LSU AgCenter
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GNO Gardening Magazine

February 2020

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Cover Photo: 'Diamonds Blue' Delphinium

Super Plant Spotlight – 'Diamonds Blue' Delphinium and 'Camelot' Foxglove Revisited

The tail end of the cool season is upon us, and this month's two LSU AgCenter Super Plants are hitting the shelves of your local retail nursery now and often already bedecked with blooms or buds! Add a splash of spring color to your landscape with these two showstoppers. I enjoy planting both of these Super Plants together as they have very similar forms and growth habits.

'Camelot' Foxgloves

Both 'Diamonds Blue' delphinium and 'Camelot' foxgloves can be planted in the fall months in the GNO area, beginning in October. At that time, however at that time, they are not yet showing their true colors and are just mounds of inconspicuous green and are easily overlooked by many gardeners when shopping. Check out the article on 'Camelot' foxglove in the September 2019 issue of GNO Gardening. They are at the garden centers now and should not be overlooked! February is the last recommended month to plant both of these cool season flowers in our area.

'Diamonds Blue' delphinium *Delphinium chinensis* offers a pop of electric blue color unmatched by any other true-blue flower out there. They make lovely accent plants within a larger bed of cool season flowers or function as a stunning focal point in a container. Delphiniums appreciate full to partial sun and well-draining, yet moist soil conditions. Don't expect them to bloom (or live) forever. Delphiniums can perennialize in more northern climates, but in our area, they should be treated as a beautiful annual. It's just too darn hot and humid for their taste here in the Gulf South, though 'Diamonds Blue' has some reported tolerance of these conditions. As soon as the temperatures rise, they tend to burn out. Mulch around delphiniums to keep weeds down and soil moisture consistent. The flower blooms will last around six weeks. You may need to stake the flower spikes to keep them upright since the blooms are profuse. Plant delphiniums a foot apart in landscape beds, or mass them in groups of three to maximize their impact. Use a two-gallon pot or larger if planting as a container display. Be sure that the container drains well and don't let the soil dry out completely . Before planting, add a little slow release all purpose fertilizer to the soil. 'Diamonds Blue' delphiniums are easy to grow and really electrify a garden in the springtime.

As we have mentioned, the 'Camelot' series of foxgloves *Digitalis purpurea* provide a wonderful cottage garden vibe in spring gardens. These foxgloves offer gardeners a palate of light tinted spring colors, including rose, lavender, cream, white, apricot, and pink. They have a classic speckling on the lip of each flower, which work to guide bees and other pollinators towards nectar and pollen within. 'Camelot' flowers tend to be positioned more horizontally, rather than bell-like, meaning that their

February Vegetable Planting Guide

Crop	Recommended Variety
Beets	Detroit Dark Red, Kestrel, Red Ace F1, Ruby Queen
Carrots	Danvers 128, Purple Haze, Thumbelina, Apache, Enterprise, Maverick, Sugar Snax 54
Collards	Champions, Flash, Georgia Southern, Top Bunch, Vates
Eggplants (seeds)	Dusky, Epic, Night Shadow, Black Beauty
Irish Potatoes	Dark Red Norland, Red LaSoda, Kennebec, Yukon Gold,
Kale	Siberian, Vates
Kohlrabi	Early Purple Vienna, Early White, Vienna, Winner
Lettuce	Esmeralda, New Red Fire F1, Nevada, Tall Guzmaine Elite
Mustard Greens	Florida Broadleaf, Greenwave, Red Giant, Southern Giant Curled, Savannah, Tendergreen
Pepper, Bell (Seeds)	Aristotle XR3, Jupiter, King Arthur, Paladin, Golden Summer, Purple Beauty, Tequila
Pepper, Hot (Seeds)	Grande, Tula, Mariachi, Mitla, El Rey F1, Tobasco, Jalapeño M, Super Cayenne II
Radishes	Cherriette, Champion, White Icicle, April Cross
Shallots	Matador, Prism
Snap Beans, Bush	Blue Lake 274, Bronco, Contender, Festina, Lynx, Provider, Roma II
Snap Beans, Pole	Derby, Blue Lake, Kentucky Blue, McCaslin, Rattlesnake, Kentucky Wonder 191
Spinach	Bloomsdale Long Standing, Melody, Tyee, Unipak 151
Sweet Corn	Merit, Silver Queen, Honey ‘n Pearl, Ambrosia
Swiss Chard	None Given
Tomatoes (seeds)	Bella Rosa, Fletcher, Tribute, BHN 1021, Amelia, Dixie Red
Turnip Greens	Alamo, All Top, Purple, Top White Globe, Seven Top, Southern Green, Top Star, Tokyo Cross

