Horticulture Hints

for Louisiana

Spring 2025

2025 Louisiana Super Plants Named

Guara has been selected as a 2025 Super Plant. Photo by Randy LaBauve

The LSU AgCenter has announced the release of four Louisiana Super Plants for 2025. The spring 2025 herbaceous perennial highlight is gaura (*Oenothera lindheimeri*). Gaura was selected for its tolerance of both high temperatures and drought, something we've become all too familiar with in Louisiana over the past couple of years. Native to the south-central United States, this clump-forming herbaceous perennial reaches 2.5 to 4 feet in height, and the delicate wispy flowers lend a unique texture to the garden.

In the shrub category, a collection of southern indica azaleas (*Rhododendron indicum*) including George L. Tabor, Formosa and G.G. Gerbing have been named for spring 2025. Native to Japan, these shrubs are proven performers in the landscape. These multi-stemmed, evergreen azaleas will vary in size depending on the variety and planting location, growing 6 to 8 feet tall and 4 to 7 feet wide. Flower colors also vary between varieties. The flowers featured on George L. Tabor are a light pink with darker pink blotches in the throat, whereas Formosa flowers are typically available in shades ranging from lavender to purple to deep magenta, with darker blotches in the throat of each individual flower. The G.G. Gerbing azalea possesses pure white blooms with splotches of light yellow to green in the throat.

For summer 2025, cuphea firecracker plant Vermillionaire (*Cuphea* hybrid) has been named. Vermillionaire cuphea can be grown as a perennial in U.S. Department of Agriculture zones 8 and higher but should be treated as an annual in colder climates. The plants reach 18 to 28 inches in height with a spread from 12 to 24 inches wide. A heat- and drought-tolerant plant, the bloom period will stretch out over several months once the weather turns warm, attracting hummingbirds with the abundant yellow-orange flowers.

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Dethawing and Deciphering Issues and Solutions in the Spring Landscape

The seasonal transition period between January and April is marked by a mix of wintry and warm weather. Many of us are torn between clinging to cool-season crops and welcoming our warm-season color to the landscape. While our well-meaning eagerness to improve our landscape stems from the desire to get back into the garden as the days grow longer and pleasant weather proliferates, judicious approaches should be taken to ensure that our enthusiasm enhances and doesn't injure our landscape.

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If a plant appears to be dead, gently scratch the stem to see if there is healthy green tissue underneath. Photo by Damon Abdi

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Centaurea cineraria rounds out the selections for fall 2025 and is commonly known as dusty miller. Another heat- and drought-tolerant selection, this smaller sized herbaceous perennial is hardy to USDA zone 8. Though considered an herbaceous perennial, dusty miller is generally used in Louisiana landscapes as an annual. The plants are valued for their leaves that are covered with fine grey-white hairs on both sides, giving the leaves a velvety appearance. When wet, the grey-white color fades and the green of the leaf is visible. Additionally, plants grown in the shade tend to look greener than those grown in full sun. The flowers are usually removed so as not to detract from the foliage. At a mature size of about 12 inches tall and 12 inches wide, dusty miller is ideally suited for mass plantings, border edging, container plantings and hanging baskets. It is best suited for placement in full sun though it can tolerate light shade, and the plants prefer well-drained soil, as they will often die in standing water.

Be sure to check out the LSU AgCenter and Louisiana Super Plants websites in early 2025 for more information on each of these terrific additions to your home garden.

Sara R. Shields, Ph.D.
Louisiana Master Gardener State Coordinator

The silver foliage of dusty miller can give off a glow at night. Photo by Heather Kirk-Ballard

Upcoming Events:

- **Feb. 14-16 – Louisiana Native Plant Conference.** 1202 Academy Drive, Eunice. For more information or to register, visit https://tinyurl.com/4fpwx5ja.
- **Feb. 28 – Louisiana Arborist Continuing Education Program.** 7:30 a.m. to 4 p.m., Ouachita Parish Extension Office, 704 Cypress St., West Monroe. For more information or to register, visit https://LSUAgCenter.com/arborist.
- **March 7-9 – LSU AgCenter Spring Garden Show.** John M. Parker Agricultural Coliseum, LSU Avenue, Baton Rouge. For more information, contact Brayden Echols at mechols@agcenter.lsu.edu or 225-578-1840.
- **March 29 – LSU AgCenter Citrus Symposium.** 9 a.m. to 3 p.m., 5124 E. St. Bernard Highway, Violet. For more information or to register, email Anna Timmerman at atimmerman@agcenter.lsu.edu.
- **May 16 – Louisiana Arborist Continuing Education Program.** 7:30 a.m. to 4 p.m., Louisiana Small Business Development Center, 4205 Ryan St., Lake Charles. For more information or to register, visit https://LSUAgCenter.com/arborist.
- **May 23 – Louisiana Arborist Continuing Education Program.** 7:30 a.m. to 4 p.m., LSU of Alexandria, 8100 Highway 71 S., Alexandria. For more information or to register, visit https://LSUAgCenter.com/arborist.
- **Aug. 29 – Louisiana Arborist Continuing Education Program.** 7:30 a.m. to 4 p.m., ULL Student Union, 104 E. University Circle, Lafayette. For more information or to register, visit https://LSUAgCenter.com/arborist.
- **Sept. 5 – Louisiana Arborist Continuing Education Program.** 7:30 a.m. to 4 p.m., Red River Research Station, 262 Research Station Drive, Bossier City. For more information or to register, visit https://LSUAgCenter.com/arborist.

