiny, and the damage they cause is initially very subtle. Early damage causes the foliage to appear dull, faded and unhealthy. As damage increases, new growth may be stunted, and deformed and older leaves may become very faded, show signs of browning and begin to drop off. High populations of mites may produce fine webbing between leaves and where the leaves join the main stem.

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.

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). A strong stream of water can be tried on mealybugs, but you should also scrub at the cottony clusters with a soft toothbrush to dislodge them.

If you decide to use pesticides, you must choose materials that are safe to use on the plant you intend to spray and labeled for use on plants indoors.

Mealybugs, scales and mites all can be controlled by horticultural oil sprays, which kill these pests by suffocation and are relatively low in toxicity. Many insecticidal soap products also have labels for indoor use and are excellent for mites and good on mealybugs but not very effective on adult scale. And the pre-mixed houseplant insecticides that contain pyrethrum or pyrethrin as their active ingredient are effective on these pests.

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.

Pruning Everblooming Roses

Roses should be pruned anytime from late January (south Louisiana) through mid-February (north Louisiana).

This pruning is especially important for the popular hybrid tea and grandiflora roses. Without this annual pruning, these roses generally become leggy, less vigorous and unattractive and do not bloom as well.

In general, however, all types of roses usually require some pruning each year to control their shape or size.

Use sharp bypass hand pruners on roses. Should you need to cut canes larger than one-half inch in diameter, you should use bypass loppers. It's a good

idea to wear a sturdy pair of leather gloves and long sleeves to protect your hands and arms from the thorns.

Hybrid tea and grandiflora roses generally are cut back to about 18 to 24 inches from the ground. Other types of roses that are everblooming (such as China, tea, noisette, Bourbon, polyantha, floribunda, landscape and miniature roses) also may be pruned now. In general, roses in these categories have more pleasing shapes without severe pruning. Unless there is a need to control their size, they are only lightly shaped under most circumstances.

First, prune out any dead or diseased canes. To shape the bushes, you can use hand pruners to selectively cut back individual branches. Landscape roses can even be sheared with hedge shears to shape them and encourage full, bushy growth. If some of your bushes are considerably overgrown, they will tolerate severe pruning to get them back into shape.

As a rule of thumb, other than hybrid teas and grandifloras, roses are cut back about one-third to one-half their height, depending on the situation. Long, especially vigorous shoots that have grown well beyond the rest of the bush and make it look out of balance may be cut back further than the rest of the bush. Young bushes planted within the last year or two likely will not need drastic pruning but may be cut back slightly to encourage a full, bushy plant.

It is far easier for you and healthier for the rose bush if you prune at least once a year. It is very difficult to properly prune a rose bush that has been allowed to grow for several years without pruning. Don't forget that we also do a second, but not as severe, pruning on everblooming roses in late summer – around late August.

Enjoy Holiday Plants

Among the special pleasures associated with the holiday season, decorative plants such as poinsettias, holiday cactuses and living Christmas trees play an important part in decking the halls for the holidays. How well you care for them will determine how long they will stay attractive.

After purchasing a holiday plant, be sure to protect it while bringing it home. Sudden exposure to low temperatures and wind will damage the plant. Poinsettias are particularly fragile, so handle them with care. It's best to have them sleeved before you take them out of the store. When you get them home, the plants should be located for attractive display, but a spot where they will receive some natural light will give best results.

Holiday plants often are sold in pots wrapped in decorative coverings. Punch holes in the covering where the drainage holes of the pot are located to allow the soil to drain properly when you water. This prevents the roots from becoming waterlogged. Also, make sure the furniture or floor you set your plant on is protected by a plastic saucer. Another option is to remove the pot from the decorative covering, take the plant to the sink, water it and allow it to drain there before you return it back to the location where you are displaying it and slip it back into the decorative pot cover.

The water needs of your plants should be checked every day by feeling the soil with your finger. Water thoroughly when the soil begins to feel somewhat dry. Never let a holiday plant wilt.