Super Plant Spotlight – 'Diamonds Blue' Delphinium and 'Camelot' Foxglove Revisited

spotted throats are more visible when compared to older foxglove varieties. Foxgloves may also be planted in our area beginning in November, with February being the last recommended month to get them into the garden. They enjoy full or partial sun, with moist, yet well-draining soil. As with delphiniums, foxgloves are treated as cool season annuals in the Gulf South because they burn out in the heat and humidity. 'Camelot' is bred to be more tolerant of our climate, but they are still unable to make it through the brutal summer months. Foxgloves typically begin to bloom in early spring and may continue to do so through the end of May. Mass foxgloves for a stunning effect in a landscape bed. They may also be used as a specimen plant in a container and require the same soil and moisture conditions that delphiniums do. Mulch helps to keep weeds down and soil moisture consistent. Use a little slow release fertilizer to the soil to keep them blooming. Staking may be needed to keep flower spikes upright also.

'Diamonds Blue' delphinium cut flowers

Both 'Diamonds Blue' delphiniums and 'Camelot' foxgloves are toxic. Be sure to plant them out of reach of small children or pets to be safe. Use a garden fence or position containers out of reach to manage this risk.

Both of these Super Plants make wonderful cut flowers and last in a vase for up to a week easily. Cut flower spikes early in the morning after the dew has dried from them. Harvest both foxgloves and delphiniums when 1/3-1/2 of the flowers are open so that you may enjoy them indoors longer. Use a sharp knife to cut them rather than scissors or hand pruners. The pinching action of scissors or hand pruners crushes the stem ends, inhibiting the uptake of water into the blooms. Recut stem ends at an angle daily to keep them fresh and perky longer. Change water in the vase daily and keep them out of direct sunlight.

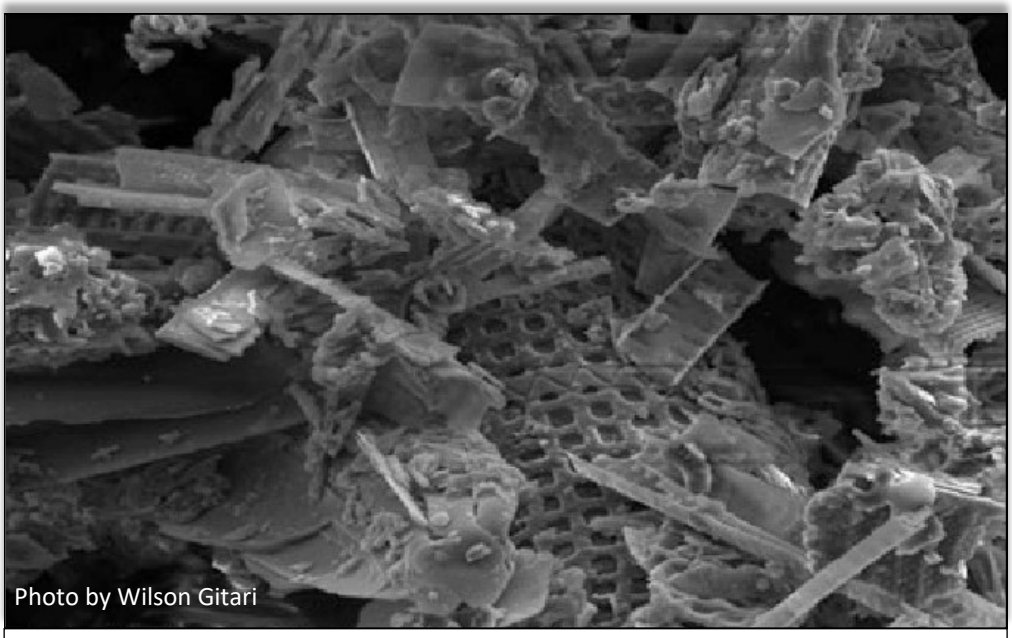
Give both of these truly outstanding Louisiana Super Plants a try this spring, you won't be disappointed. Both delphiniums and foxgloves lend a cottage feel and a welcome pop of color to our gardens during the transition from the cool season to the summer months. Both are easily found at local garden centers in the springtime, be sure to choose plants with buds rather than fully open blooms. This will extend their display time and ensure that you may enjoy their charm for many weeks or even months.