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Spring flowers on woody plants, like this redbud, are formed the preceding fall, and early pruning would sacrifice those blooms.

Do not prune spring flowering plants, such as Jane magnolia, until after they finish blooming. Photos by Damon Abdi

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Spells of warm weather in late winter often ignite the growth of plants prematurely, only for the fresh foliage to be eviscerated when an unfortunate frost follows. Exercising patience is key when deciding when to fertilize and when assessing whether a plant has been knocked out, or simply just knocked down temporarily, from the winter weather. A good practice is to time fertilizer applications to support a flush of growth after the greatest risks of cold weather have passed. Fertilizer will stimulate new growth, which we certainly want, but just not too early. A good practice is to provide granular nutrients in three intervals six to eight weeks apart. March May, and July are appropriate times for much of Louisiana, although in south Louisiana, bumping that up a couple weeks should be ok. There is no need to be overeager when applying fertilizer since you can always add more, but it's awfully hard to take fertilizer away. Force-feeding fertilizer to young plants to accelerate growth can be a recipe for disaster. Patience is key.

Speaking of patience, some of your woody landscape plants may indeed be wounded patients in the landscape but give them time to recover before you pronounce them dead. Let nature take its course and keep observant for new growth. If you are impatient to find whether the plant has perished, gently scratch part of the stem to reveal the vascular cambium. If it's alive and well, green tissue will be apparent. If you don't see green tissue, it may pay to wait a little longer and hold out hope that the plant remains alive. Remember, you can always remove it later. Give it a chance to grow back.

If you have your heart set on maintenance sooner than later, keep Valentine's Day in mind. This is typically the target time to prune roses in south Louisiana, so make sure you set a date with your pruning equipment around then. Proper pruning practices should be performed to remove dead wood, encourage a new flush of growth, maintain form and improve airflow, which is a good practice to mitigate disease. In late February or early March, cutting back ornamental grasses allows space for new growth as temperatures start to consistently warm up. You may have seen my articles encouraging people not to cut ornamental grasses back too early while in winter to maintain a habitat for wildlife through the coldest months. Just as important as knowing what to prune, knowing what not to prune is something to consider. Do not prune your favorite spring flowering plants, such as azaleas, redbuds or magnolia Jane, until after they finish blooming. Spring flowers on woody plants form the preceding fall, so premature pruning sacrifices those blooms. It is best to prune flowering woody ornamentals after the blooms fade.

Spring is also an ideal time to install new plants in the landscape. The milder temperatures support acclimation and establishment before summer turns up the temperature dial. If you are looking to replace or add new plants to the landscape, now is a perfect time. Generally speaking, fall and spring are the sweet spots. So, as you are gearing up for spring, prioritize certain tasks and exercise a little patience to support a successful season.

Damon Abdi, Ph.D.
Assistant Professor, Extension Specialist,
Hammond Research Station

Adobe Stock photo

Spring Vegetable Tips

Has your bank account recovered from all the holiday gift purchases? I hope so, because spring is here, and it's time to open seed catalogs and order before all of the great varieties are gone. Ordering seeds in January and February reminds me that the cold, rainy, miserable weather will soon vanish, and spring will rush in quicker than we think. Below are a few garden tasks to knock out prior to planting your spring vegetable beds.

- Order seeds!
- Purchase some nice germinating media (potting soil) to start the seeds in.
- Wash any containers you plan on starting seedlings in with a 10% bleach solution to minimize fungal and bacterial problems in your new plants.
- Remove weeds and insect- or disease-infested plants from the fall garden.
- Work the soil. Loosely till or spade your garden area.
- Apply fertilizer or aged manure. A key to achieving heavy vegetable harvests is using adequate fertilizer. For example, most mixed gardens, where all warm-season crops are combined into one area, require a medium rate of fertilizer. There are hundreds of fertilizers to choose from. To keep the recommendation simple, I would apply 0.5 to 1 pound of 13-13-13 for every 10 linear feet of row in your garden space. That rate assumes your rows are no wider than 48 inches. That is about 1 to 2 cups of 13-13-13.
- Water the fertilizer in.
- Plant! In south Louisiana, plant in early to mid-March. In central and northern Louisiana, plant April 1, or late March if it is warm.