Allowing a plant to dry out, low light, low humidity, drafts and placing them near sources of heat all can shorten the attractive life of your holiday plant. With a little care and attention, you can make sure that your holiday plants will provide a beautiful display throughout the season.

Controlling Snails and Slugs

Snails and slugs belong to the mollusk family (the same one as oysters). They crawl along on a single "foot" over a thin layer of slime that they produce to ease their way.

Snails carry a shell on their backs, and they can retreat into it when threatened. Slugs do not have shells.

In our mild climate, snails and slugs are active and cause damage virtually year-round. They enjoy eating many of the cool-season bedding plants and vegetables in our gardens this time of year. But trees, shrubs and most ground covers and vines rarely are badly damaged by snails and slugs.

The damage snails and slugs cause is obvious but can be misdiagnosed. They eat holes in leaves and flowers and especially favor low-growing, succulent growth. Snails and slugs will be most active at night or on cloudy days during moist or wet mild weather and in beds that are regularly irrigated.

Caterpillars also chew holes in leaves. Since the methods and pesticides for controlling them are different than for snails and slugs, it's important to know which pest is causing the damage. The presence of slime trails – which look like meandering reflective, silver lines – indicate snails and slugs are the culprits. These may occur on concrete, pot sides or plant foliage. Caterpillars may leave behind dark pellet-like droppings, and this would confirm their activity.

There also are leaf-eating beetles that chew holes in leaves, so they must be considered when holes in leaves are observed. Holes in the leaves of trees and shrubs are more likely to be caused by caterpillars or beetles than by snails and slugs.

Controlling snails and slugs requires perseverance, and it is best to use several techniques. The goal is to keep the population low enough to prevent an unacceptable amount of damage. The main strategies for snail and slug control involve baits, traps, hand picking and encouraging predators that eat them.

Baits generally are available in the form of pellets, meal or liquid slurries. The snails and slugs must eat the bait for the active ingredient to work, so

apply these materials in such a way that they are likely to be eaten. Follow label directions carefully.

The chemicals in the baits are toxic to snails and slugs and will kill them if they eat the bait. Baits should be used regularly until new damage is reduced to tolerable levels. Choose baits with iron phosphate as the active ingredient because those baits are safer to use.

Beer traps are useful in monitoring and reducing the population of snails and slugs. To make a beer trap, sink a small plastic bowl up to its rim in the ground and fill it half full of beer. Any kind will do, but it should be fresh. Set the traps in areas where snails and slugs have been causing damage in the early evening after watering the yard. Empty and reset the traps daily until you stop catching very many pests in them. Traps also are a great way to monitor population levels. If you see holes in leaves and put out beer traps in the area and don't catch any snails and/or slugs, the damage is more likely due to caterpillars.

Hand picking is done at night with a flashlight and is not for the squeamish. It helps to wear latex gloves or use kitchen tongs to pick up the slimy creatures. Put them in a plastic bag and throw them away.

Several types of barriers will keep snails and slugs out of planting beds. The easiest to maintain are those made with copper flashing and screen. It is believed that copper barriers are effective because the copper reacts with the slime that snails and slugs secrete, causing a disruption in their nervous system similar to an electric shock.

Finally, toads are excellent predators of snails and slugs and can consume large quantities of them. You can attract toads and keep them in your garden by providing a water source such as a small pond, pool or water garden, as well as cover for the toads to hide under during the day. Gardens with active populations of hungry toads rarely have major problems with snails and slugs.

Growing Amaryllis

Few flowering bulbs can surpass the stately beauty of the amaryllis. Blooming typically in April, this popular bulb is a star performer in the spring garden. Dormant bulbs are available now, and, with proper care, they can become a long-lasting part of your landscape.

Dormant bulbs that you purchase now, however, must be handled carefully this winter. When they are dried off and forced into dormancy for shipping purposes, the bulbs are triggered to bloom during the winter rather than the spring. If you plant bulbs you purchase now outside into the garden, they will send up their flower stalks this winter when they are likely to be damaged by cold.