~Anna Timmerman

For more information on 'Diamonds Blue' delphinium or 'Camelot' foxglove, as well as all of the LSU AgCenter Super Plants, please visit. www.lsuagcenter.com/superplants. Each year, the LSU AgCenter releases several new Super Plants, which are "university tested, industry approved". Super Plants grow throughout the state and have been proven to succeed in our area. Be sure to ask for Louisiana Super Plants at your local garden center.

Diatomaceous Earth & Kaolin Clay

In this series, we've discussed horticultural oils, neem and insecticidal soaps. Many of you have used these "soft" pesticides and are familiar with them. Generally, these have a mostly physical effect on the pests they are controlling (see GNO Gardening November 2019 and December 2019 and January 2020). This month we will discuss a couple of insecticides that may be a little less familiar: diatomaceous earth (DE) and kaolin clay (Surround®). Both are effective control measures because of their physical attributes and the physical effect they have on pests.



Electromagnetic microscopy image of a sample of diatomaceous earth.

Diatomaceous Earth

Diatomaceous earth is made from the fossilized remains of diatoms, tiny organisms that lived in rivers, streams, lakes and oceans. Diatom skeletons are made up of silica (silicon dioxide), a combination of silicon and oxygen. Silica is common in nature and makes up 26% of the earth's crust by weight. Over a long period of time, diatoms accumulated in the sediment of rivers, streams, lakes, and oceans. Today, silica deposits are mined from these areas. Various forms of silica include sand, emerald, quartz, feldspar, mica, clay, asbestos, and glass. Silicon does not exist naturally in its pure form. It usually reacts with oxygen and water to form silicon dioxide or silica. Silicon dioxide has two naturally occurring forms: crystalline and amorphous. Most diatomaceous earth is made of amorphous silicon dioxide. However, it can contain very low levels of crystalline silicon dioxide.

The first pesticide products containing silicon dioxide (diatomaceous earth) were registered in 1960 to kill insects and mites.

Products containing diatomaceous earth are most commonly dusts but other formulations include wettable powders and pressurized liquids. Currently, there are over 150 DE insecticide products registered for use inside and outside of buildings, farms, gardens, and pet kennels.

There are also thousands of non-pesticide products that contain diatomaceous earth. These include skin care products, toothpastes, foods, beverages, medicines, paints and water filters. The Food & Drug Administration lists diatomaceous earth as "Generally Recognized as Safe". "Food grade" diatomaceous earth products are purified and may be used as anticaking materials in feed, or as clarifiers for wine and beer.

Diatomaceous earth is not a poison; it does not have to be eaten in order to be effective. Diatomaceous earth causes insects to dry out and die by absorbing the oils and fats from the cuticle of the insect's exoskeleton and its abrasive, sharp edges speed up the process. It remains effective as long as it is kept dry and undisturbed. It is easily removed from harvested produce with water.