March

Directly sow seeds of snap beans, beets, radish, lettuce, collards, mustards and turnips into nice, loose soil.

In south Louisiana, plant tomatoes, peppers and eggplant seedlings mid-month. Plant cantaloupes, squash, cucumbers and watermelons well after the danger of frost is over. Melon seed can be sown directly into the soil, or you can plant seedlings to harvest fruit earlier. In north Louisiana, wait a bit longer and watch the weather to wait until the last freeze has passed.

April

Direct seed butter beans, okra and southern peas, only after the soil is truly warm. Direct seed snap beans, radish, collards, cucumbers, pumpkins, winter squash, summer squash and watermelon.

Plant tomato, pepper, eggplant, cucumber, squash seedlings (summer and winter) and melon seedlings (watermelon, honeydew, and cantaloupe). Plant sweet potato slips late in the month.

May

Most spring vegetables can be planted in May, since the soil has warmed and the danger of frost has passed. Plant sweet potato slips, tomato, eggplant, pepper, cucumber, squash seedlings (summer and winter) and melon seedlings (watermelon, honeydew and cantaloupe).

LSU AgCenter file photo

Direct seed southern peas, butter beans, okra and any of the cucurbit crops (melons, squash, gourds, pumpkins and cucumbers). Just remember, if you want pumpkins and gourds for Halloween or to decorate in October, wait to plant these seeds during the last week of June. Giant pumpkin lovers should start seeds in late May or early June and pray the humidity and worms are at bay.

Most importantly, grow a new crop or a new variety to spice the garden up. You may surprise yourself with the next best vegetable you have ever tasted.

Kathryn Fontenot, Ph.D.
Extension Vegetable Specialist

Last-Minute Lawncare: What To Do This Spring

In a few weeks, spring will be upon us. Soon enough, Louisiana lawns will be waking up from a long winter's nap. I use "long" loosely, being from Michigan. But let's first go back to fall. It's a busy time of year. School was back in session, football and tailgating was in full swing and the holidays were looming around the corner. It's understandable if you didn't have the chance to put your lawn to bed properly for the winter. All is not lost.

Sometimes the best thing to do is do nothing at all. I'm not going to go that far, but a lot of spring lawn care is about what not to do. It's like giving yourself a head start by not setting yourself back. Don't worry, there are still plenty of actionable items to check off the list as winter ends to set yourself up for a great summer. The following are a few key areas to pay attention to this spring.

Weeds

Weeds are the most common thing I am asked about, so let's start there. Didn't get a chance to put out your fall preemergence herbicide last year? Chances are you're dealing with a wide array of healthy, full-grown weeds. It may be tempting to break out the weed-killing spray and start firing at will. If you feel this urge, remember two things:

First, your turf is not fully awake and functioning until the soil reaches a minimum of 60 F. It may look somewhat green, but that doesn't mean it's ready to be sprayed with an herbicide. During the transition from dormancy to active growth, warm-season grasses are particularly vulnerable to herbicide damage. It's even possible that your grass may have never gone fully dormant. Their metabolic processes are ramping up, but the grasses are not yet growing to their full potential, which reduces their ability to quickly metabolize and detoxify the herbicide. Centipedegrass and St. Augustinegrass are particularly sensitive. If you can't tell whether your turf is dormant or actively growing, that's a sign that you're not ready for postemergence herbicides. Wait until it's obvious that the lawn has transitioned to active, vigorous growth to apply postemergence herbicides.

Second, those weeds are 99.9% likely to be either winter annuals or perennial weeds. You'll have plenty of time to spray perennials down the road. Winter annuals are weeds like chickweed, henbit, lawn burweed and annual bluegrass (Poa or Po'Ana). The lifecycle of winter annuals will soon be coming to a close for the year as they go to flower, set seed and die off at the first sign of warm temperatures. Is a herbicide application on vulnerable grass warranted to remove weeds that will be dying off in a month or two anyway? That's ultimately your call (maybe worth it if it's lawn burweed), but the safest option is to write this year off. Wait for the late summer or early fall and control the 2025-2026 versions that will germinate next fall with a preemergence herbicide application at the end of summer.

There is still time to get your summer annual preemergence application down. By the book, crabgrass seeds germinate when soil temperatures reach about 55 F for a few days consecutively. If you want to monitor 2-inch soil temperatures, aim to apply your preemergence herbicide once soil temps are consistently above 50 F. Remember, it needs to be in the soil before it warms to 55 F, or you'll get very little weed control. For those that like calendar dates, apply preemergence herbicides before Valentine's Day

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Weeds like henbit will be dying off for the year at the first sign of hot weather. Avoid using postemergence herbicides to kill winter annuals in turf that is transitioning to active growth. Photo by Adobe Stock

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for New Orleans, Baton Rouge, Lafayette and Lake Charles. Alexandrians wait until around Valentine's Day, and Shreveport and Monroe before March 1. Most preemergence herbicides have a decent residual in the soil, so erring on the side of being too early is much better than waiting too long.