Using a well-drained potting soil, plant amaryllis bulbs you purchase now into pots with the neck of the bulb above the soil surface. You also can buy them already planted in pots. Place the pot in a sunny window (the more sun the better), and keep the soil evenly moist.

When the flower stalk begins to emerge, rotate the pot a half turn every few days so it will grow straight. If you provide your amaryllis with too little light, the flower stalk will grow excessively tall and may even fall over. Flowering generally occurs in December or early January from bulbs planted in November, and some large bulbs will produce two flower stalks.

After the flowers have faded, cut the stalk at the point where it emerges from the bulb, but do not cut any foliage. Keep the plant inside and continue to provide plenty of light or the leaves will be weak. Water your amaryllis regularly when the soil begins to feel dry, but you don't have to fertilize it during this time.

In April, it's time to plant your bulbs into the garden. Choose a well-prepared spot that receives sun for four to six hours. Amaryllis planted in the garden this spring will get into their natural cycle and bloom in April the following years.

Louisiana Master Gardener Volunteer Program

The Louisiana Master Gardener program offers the public a wonderful combination of horticulture training and leadership opportunities.

Designed to recruit and train volunteers, the Louisiana Master Gardener program is operated by the LSU AgCenter's Extension Service and is open to anyone with the willingness to learn and a desire to help others. Training for the Master Gardener program is tailored both to instruction for beginners and experienced gardeners.

Classes are offered in more than 25 parishes across the state – with 51 parishes benefitting from Master Gardener volunteer involvement. Master Gardener classes offer 40 to 50 hours of instruction in a variety of interesting horticulture topics.

As a Master Gardener participant, you will learn about insects and diseases, ornamental plants, fruits and vegetables and soil fertility, as well as how to diagnose plant problems. In addition, you will have the opportunity for increasing your leadership skills.

In exchange for horticulture training, Louisiana Master Gardeners contribute time as volunteers, working through the LSU AgCenter's Extension Service offices in their parishes to develop and enhance community programs related to horticulture.

Participants in the Master Gardener program don't just only become better gardeners; they also learn how to help youth and adults with gardening needs. Depending on a community's needs, this may include environmental improvement activities, parish fairs, plant health clinics, civic meetings and community and school gardening programs.

Enjoy the satisfaction that more than 1,800 citizens throughout the state are experiencing as a certified Louisiana Master Gardener. For more information, contact the LSU AgCenter Extension Service office in your parish or visit the LSU AgCenter Master Gardener website at: www.LSUAgCenter.com/Master Gardener.

René Schmit
Louisiana Master Gardener Coordinator

LouEASYana GARDENING

In the gardening world, "spring fever" is that time of the year when gardeners flock to nurseries in droves to buy flowers, shrubs, trees and other types of plants by the truckload.

During that time, a frenzy of planting takes place, and the nurseries are crowded most weekends. In Louisiana, spring fever generally shows up in late March, accelerates through April and finally begins to diminish as the heat of summer moves in around mid- to late May. Ask local retail nursery managers when the busiest time of the year is, and I think they will agree.

The question is: Do you have to follow the masses and wait until then to purchase and plant your trees, shrubs and flowers? And the answer is: No! A great deal of planting can be done in January and February. Hardy trees, shrubs and flowers are not bothered by the cold of winter, so that is not a concern. In fact, there are very good reasons for you not to wait.

Flowers

Late winter also is a good time to plant cool-season bedding plants. Planted in late January or early February, they will produce lots of colorful flowers for your spring gardens. The display will be far more attractive and last longer (more bang for your buck) than plantings of cool-season bedding plants done in April. Really, by the time we hit late March and April, it's time to begin focusing on warm-season bedding plants.