Kaolin Clay

Kaolinite is a clay mineral with the chemical composition $Al_2Si_2O_5(OH)_4$. Rocks that are rich in kaolinite are known as kaolin or china clay. Kaolinite clay occurs in abundance in soils that have formed

Diatomaceous Earth & Kaolin Clay

from the chemical weathering of rocks in hot, moist climates—for example in tropical rainforest areas. The name kaolin comes from the Chinese for Kau-ling or "high ridge" in reference to a hill in China where the pure clay was first mined by Jesuit missionaries around 1700. It has been used in pottery and porcelain production for centuries. Work done in the 1920's and 1930's with pottery-grade kaolin proved unsatisfactory, as plant health suffered and insects still maneuvered through the large (relatively-speaking) clay particles. For effective use as a pesticide, a super-magnetic centrifuge in Georgia is used to refine the impurities out of raw kaolin and then filter the clay particles to a critical 1.4 microns in size.

Image of tomatoes coated with kaolin clay.

I know of only one kaolin product (thus far) registered with EPA as an insecticide and crop protectant – Surround WP or Surround CF. From the Surround WP label: "Surround WP forms a barrier film, which acts as a broad-spectrum agricultural crop protectant for controlling damage from various insect and disease pests, a growth enhancer, and as a protectant against sunburn and heat stress." Kaolin clay is non-soluble and is applied as a slurry making surfaces look as though they've been painted white. This change in plant appearance confuses feeding insects and creates a non-inviting environment on the leaf surface. The label indicates that three coats are required for full effects and all plant surfaces must be coated for good control. This means top and bottom of leaves. No negative effects on plant photosynthesis or respiration have been noted; however, it can delay fruit maturation time because it lowers the overall plant temperature. Regular reapplication is needed as the plant grows or as rain and irrigation wash the clay from the plant surface. Growing in greenhouses or high tunnels increases the longevity since the plants are affected by rain.

Exposure to kaolin is not expected to pose any health risks to people, including children and other sensitive populations. Kaolin has been extensively tested, and no evidence of toxicity to humans was detected. In addition to being an active pesticide ingredient itself, kaolin is also an inert ingredient in other pesticide products. FDA has granted kaolin GRAS status (Generally Recognized as Safe) when used in human food. EPA finds that kaolin is not harmful to non-target organisms or to the environment.

The white kaolin coating is easily removed from harvested fruit and vegetables by wiping with a wet cloth or even a dry cloth. It can also be removed with a steady stream of water or water and soap.

Though both diatomaceous earth and kaolin are considered non-hazardous, they can be ocular and respiratory irritants. Therefore, proper protective equipment and activities to avoid creating excessive dust or inhaling dust should be used. Always follow label instructions and take steps to minimize exposure. If any exposures occur, be sure to follow the First Aid instructions on the product label carefully. For additional treatment advice, contact the Poison Control Center at 1-800-222-1222. If you wish to discuss a pesticide problem, please call 1-800-858-7378.

~Dr. Joe Willis

Landscape Bed Preparation

Proper landscape bed preparation is imperative to the establishment of a healthy landscape. While, there is no single method to follow for all landscapes, I would like to touch on some of the key concepts involved in proper landscape preparation. Successful landscape preparation will ensure landscapes are viable for long durations, have reduced regular maintenance, are environmentally sound, and remain both healthy and aesthetically pleasing longer. When teaching landscape preparation I am often reminded of a quote by Benjamin Franklin, "By failing to prepare, you are preparing to fail."

Master Gardener volunteers work with New Orleans Botanical Gardens staff to prepare vegetable beds for planting.

Site Assessment and Planning

The first step to a properly prepared landscape bed is site assessment. If an existing bed is being renovated, make sure the boarders are well defined; if the bed is new, clearly determine the size and shape first. Identify any existing trees or valued plantings that need to be considered in the preparation, as many gardeners will want their prized trees and shrubs included in the landscape. Assess the proximity to the house. Be sure to leave at least 1' of space between the landscape bed and the house. This space should be filled with a pest and weed barrier to deter termites and weeds from growing alongside the house. Identify window locations and how low the windows are to the ground as to not block the view from inside with plant material. Assess the potential of water runoff from the roof and gutters, and ensure the landscape bed will not flood after every rainstorm. Also, identify any established fixtures that need to be considered (sidewalks, light fixtures, etc.). Develop a clear plan involving all the information gathered in this step before continuing.