Fertilizer

The same approach should be used when it comes to fertilizing. The only grass that should be receiving fertilizer is fully green and actively growing turf. If the soil is not consistently above 60 F to 65 F at a depth of 3 to 4 inches, your lawn is not growing vigorously enough to make full use of a fertilizer application. Applying nitrogen fertilizer too early in the year increases the risk of sustaining frost damage and setting your lawn back another two weeks.

Nitrogen fertilizers encourage shoot (leaf) growth, and these young, tender shoots are not prepared to deal with the stress of a late winter freeze. This can result in dieback of the new tissue and is a waste for the plant that just used resources to create leafy growth that is no longer viable. Instead, wait until you're certain that it's been warm enough and your lawn is actively growing before applying any nitrogen fertilizers. I don't see any reason to fertilize a lawn before the end of March or early April anywhere in the state.

Diseases

The number one disease that comes to mind in winter and spring is large patch (Rhizoctonia, warm-season brown patch, zoysia patch). It's particularly bad on St. Augustinegrass and zoysia. Like all turf diseases, preventative control is the best method. Curative control of diseases is much less effective. We're past that point now with large patch. A curative fungicide application can be made when soil temps are around 50 F.

Large patch is favored by poor drainage. Consider using the spring to install subsurface drainage to reduce future large patch pressure.

You can also use this spring to remedy underlying causes of disease outbreaks. Unfortunately, the inherent traits of Louisiana play against us in large patch control. The disease is favored by poor surface and subsurface drainage, leaf canopy moisture, stagnant humid air and cloud cover.

Remedy the situation by reducing irrigation throughout the year. Overwatering creates so many problems and exacerbates this situation. If you're chronically waterlogged, consider installing subsurface drainage to help direct water away from the area. Prune trees and shrubs to increase airflow and sunlight in the area. The more airflow, the better. Also, check your mowing heights. Turf mowed too low is more susceptible to large patch infection than turf mowed at the proper height.

Mowing

If you're growing St. Augustinegrass, make sure to check that your mower is set to at least a 3-inch height of cut. All the troubled St. Augustinegrass lawns I see around Baton Rouge are cut too low. There is a reason they don't use St. Augustinegrass for golf course fairways. It prefers life at a height of 3 inches.

Buy a new mower blade or sharpen your existing blade. Some small engine shops may be able to assist you with sharpening your blade. You don't need to be able to shave your face with the blade, but it should be free of knicks and dents on the cutting edge. If you do sharpen your blade yourself, make sure it is balanced before reinstalling. If one side weighs more than the other, it can put unnecessary strain on the mower spindle holding it in place and result in costly repairs down the road.

Pick up sticks and debris that have accumulated during the winter months. Your first mow of the year can be a little bit lower than your normal mowing height. This will help open the turf canopy to allow new shoots to receive sunlight and get rid of old, decaying shoots from the previous year that can harbor disease.

Pay attention to these important details this spring and you'll set yourself up for success this summer. When it comes to lawn care, sometimes what you don't do plays just as big of a role as what you are doing.

Eric DeBoer, Ph.D.
Assistant Professor

It might be tempting to mow over small sticks during spring cleanup. Pick them up prior to your first mow of the spring to increase the lifespan of your mower blade. Photos by Eric DeBoer

The Time Is Now to Start Your Seeds Indoors for Spring Transplantings

Welcome to Louisiana where the weather is as unpredictable as the final score at a New Orleans Saints or LSU Tigers football game, I always say to people that are new to the Bayou State, "If you don't like the weather, wait five minutes and it will change." All jokes aside, it's been a cold winter, and the last frost is expected to be at the end of February or possibly the beginning of March. You know what that means — it could be a cold Mardi Gras, and we might not be in the garden until after Ash Wednesday. In the meantime, we can begin to prepare and germinate seeds to start our seedlings for transplants when the ground warms up.

There are a few factors to consider before we begin. "What to plant?" is the first question that comes to mind. I prefer native plants indigenous to Louisiana and support our state's natural ecosystem. These plants can be a welcome addition in your garden or landscape without requiring expensive inputs. Native plants provide crucial habitat for pollinators, and many beneficial insects' life cycles are dependent on native host plants including several species of moths, butterflies and bees. The attractive flowers provide vital nectar to these pollinators while providing fruit to biodiverse wildlife such as songbirds, rabbit, deer, turkey, quail, and other amphibians and reptiles. Native plant species are already adapted to Louisiana's environment. Many are more drought tolerant and flood resistant.