So head out to the nurseries in your area over the next few months to look over what they have, and purchase and plant hardy trees, shrubs, ground covers and cool-season bedding plants. When spring fever hits and the nurseries are swamped with customers, you can sit back sipping on a glass of iced tea and admiring all the planting you already have accomplished.

Trees and Shrubs

Trees and shrubs planted in winter have more time to settle in and make root growth before the intense heat of summer begins to stress them, so they have a real advantage over trees planted later. In addition, selecting a tree for your landscape is a serious decision that requires careful and thoughtful consideration on what tree would be the best choice. You don't want to make a mistake and plant a tree with characteristics that become problems in future years – such as growing too large.

When spring fever hits and people throng the nurseries, the staff often is overwhelmed, and you are lucky if you can get a quick question answered (like "Where are the trees?"). Stop by your local nursery now when traffic is relatively low, and you will have a much easier time asking the questions you need to ask about trees you are considering. The staff will have time to talk to you without rushing on to other customers with questions.

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 for lacebugs. They cause the foliage to have numerous small white spots and feed underneath lower foliage. Control with horticultural oil sprays or Orthene.
6. A late-winter planting of petunias will provide a good flower show for early spring. Consider the new Wave series.
7. Winter is a great time for planting trees. Some excellent native species for Louisiana include nuttall oak, southern red oak, willow oak, red maple, southern sugar 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 that 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 the 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
12. Look for Louisiana Super Plants at your local nurseries. Louisiana Super Plants are selected for their outstanding performance around the state and are "university tested and industry approved." The fall selections include two cool-season bedding plants that can be planted now. Those are the Swan series columbine and the Redbor kale. This fall's Super Plants also include an excellent landscape rose called Belinda's Dream that produces beautiful, pink, hybrid tea-like flowers on a tough, disease resistant shrub.

Dan Gill
Consumer Horticulturist

Vegetable Gardening

Now that the weather has cooled off a bit, you might have noticed you're spending more time outside – planting trees, shrubs, flowers and just enjoying nature. Why not start a vegetable garden?

The fall season is a great time to grow many vegetables. Generally, the weed pressure is less severe during the fall, and with the exception of a few worms and aphids, insect pressure also is down.

With the wide variety of winter vegetable crops available, you're sure to grow something everyone likes to eat. If you start quickly, you might even pull off a crop or two to add to the Thanksgiving and Christmas feasts! Read the vegetable crop highlights, and give winter vegetables a try!

Just an aside, every time we give fertilizer recommendations they are based on a 100-foot row that is approximately 4 feet wide. For instance, if our recommendations are 6 pounds per 100-foot row and you have a 10-foot row, you would apply 0.6 pounds. (6 divided by 100 equals 0.06 pounds per foot; that times your 10 foot row equals 0.6 pounds). A pound of 13-13-13 or 8-8-8 is 1 pint or 16 ounces. You would need almost 1 pint of complete fertilizer for your 10-foot row.

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 0.6-0.7 pounds per 10 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 ¼ teaspoon of ammonium nitrate or ½ teaspoon of calcium nitrate between every other plant. Two additional side-dressings at two-week to three-week intervals will increase bulb size.

Control weeds during early November and December.

Control thrips with Malathion!

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 transplanting them again. Separate plants during December and January for next year's sets.

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, Cheers, Blue Vantage, Emblem, Vantage Point and Rio Verde. For reds, try Cardinal, Red Rookie 831 or Red Rookie.

Bolting may occur. Bolting is caused when plants go dormant because of prolonged exposure to cooler temperatures (45 F and lower). Bolting of the cool-season crops also will occur when late-season crops are exposed to hot temperatures.

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

Irish potatoes: Begin planting Irish potatoes around mid-January in south Louisiana and about 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 (0.7-0.8 pounds per 10 feet of 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. Irish potato plants may be nipped back by a light frost, but damage usually is not serious.

Plant seed pieces 10 to 15 inches apart in the row.