Site Preparation and Establishment

Mark off the landscape bed with either flags or turf paint. The area within the bed should then be cleared of all plant material not involved in the final plan and any additional debris. Existing grass should be removed and this can be done in several ways. A non-selective herbicide can be applied or the area can be covered with black landscape fabric until the grass completely dies. After everything is removed, apply landscape bed mix soil to area and spread. *This is a great time to for a soil test.* Build landscape beds up 4"- 8" to ensure adequate drainage and a sufficient rooting environment. Moreover, the bed mix will provide needed organic matter to the soil as it breaks down, improving soil health. If the soil is compacted below, you may till in 2" of bed mix to the soil and then add the remaining 4-6" on top; otherwise, the entire 4-8" of bed mix can be applied to the top of the

Landscape Bed Preparation

soil and raked smooth. Grade the soil/bed mix slightly away from the bed and any house/sidewalk to encourage water to flow away from impervious surfaces.

Plant Selections and Installation

When selecting plants, it is important to remember the maturation of the landscape. Bedding plants will likely not overgrow their area in the season they are installed, if planted properly. However, trees and woody shrubs will grow over time. Proper planning is done for the mature size and shape, as opposed to the size at planting. Remember the old adage, "Right Plant, Right Place" when laying out the design. Plants that are grown in proper conditions generally have lower pest pressure and require less maintenance. Do not place bedding plants too close to walkways or houses. Ensure that plants placed nearby have similar water and fertility requirements. Planting heavy water requirement bedding plants next to shrubs that need drier rooting areas will result in the loss of productivity from one of the plantings. Moreover, some plant species require acidic soil and will not thrive in neutral/ alkaline soils, while others require the complete opposite. Be aware of sun/shade requirement of plant selections, and that the degree of shade may change as trees mature and structures are built. Make sure to check the hardiness zone of long-term plantings, some perennials in south Louisiana may not be root hardy in north Louisiana. Finally, be sure to recognize what the client desires from the planting and what you need to do to meet those goals.

Irrigation, Fertilization, and Mulching

Identify the irrigation requirements of the plants and ensure that the irrigation design fits those requirements. Overhead sprinklers can cover a large area if everything in that area has similar water requirements. Micro-irrigation (i.e. sprayers and drippers) are generally more efficient with water, but can be more expensive to install and require more routine maintenance. However, if different irrigation requirements exist in a relatively small area, micro-irrigation can be the most effective choice. Ensure that the irrigation system has uniform coverage, that there is sufficient drainage, and no irrigation outside the desired area (roads, driveways, and buildings do not need irrigation). Make sure plants will not block irrigation as they grow. Test the system early for leaks it will be more difficult to identify and repair as the landscape matures.

Determine the fertility requirement of the landscape and apply only what is needed. Make sure to apply at appropriate times in the year. Fertilizing late fall or in winter will encourage new growth that is susceptible to freeze damage. Over fertilizing can stress plant, in fact too much fertilizer is often worse than not enough. If using a controlled release fertilizer, check the fertilizer longevity on the bag. Remember, longevities are recommended for mild temperatures, and hotter temperatures, which are common in Louisiana, will expend fertilizer quicker. Most plants uptake the three primary nutrients (Nitrogen-Phosphorous-Potassium; N-P-K) in a 3-1-2 ratio, so we recommend utilizing a similar ratio fertilizer (i.e. 15-5 -10 or 18-6-12, or similar) if possible. Otherwise, a balanced fertilizer (i.e. 13-13-13) will suffice.

Apply 2-4" of mulch to the surface of the landscape bed. Mulching reduces water and fertilizer loss by creating a buffer layer on the bed surface. Mulching can also lower pest pressure and will inhibit weed germination throughout the season. Moreover, properly mulching will encourage a healthy soil and continue to add organic matter to the landscape. Mulching also greatly improves the aesthetics of the landscape. Pine needles, cypress leaves, and even chopped oak tree leaves make great mulch. Using black plastic beneath the mulch further helps with weed control. Remember, mulch does not last forever and should be reapplied as needed. There is never a bad time to apply mulch to a landscape bed.