Whether your selected plant species are native or not, each plant has different requirements for germinating seed. Some plants seeds can be directly sown into the soil. For other plants, you may need one or more treatments to overcome dormancy. Some seeds require stratification, which is an alternating exposure to cold and/or hot temperatures sometimes with the addition of moisture. Some seeds require scratching (scarification), which can be achieved by using sandpaper or certain chemicals. Some seeds may germinate better with a soak in water for 24 hours prior to sowing. There is also a method of hot water scarification that involves soaking for up to 24 hours prior to sowing. The float/sink test is the idea that after 24 hours of soaking, the seed should sink to the bottom of your container. Personally, I wouldn't waste my time on this test as you may lose actual viable seed by doing so. The process of scarification will assist with uptake of water (imbibition), which is the first stage of germination. In nature, these processes take place over time with exposure to the environment. When starting seeds indoors you play the role of Mother Nature, and it is important to research your plants and determine each seed's required preparation before you begin.

Once you decide what you will plant and have your seeds prepared for germination you can start sowing. To start seeds indoors, you will need a seed germination media and some cell trays or little plastic storage containers. You will need lighting or a good windowsill. You may want to add a heating pad if your windowsill is extra cold. In general, my process is to take my prepared soaked seeds and sow them in a premoistened seed starter media in plastic storage containers making sure to sow each seed at the appropriate depth. Then I close the lid to the container making a tiny green house, place the containers on the windowsill and wait patiently for signs of life. Once the cotyledons and first true leaves emerge, I feel the accomplishment of success and continue to care for my new plant babies until it is time to move them outside after the last frost of the winter season has passed. That time for Louisiana seems to be coming at the end of Mardi Gras, just after Ash Wednesday and right in time for the LSU AgCenter Garden Show to be held March 7-9, 2025, at Parker Coliseum on the LSU Baton Rouge campus.

Jennifer Blanchard
Instructor

The Garden Show is a great opportunity to purchase a few more plants to accompany your transplants in the garden and pick up some other great garden additions. This year, the AgCenter is hosting a speaker series to accompany the garden show, and I will be giving a talk entitled "Medicinal Plants and Ethnobotany for Gardeners of the Southeast." Other experts will give talks on everything from lawns and edible plants to school gardens and using AI for pest detection. The speaker series includes:

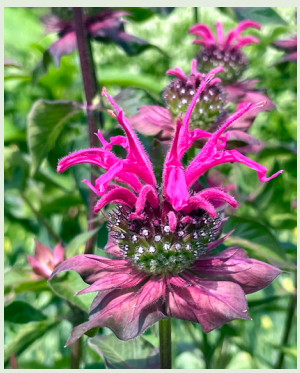
Saturday, March 8

- **10 a.m.-11 a.m.:** Battling the Bayou Blues: Tackling common summer lawn issues in Louisiana, by Eric DeBoer
- **11 a.m.-12 p.m.:** Engaging Youth and the Community in Farm to School, by Carl Motsenbocker
- **1 p.m.-2 p.m.:** Blackberry and Raspberry Production in Louisiana, by David Picha
- **2 p.m.-3 p.m.:** Edible Plants of the Gulf South, by Charles Allen

Sunday March 9

- **10 a.m.-11 a.m.:** The Beauty of Edibles: Transforming Your Landscape into a Food Source, by Isabella Frank
- **11 a.m.-12 p.m.:** Conservation Corridors, by Brian Early
- **1 p.m.-2 p.m.:** Medicinal Plants and Ethnobotany for Gardeners of the Southeast, by Jennifer Blanchard
- **2 p.m.-3 p.m.:** AI-Enable Pest Detection in Specialty Crops, by Congliang Zhou

For more information on horticulture and help with your lawn and garden questions, visit www.LSUAgCenter.com/topics/lawn_garden



Left: Native plants, like this scarlet beebalm, provide crucial habitat for pollinators. Right: Some seeds may germinate better with a soak in water for 24 hours prior to sowing. Photos by Jennifer Blanchard

New Sweet Potato Variety Updates

Our harvest season goes on and on. We intentionally plant late and harvest late to see how our lines and varieties perform in these less-than-ideal conditions. Our first-year selections, which started out as true seed, don't see the field until the middle of July and are harvested at the end of November. If they make it through this, they definitely get a second look the next year.

The Avoyelles variety didn't disappoint us in our trials. In nearly all multi-state trials, it was the highest ranking for total yield and was tagged as the best for U.S. No. 1 yield in the vast majority of plots.

A couple of things became clear to us. First, presprouting roots is essential, and growers with presprouted seed had good plant beds. Roots straight out of storage into beds did not do as well. We also saw a strong stand of Avoyelles when transplanted at the station in comparison to others.

Secondly, it was clear that Avoyelles is sensitive to Dual herbicide. The roots look okay shape-wise but have an irregular surface. Delaying Dual application for seven to 10 days after planting improved overall appearance.

A couple of other lines are catching our interest. One is a red skin, orange flesh line. The yield has been very strong and often out competes Orleans. We have not really seen a downside yet, and it also tastes great.