Transplant Production

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

Transplants require sunlight. Provide full sunlight all day when seedlings first appear. If starting transplants inside a house, keep on a bright window sill. Most cole crops will be ready to transplant five to six weeks after seeding.

Make sure you harden off your transplants before moving them into the garden. Remove the plants from your home or greenhouse and keep outside for one week. Water less frequently than you did when they were growing indoors.

Plant transplants into the garden early in the morning or early in the evening. Do not wait any longer than one hour after planting to water!

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

Web Soil Survey: A World of Soil Information at Your Fingertips

Have you ever wondered what type of soil you have in your backyard or on your farm? Do you know if your home sits in an area prone to flooding? Is your soil fertile? How can you find out?

For many years, the U.S. Department of Agriculture's Natural Resources Conservation Service published parish soil surveys – aerial photos with soil types drawn on top of the image. The surveys would tell landowners and others the basic properties about their soils and would give suggestions for optimal use of the land.

Today, the NRCS disseminates all soil information electronically via the internet at a website known as Web Soil Survey (http://websoilsurvey.nrcs.usda.gov/app/HomePage.htm). The site is essentially a geographic information system targeted at homeowners/landowners. The user interface is designed to be intuitive and easy to use.

Web Soil Survey has a tremendous amount of information and data to offer. Users simply identify their location (choose from street address, parish, latitude and longitude, etc.), define the area of interest (basically drawing a block on the screen around the area you wish to learn more about) and set the program to work. It will instantly retrieve soil data about the area you selected, but even more importantly, it will provide a wide array of interpretations on what that data means to you. Examples of interpretations include suitability of the soil for building site development, construction materials, military operations, recreational development, sanitary facilities, vegetative productivity, waste management and water management.

Of course, all the original SOIL data is there as well, including soil chemical properties (pH, salinity, buffering capacity, etc.), soil erosion factors, soil physical properties (sand, silt and clay percentage, bulk density, plasticity, organic matter content, linear extensibility and hydraulic conductivity), soil qualities and features (drainage class, depth to restrictive layer, hydrologic soil group, etc.) and water features (depth to water table, ponding frequency and flooding frequency).

Once you have selected the soil properties or interpretations of your choice, you can view the ratings for your selected area of interest and obtain detailed information on what the interpretations mean to you. If you are a bit rusty on your understanding of soil terminology, there is even a section called "Intro to Soils," which is a great learning resource or refresher for those who need more information.

Web Soil Survey also lets you print beautiful maps with full interpretations, legends, scale bars, etc. into pdf documents that you can save on your computer, e-mail to a friend or colleague or print on your color printer.

Of course, your local AgCenter Extension Service office will always be here to help you with questions or specific issues related to your property. You can also submit soil samples to the Soil Testing and Plant Analysis Lab (www.lsuagcenter.com/soiltest) on the LSU campus. In about a week, you will receive a detailed report of your soil properties and guidelines for improving your soil fertility.

For smartphone users, there also is a mobile soil "app" called SoilWeb. (Find it as a free app at the iTunes store.) The app uses the GPS in your phone to determine your approximate position, then downloads soil series information that can be displayed right on your phone. This type of data in the palm of your hand can be a really useful tool for farmers or homeowners curious about soils of a certain area.

Check out Web Soil Survey and SoilWeb! Both provide a wide array of helpful information to landowners.

David C. Weindorf, Ph.D.

Turfgrasses and Lawns

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

Because lawns are not actively growing, fertilizer applications are not needed during the winter. In fact, nitrogen fertilization should have ceased on home lawns by late summer (mid- to late August for St. Augustine grass and centipede grass). Nitrogen fertilizer on dormant to semi-dormant St. Augustine, centipede and zoysia lawns can lead to increased brown patch and winter kill. Also, nitrogen applications during this time have a greater potential for leaching or movement into nontarget areas.

Winter is an excellent time to collect soil samples and submit them for analysis. Samples should be a composite of soil taken from about 3 to 4 inches deep at various places around the lawn.