~Jeb S. Fields, Assistant Professor & Extension Specialist, LSU AgCenter Hammond Research Station

Gulf Coast Monarchs: Plant Milkweed Now

The month of February is the perfect time for planting milkweed. The plants can use a few weeks to settle their roots and start putting out fresh foliage before for the Monarchs hit our Gulf Coast in early March. These Monarchs will be the same that flew south last fall, spent the winter in Mexico's Oyamel forests and mated there. They spend the last weeks of their lives streaming north into Texas and along the Gulf Coast. When they find milkweed, they stop, lay eggs and their remarkable lives end.

A pair of monarch cats feeding on a tropical milkweed plant. Photo by Chris Dunaway

No creature on Earth has a higher growth ratio than a butterfly caterpillar. Monarch "cats" consume an amazing amount of milkweed to complete their transformation into a long distance flier. The cats that succeed start 2020's new Monarch migration and time is of the essence. They must get wings before our daily temperatures reach the mid-80s. Monarch butterfly bodies are precision instruments. Above the mid-80s, only short distance flying is possible. In 2019, South Shore temperatures hit that mark on April 26. The time window is not wide.

For March and April cats, milkweed is life and any kind will do. Aquatic milkweed, *Asclepias Perennis*, is the only recorded native below Lake Ponchartrain. It is a small plant that does well in part shade. Plant as clusters, in an understory or in pots. Pink swamp milkweed, *Asclepias Incarnata*, and Green Antelope Horn milkweed, *Asclepias Viridis*, are larger, sun-loving plants known to be native above the Lake. We need these in quantity, augmented by non-native species that require cut-backs later in the year.

Once the long distance flying window closes, Monarchs are trapped here. This wouldn't be a bad thing—we all love our butterflies—except that hot weather brings on a Monarch spore disease called *Ophryocystis elektroscirrha* or OE. This highly contagious STD debilitates, maims and sometimes kills butterflies. OE spores are deposited on milkweed leaves while the female Monarchs are laying their eggs so the young cats are infected shortly after hatching. Nothing natural kills OE spores except being set down into the soil where tiny organisms destroy them. People who raise caterpillars use bleach protocols to keep their young ones safe. During the summer and fall, all cultivated milkweed plants—especially tropical milkweed, which Monarchs heavily use—have to be presumed contaminated with OE. Their foliage must be cut back periodically to force new, clean leaf growth.

Monarchs found in our gardens currently are descended from non-migrators that were trapped here after April 26. Scientists don't know yet exactly if or how these will interact with the migration butterflies. The worry is they may carry OE spore disease into the migration spreading it even further into the already endangered monarch population. This would be a tragedy. The hope is they are healthy and will join the migration north.

Learn more about helping the Monarch migration at MonarchWatch.org. Help Tulane researchers understand OE by contacting Christen Steele, Ph.D. candidate, at csteele3@tulane.edu. Get involved with one of MGGNO's butterfly garden projects by accessing the "Projects" page at mggno.com and contacting the Project Manager.

~Ginna Hoff, Centennial Park Butterfly Garden Project Manager

Growing a Seed Library

Just inside the entrance to the Mid-City branch of the New Orleans Public Library System at 4140 Canal Street stands an old-fashioned wooden card catalog. Surrounded by computer terminals and DVDs available for checkout, the vintage piece of library furniture holds heirloom surprises inside. Open one of the drawers and instead of finding a book catalog made up of paper cards, there are hundreds of packets containing heirloom vegetable, flower, and native plant seeds.

Librarian Brian Morin established the seed library in the summer of 2017. "We started in June, which is the dead time for planting, so we weren't getting anybody checking out at first. But word of mouth really spread fast." Morin had seen a seed library set up at his hometown library in Michigan. "We have such a strong gardening contingent in Mid-City, this really did seem like a logical place to start doing it in New Orleans."