We have some other lines that are all purple skin, white flesh Murasaki types. Fresh market demand continues to be strong for this specialty type with a good box price. Murasaki is not a strong performer in our area as it really likes a very sandy soil. Our challenge is to figure out which one or ones have the best performance.

Finally, we are also excited about a promising purple fleshed variety. These are all specialty types that arise in our breeding program and are nice to have as offerings. Still, we won't lose sight of coming up with that classic orange flesh variety our Louisiana industry is so well known for in the markets.

Don La Bonte, Ph.D.
Professor, Sweet Potato Breeder

Stock photo

Irrigation Scheduling in Transitional Rainfall Environments

Evapotranspiration (ET) is the loss of water from the soil both by evaporation and by transpiration from plants. The purpose of irrigation is to replace ET when rainfall is not sufficient. As we move through the traditional rainy spring season and into an even more unpredictable rainfall pattern for the summer months, it's important to understand how to keep track of plant water needs across dynamic weather conditions common to Louisiana. Using ET and rainfall to estimate irrigation helps to minimize overwatering so that plants can maintain their health, vibrancy and longevity in the garden or landscape.

Setting a timer with an efficient but accommodating schedule during a drought or turning the timer off during heavy rain periods are simple options. However, plant water needs may not be satisfied when rainfall occurs sporadically, with too much intensity or is less than the rate of ET. Unfortunately, this means that irrigation may still be required even when seasonal rainfall totals approach normal expectations. We must work harder to be efficient irrigators as we frequently transition between dry and rainy conditions.

Tracking daily ET and rainfall are the best options for understanding how much to apply. In addition to different weather conditions affecting ET rates, plants naturally transpire different amounts. It's important to know the basic plant water needs of what you're irrigating. Irrigation should replace ET when rainfall does not.

Below are four rainfall scenarios for a turfgrass zone to illustrate this type of tracking. All measurements are shown in inches.

Date: ET	7/5 0.21	7/6 0.23	7/7 0.25	7/8 0.24	7/9 0.25	7/10 0.24	7/11 0.23	Weekly Total 1.65	Irrigation Needed	Possible Irrigation Strategy
Scenario 1: No Rain	0	0	0	0	0	0	0	0	1.65	0.75 inch/event, applied twice
Scenario 2: Surplus Rain	2.3	0.24	0	0.52	1.7	0.39	0	5.15	0	OFF
Scenario 3: Transitional (irrigation)	0	0.41	0	0	0	0.25	0	0.66	0.99	0.75 inch/event, applied once
Scenario 4: Transitional (no irrigation)	0	0.54	0	0	0.12	0	0.48	1.14	0.51	0.5 inch/event, applied once

The decision to supply the landscape with irrigation to supplement ET was much more difficult in scenarios 3 and 4 than it was for the first two scenarios. Also, there are additional considerations such as the moisture conditions from the previous week, forecasted weather, infiltration rates, slopes, microclimates, etc. Thus, these irrigation schedules are illustrative and not the only strategies considered efficient.

You may also want to keep some capacity to capture more rainfall within the soil. This deficit technique works for warm season turfgrasses and established perennials but may not be appropriate for drip-irrigated vegetables, annuals or wetland-loving plants. The key to deficit irrigation is having a well-developed root structure before introducing water stress.

If this type of tracking is not the best option for you, smart technologies may be a better option. Smart technologies are devices that help with irrigation scheduling by adjusting the irrigation schedule around ET and rainfall. The most common options are soil moisture sensors and weather-based irrigation controllers.

Stacia L. Davis Conger, Ph.D.
State Irrigation Specialist

Adobe Stock photo

Azalea infected with *Phytophthora* root rot. Photo by Raghuwinder Singh

Phytophthora Disease Management in Landscapes and Nurseries

Root and crown rot caused by *Phytophthora* species is the No. 1 ornamental plant disease in landscapes and nursery operations. In addition to root and crown rot, *Phytophthora* is also known to cause aerial blight, fruit rot, stem canker and stem rot. *Phytophthora* is a soilborne, fungus-like microorganism commonly known as water mold. There are several species of *Phytophthora* prevalent in landscapes and most of them have a wide host range.

Aboveground symptoms of this disease include wilting of foliage in the beginning. As the disease progresses, wilted foliage turns light green and then tan. Leaves dry out and finally drop. Belowground symptoms include root and crown rot. The outer layer of infected roots easily sloughs off, resulting in a rat-tail appearance, and roots lose the ability to absorb water and nutrients. The crown of the plant rots and turns dull brown. Bark of infected plants sloughs off at the soil line. Infected plants die eventually.