To get your sample tested, bring about 1 pint of soil to your parish's LSU AgCenter Extension Service office or a participating garden center. Make sure to specify the type of grass you are growing on the soil test form. Soil samples submitted to the LSU AgCenter cost only $10, and they provide a wealth of information concerning the overall fertility of your soil.

If results of the soil test indicate the soil pH is too acidic, lime will be prescribed in the soil test recommendations. Winter is the best time to apply lime so it can be fully activated by the following spring. The correct soil pH is extremely important and has everything to do with nutrient availability to your lawn's roots and to fertilizer performance.

Postpone any permanent warm-season turfgrass establishment from seed until next spring. Sod, such as St. Augustine and centipede grasses, can be laid during winter, if necessary, but remember to keep it moist to prevent it from drying out and dying. Establishment is easiest when delayed until the middle of 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 myclobutanil, propiconazole, pyraclostrobin, thiophanate-methyl and triticonazole will reduce the spread of brown patch. In addition, azoxystrobin is now available as granular fungicide. Azoxystrobin is one of the best fungicides on brown patch disease.

Damage from brown patch will slow spring green-up, and affected areas will

remain unsightly until warmer spring weather conditions allow for turfgrass recovery.

Lawns 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 winter weeds and will result in lush turfgrass growth that is more susceptible to injury from late frosts or brown patch. Lawns may be fertilized in the New Orleans area by late March, but delay fertilizing areas north of Baton Rouge until early to mid-April.

Broadleaf weeds and annual bluegrass infesting St. Augustine, centipede, zoysia and dormant Bermuda grasses can be managed with applications of atrazine herbicide. February and March are good months to spray winter weeds while they are still actively growing. Also, herbicides containing three-way mixtures of 2,4-D plus dicamba plus mecoprop can be used for winter broadleaf control in all southern turfgrasses at this time of the year.

Since weed-and-feed products usually contain high levels of nitrogen fertilizer, however, application should be delayed until the appropriate times for applying nitrogen-containing fertilizers for your area. (See paragraph above.) The weed-and-feed product can be substituted as your first application of fertilizer during the early spring, if you'd like.

Ron Strahan
Turfgrass Science

Fruits

Deciduous Fruits

Deciduous fruit trees shed their leaves in winter. Developing and maintaining a successful home orchard requires much horticultural skill because fruit trees are perennial.

Generally, homeowners who select the wrong cultivar (variety) or site will fail regardless of how much care and attention they provide.

Despite the careful attention needed, the pleasure of eating truly fresh fruit picked at its peak of maturity more than compensates the enthusiast for the time and effort. A well-designed and well-managed home orchard can furnish both fine fruit and pleasant hours of gardening.

Stone Fruits

Peaches, nectarines, and plums are called stone, or drupe, fruits because they consist of a seed enclosed in a heavy pit or stone, surrounded by soft flesh. Certain cultivars of these fruits can be grown successfully in Louisiana. Other stone fruits, such as apricots, almonds and cherries are not well-adapted to Louisiana and should not be planted here. The various stone fruits are closely related, all being different species within the same genus, *Prunus*.

Fruit development

The fruit development occurs in stages. During the first stage, which starts immediately after fruit set, the stone or pit is soft and the proportion of flesh to pit is small. The second stage is a transitional stage during which the pit hardens. After pit hardening, the third stage begins; the flesh develops rapidly and the fruit diameter increases correspondingly. This often is called the final swell.

Peach, nectarine and plum trees often set too many fruit, and some of this fruit must be removed to obtain the desired size for the other fruit. This procedure is called fruit thinning. Fruit are usually thinned to one fruit per 4 to 6 inches of stem length. To obtain the maximum benefit from thinning, it must be done prior to pit hardening, which is the second stage of fruit development. This stage can be recognized by the increased difficulty of cutting through the pit with a knife. When the knife first encounters a resistance to cutting through the seed, the pit hardening stage has begun.

Optimum soil moisture conditions are essential during the final swell to increase fruit size. Irrigation is necessary during dry periods due to the characteristic shallow root system of stone fruits. Avoid frequent light irrigations because this tends to promote root development near the soil surface, further increasing the shallowness of the root system. A general rule is to apply 2 inches of water every 10 to 14 days, unless adequate rainfall occurs.

You can measure the amount of water by placing a can or another empty container under the tree during watering. When the water level in the can reaches 2 inches, enough water has been applied.

Peach and nectarine trees usually make extensive terminal growth each

year, which requires relatively heavy annual pruning. On the other hand, plums fruit on both long twigs and on very short twigs, called spurs. Since there is less terminal growth for plums than for peaches, correspondingly less pruning is needed for plums. Fruit buds are produced during the spring and summer on current season growth.

Chilling requirements

Most deciduous fruit trees, including stone fruits, require accumulated exposure to cool temperatures during winter dormancy for the resumption of normal growth the following spring. This requirement is specific for each cultivar and is referred to as its chilling requirement. Common cultivars grown in more northern climates may have too high in chilling requirement to be grown successfully in Louisiana. Only those cultivars adapted to Louisiana's mild winter climate should be considered.

In Louisiana, stone fruits tend to bloom soon after the chilling requirement is satisfied. This, coupled with alternating periods of warm and cold weather during the late winter and spring in Louisiana, may result in early bloom that is frequently damaged by late freezes. Because of this hazard, the warmest sites within the orchard should be reserved for stone fruits.

Rootstocks

Peach and nectarine rootstocks require good soil drainage. For example, the Marianna plum is not a good rootstock for peaches because the tree will be very short-lived. On the other hand, peach can be used as a rootstock for plums – but only when planted on well-drained soils. In Louisiana, root-knot nematode-resistant peach rootstocks, such as Flordaguard, should be considered.

Peaches, nectarines and plums are susceptible to a multitude of pests, including diseases, nematodes and insects. Thus, a regular pest control program must be followed to ensure good fruit quality.

Pome Fruits

Apple (*Malus domestica*), pear (*Pyrus* spp.), quince (*Cydonia oblonga*) and the native mayhaw (*Crataegus* spp.) are examples of pome fruits. Many apple, pear and quince cultivars are not well-adapted to Louisiana because of their high chilling requirement.

Fire blight, a bacterial disease, is particularly damaging throughout the southeastern United States and prevents successful production of most soft dessert or European-type pears in Louisiana and other southeastern states.

Oriental or hard pears and some hybrids with European types are tolerant of fire blight, and some of these cultivars are adapted to Louisiana's climate. Even adapted cultivars are susceptible to leaf spot, and proper control may require more spraying than the hobbyist is likely to accept. Moreover, except for canning, the quality of Oriental pears is poor. On the other hand, pears will grow and produce on virtually all soils, and the bloom has ornamental value.

The native mayhaw makes a small, attractive dooryard tree, but the small fruit is used only for making jelly.

Persimmons

The Oriental persimmon (*Diospyros kaki*) is well-adapted to Louisiana. It is often budded on native persimmon (*D. Virginia*) seedlings.

Care must be taken in fertilizing persimmons because excessive nitrogen fertilization increases plant vigor and may cause young fruit to drop prematurely. Late growth in the fall and activation of cambial growth of the trunk during warm periods, followed by freezing temperatures in the winter, may cause bark to split and cold cankers to develop.

Some persimmon cultivars are seedy and others are seedless. Some must become soft before the fruit loses its astringency. Others are nonastringent and can be eaten while still firm and crisp. For local use, persimmons can be grown on a wide range of soils with little or no pest control or pruning. The tree itself has large, glossy, green leaves and highly colored fruit that make it a beautiful dooryard tree.