Phytophthora is a soilborne microorganism and may survive in soils for several years in the absence of a host due to resting (survival) structures called oospores. Poor soil drainage and compaction predispose roots to *Phytophthora* infections. The pathogen produces motile zoospores (infection propagules), which can swim in irrigation water. The pathogen can also spread via movement of contaminated soils. In landscapes, the disease is favored by poor landscape practices that create conditions conducive

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A Triple Threat to Southern Lawns

A homeowner's lawn is often a point of pride, especially in the South. There is nothing like the sound of lawnmowers cranking up to start the day. Often homeowners may notice circular brown spots on their lawn. Three causes for these spots are pet urine, chinch bug damage and brown patch disease.

Pet urine

Pet urine spots are common because animals will often return to the same spot. The brown spot will occur because of the high salt concentrations in urine, which can damage the lawn. The way to identify a pet urine spot is by monitoring the brown spot. If it is from urine, the original spot will not merge with newly formed spots. As the new spot turns brown, the old spot will start to heal. Regular irrigation and fertilization of the lawn can help with healing pet spots.

Chinch bugs

The chinch bug is an insect that attacks southern yards during the summer. Chinch bug damage starts with a small spot with irregular edges. Chinch bugs often spread through the yard forming new spots. In many cases, the spots will start merging to form a larger spot. One way to identify chinch bug damage is to do a flush test. Mix 1 tablespoon of lemon-scented liquid dish soap into 1 gallon of water and slowly pour mixture on an area where healthy grass and damaged grass meet. In about five to 10 minutes, the insects will come to the surface. Keeping your yard and soil healthy is the first line of defense against chinch bug damage. If there is significant infestation, chemical control may be needed.

Brown patch disease

Brown patch disease is caused by a fungus. The damage starts off as round spots a foot in diameter and can spread to multiple spots throughout the lawn. The circles in general have smooth edges and can eventually merge across a large area of lawn. The causes of brown patch disease are excessive irrigation, extended periods of high humidity and high rainfalls in a brief period. Two of the best defenses to battle brown patch disease are proper water and nutrient management. Watering during the hours of 4 a.m. to 8 a.m. can help prevent brown patch disease and allows for evaporation to remove any excess water during the day. Utilizing a slow-release fertilizer in the initial stages can help your lawn remain healthy.

If you have any lawn-related questions, please feel free to call 318-927-3110.

John Monzingo
Assistant County Agent



From left: A row of boxwoods shows symptoms of tan-colored foliage resulting from root and crown rot caused by *Phytophthora* species. An azalea exhibiting foliar blight symptoms caused by *Phytophthora* species. Crown rot of a symptomatic boxwood caused by *Phytophthora* species. Photos by Raghuwinder Singh

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for disease development such as deep planting, overcrowding of plants, excessive mulching, overfertilization, overirrigation, planting in clay rich soils, soil compaction and poor drainage.

Disease management in the landscape starts with avoiding diseased plants because once *Phytophthora* is introduced, this plant pathogen can persist in soil for a long time. Avoid replanting in the same areas where previous plant infections have occurred. Well-drained soils with good organic matter content are recommended for new plantings. Good cultural practices, including raised beds, proper planting depth and spacing, and proper fertilization and irrigation, may help reduce infection. Roots injured during planting become highly susceptible to *Phytophthora* infection. In landscapes where disease is prevalent, prophylactic treatment with fungicides containing active ingredients such as aluminum tris, fosetyl-Al, mefenoxam or phosphite may help avoid infection. These fungicides do not eliminate the pathogen, and repeated applications may be required to suppress the disease. Follow fungicide labels for rates and frequency of applications.

Management of root and crown rot in container-grown boxwoods in nurseries plays a crucial role in avoiding this disease. Growers must practice good sanitation practices to avoid disease spread in their production areas. Boxwood liners or potted plants imported by nurseries must be inspected, isolated and monitored for several weeks for symptoms to develop. Scout plants regularly for early disease symptoms and isolate suspected plants at once. Remove and discard symptomatic plants by burning, if feasible. Do not discard symptomatic or dead plants in cull piles. Growers must use ground covers or gravel as a barrier to reduce contact between containers and native soils. This practice will also prevent soil particles from splashing into containers resulting from overhead irrigation. Potting mix must be stored on paved concrete surfaces. Do not reuse potting mixes and containers that contained previously infected plants. Nurseries that use pond water for irrigation must treat it regularly to avoid the spread of the pathogen. Well-drained production areas and rerouting of running irrigation water away from production blocks are essential in managing this disease.

Preventative use of fungicide containing the active ingredients listed above can be effective in managing Phytophthora root and crown rot may be used at recommended rates to mitigate infections and manage this disease. Because Phytophthora root and crown rot produce similar symptoms to those produced by boxwood dieback, accurate identification is required before implementing management strategies. For more information, please visit our website at www.LSUAgCenter.com/plantdiagnostics.

Raghuwinder Singh, D.P.M.
Professor and Horticulture Pathology Extension Specialist

From left: Reddish brown lesions on infected roots caused by *Phytophthora* species. Sloughing off roots (naked roots) are a common diagnostic feature associated with root rot caused by *Phytophthora* species.


Growing Indoors

Indoor Gardening to Weather Our Southern Winters

A garden is a space that is used for the pleasurable showcase and cultivation of plants. So, what is implied by indoor gardening? Simply put, it is growing plants inside of a building. Since it's still officially winter here in Louisiana, let's discuss indoor gardening adventures.

Though the types of plants that can be grown indoors are quite extensive, this will focus on those commonly labeled as house plants. Most house plants would be considered tropical or even desert dwellers in their native habitat, but they can be cultivated to thrive indoors. The locations where these plants can thrive are just as numerous as the plants themselves. Plants can live in the bathroom, the bedroom, the kitchen and more.

The plants that make my list are pothos, snake plant, peace lily, corn plant, ficus tree, fiddle leaf fig tree, spider plant, Zanzibar gem (ZZ) plant, monstera, aloe vera, hoya, philodendron, jade plant, rubber plant, prayer plant and money tree. The real challenge isn't picking out a cool plant to care for; it's learning how to properly care for it.

The success of indoor plants hinges on two key factors: providing the proper amount of light and water. When buying plants marketed for indoors, the label contains key words such as direct light, indirect light or bright indirect light. These are important to note because they tell you where in the house the plant should be placed in relation to the sun exposure through the windows.

Direct Light Plants

In the northern hemisphere, south-facing windows provide hours of direct light from morning to afternoon. A west-facing window will get lots of afternoon light which may work as well but watch that the heat doesn't get too intense. Plants that usually need direct light are cacti, succulents and herbs.

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Bright Indirect Light Plants

This type of label means these plants want light, but they don't want to be hit directly by the sun's rays all day. Our tropical plants usually fall into this category. Think of an understory plant. This can be achieved with different window locations and distance variations or some type of filter like a sheer curtain. For a north-facing window, place the plant close and no curtain is needed. For an east- or west-facing window, the plant can be a few feet away and get a little morning or afternoon direct light. Lastly, for a south- or southwest-facing window, place the plant a few feet back where it doesn't get direct light or closer to the window with a sheer curtain. Some examples of plants in this category are monstera, philodendron and ficus.

Low Light or Medium Indirect Light Plants

Numerous plants are labeled as low-light plants but take caution in expecting these plants to truly thrive. Instead, categorize this plant as "tolerant of" and "surviving in" low-light situations. Most of these low-light plants would rather have medium indirect light which can be achieved in positions similar to bright indirect light but possibly just a little further back. For north-facing windows, place the plant a few feet away. For east- or west-facing windows, plants need to be 6-8 eight feet away. If placing them near south- or southwest-facing windows, the plant needs to be 8-12 feet away. Plant examples include the snake plant (mother in law's tongue) and pothos.

Grow Lights

Since the house plant trend is on the rise, so are the tools to enhance their performance. There are tons of options out on the web for easy-to-install LED grow lights. There are track systems with multiple lights, tabletop setups with water catching trays, pendulum lights with a single bulb or you can buy just the bulbs themselves and use directionally adjustable lamps to utilize them. Technology has improved, and the spending range is wide enough so that most folks can afford to purchase one of the listed options. Don't forget to do your homework though. Read the reviews and research the light requirements of your plants.

Water Needs

Don't forget the importance of good soil composition and proper fertilization because both play a vital role in the success of indoor plants. House plants should have a nutrient-balanced, well-drained soil to maintain a healthy root system. Healthy roots are needed to properly take up water and nutrients, and those things — in proper amounts — must be present in the soil for the plant to utilize. Most house plants need consistency to maintain the best foliage and to continue producing leaves, preferring to be watered thoroughly and allowed to dry before the next watering. When in doubt, research it out. Study up on your exact plant species and variety, if you know it, to provide the watering schedule that it needs as well as the proper fertilization.

When diagnosing plant issues, underwatering and overwatering can present with the same signs and symptoms, so inspect the soil if you are unsure of the cause of the plant's decline. Roots don't lie. If you find brown mushy roots it is being overwatered, and root rot has set in. The plant needs immediate attention to remove the rot and repot. If you find hydrophobic soil (soil that is repelling water instead of absorbing it), place the plant and pot (if it has holes in it) in a bucket or bowl of warm water. Allow it time to become fully saturated, then remove it from the water and allow the excess water to drain. This should help jump-start your plant on the road to recovery.

Many plants thrive in indoor conditions. The key to success is providing the proper amount of light and water. Adobe Stock photo

Whether you are planning an indoor plant sanctuary, or you just want a few around your living space, house plants can bring a wonderful sense of accomplishment and stress relief when we succeed in properly providing the key ingredients for them to thrive. Stay tuned for the next edition when we will tackle how to handle pests that plague and hinder our plant serenity indoors.

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