Figs

The edible fig (*Ficus carica*) is structurally a fleshy, hollow stem with flowers produced on the inner walls of the cavity. There is an opening or eye at the apex of the false fruit through which disease organisms and insects can enter, causing souring and splitting.

Cultivars differ, however, in the extent to which this eye is open, and those such as Celeste, which have eyes that are not open until near maturity, are best-adapted to Louisiana.

Fig trees grow vigorously. While they do not require pruning for continued fruit production, pruning helps control tree size and prolongs the fruiting season.

Although quite hardy when fully winter dormant, the fig often leafs out early in the spring and is killed back by late freezes. Throughout much of north and north central Louisiana, late freeze damage usually keeps the tree from attaining a large size and results in development of a bush form with several major branches, rather than a tree with a single trunk.

The fig is best-adapted to near-desert conditions but actually grows well throughout most of the southern United States.

In Louisiana's humid climate, fig rust should be controlled with fungicide sprays. A fruit weevil, which cannot be controlled economically, can cause damage. Root-knot nematodes can cause damage, especially on deep, sandy soils.

On sandy soils, best results are obtained when figs are planted near a building or are heavily mulched. In both cases, a more favorable root environment is furnished. Full sun is desirable, and competition from grass and other plants should be avoided.

David Himelrick, Ph.D., Fruit Specialist

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 get some idea of the use of these practices in your area.

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.

1. Please list your parish _____

2. How helpful were each of the following sources of information in helping you grow a home vegetable garden?

Source	Very helpful	Fairly helpful	Not helpful	I don't use it
Newspapers	❑	❑	❑	❑
Garden magazines	❑	❑	❑	❑
TV-radio	❑	❑	❑	❑
Friends/relatives	❑	❑	❑	❑
Extension Service gardening pamphlets	❑	❑	❑	❑
County Agent/Master Gardener	❑	❑	❑	❑
Horticulture Hints or your parish Extension Service newsletter	❑	❑	❑	❑
Extension educational programs	❑	❑	❑	❑
Garden centers/feed-and-seed stores	❑	❑	❑	❑
Internet/websites	❑	❑	❑	❑

3. Since you started gardening, indicate the extent to which you have used the following LSU AgCenter/Louisiana Cooperative Extension Service recommendations.

Source	Often	Often Sometimes	Seldom	Never
Extension recommended varieties	❑	❑	❑	❑
Extension insect control recommendations	❑	❑	❑	❑
Extension disease control recommendations	❑	❑	❑	❑
Fertilize according to soil test	❑	❑	❑	❑
Extension recommended planting dates	❑	❑	❑	❑
Extension recommended irrigation practices	❑	❑	❑	❑

4. To what extent did your garden contribute the following?

Source	Little	Much	Some
Fresher vegetables	❑	❑	❑
Better quality vegetables	❑	❑	❑
Savings on food costs	❑	❑	❑
Pleasure and pastime	❑	❑	❑
Improving family nutrition	❑	❑	❑
Better availability of uncommon vegetables	❑	❑	❑
Organically grown vegetables	❑	❑	❑

5. How much do you think the dollar value of your garden crops are each year? $_____

6. What is the size of your garden? Length _____Feet Width _____ Feet

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

❑ Better than average ❑ Average ❑ Less than average

8. When do you work in the vegetable garden? (Check all that apply.)

Season	Much	Some	Little or none
Spring	❑	❑	❑
Summer	❑	❑	❑
Fall	❑	❑	❑
Winter	❑	❑	❑

9. Age of the primary gardener is _____ years old.

10. The primary gardener(s) is (are) ❑ Male ❑ Female ❑ Both

11. Where you live is mostly: (Check one.)

❑ Rural ❑ Suburban ❑ City

Thank you for your help.

Please return before Jan. 13, 2012.

Mail to:
Kathryn Fontneot
School of Plant, Environmental and Soil Sciences
155 J.C. Miller Hall
Baton Rouge, LA 70803

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Horticulture Hints

Winter 2011

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Prepared quarterly by:

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