The seed library at New Orleans Public Library Mid-City branch.

"We started out with the Mid-City Neighborhood Association who gave the library a grant for whatever we wanted to benefit the neighborhood. The library used some of that money to develop the seed library. Additionally, SeedSavers.org, a non-profit seed saving organization out of Iowa, gave us about $300 worth of seeds which really helped the project start getting seeds into people's hands." According to Morin, the seeds are all heirloom varieties or Louisiana natives. "Everything in here will grow in Louisiana. Now some of it may require some expert gardening but everything here will grow."

Photo album with plant descriptions.

To help growers succeed, there are printed instructions on top of the card catalog along with an album wiht photos of each plant in the catalog. There are also descriptions printed on each packet along with planting and care instructions. Drawers are alphabetically organized by common name with varieties of beets grouped together in the B's and varieties of tomatoes grouped in the T's. Native plants are grouped together in the L's for "Louisiana Natives." Using a library card, patrons can check out up to 4 seed packets every 6 months. Free library cards are available to all residents of Orleans Parish as well as people with valid library cards from Jefferson and St. Bernard parishes. Over the first two and a half years, 3000 packets of seeds have been checked out.

In the beginning, Morin admits that he was solely concentrating on vegetables until one day SeedSavers.org included four random packs of flower seeds. Thinking to himself, "They're free. I'll put them out." The flower seeds disappeared, Morin snaps his

Growing a Seed Library

fingers, “Like that! Didn’t even last a week. Even when people weren’t planting anything else, the flowers just vanished.” He went ahead and ordered 30 to 40 different flower seed varieties and has continued to keep them in inventory ever since.

Recently the seed library has added Louisiana native plant seeds to the selection. “We’ve had a few people very interested in converting to natives.” This past summer, members of the Native Plant Initiative (NPI) started donating native plant seeds, enabling the seed library to begin offering 18 different species of native plants. “The native seed donations are great.” Morin adds, “I wouldn’t mind a few more.” Taking into account all the types of vegetables, flowers, and native plant seeds on hand, Morin estimates, “We have about 470 varieties when we’re fully stocked.”

A sample of the available varieties.

“We stock with the seasons,” Morin explains. “We try to stock in November for the spring planting because everybody wants to plant their tomatoe seeds in January. Then we try to stock in August/early September in time for planting the cool weather crops like your broccoli and lettuce.”

“People love it so much, keeping it stocked can be a challenge. The Friends of New Orleans Public Library (FNOPL) came up with the larger funding that we really needed to expand and keep going. They have committed now to continuing grants for us to maintain the program. We’re still getting back on our feet because we were out of EVERYTHING.”

When asked what the local community can do to help the seed library, Morin has two suggestions:

First, the seed library would welcome clearly labeled donations of heirloom and native plant seeds. Patrons who donate seeds are able to reset their checkout records to zero and can get more seed packets within a six-month period. Before donating, Morin prefers gardeners to email him at bmorin@nolalibrary.org to see if the seed library has a need for the seed variety being offered. Morin counsels, “If you are going to save vegetable or flower heirlooms, keep in mind the pollination distances. For example, if you are growing two different pepper varieties in the yard, and they cross, I can’t use the seeds. When donating seeds, you’ve got to be mindful of the pollination distances, even in an urban setting.” He shares that Seedsavers.org has an on-line reference table of crop specific safe pollination distances that gardeners can check.

Second, “People can always donate to the Friends of the New Orleans Public Library (FNOPL). You can actually say ‘I’d like this to go to the Seed Library.’ You can also make purposed donations.” More information about making financial donations to FNOPL is available on the Friends’ website https://friendsnola.org.

As the seed library evolves, Morin notes the changes. “For a year I couldn’t get anyone to check out a squash seed to save my life. Same with corn. Nobody wanted to mess with either of them. And then there was suddenly a run on both of those. I’d stopped even carrying or restocking them because there was no interest and then suddenly the next thing you know we’re out of both, completely across the board. In the effort to serve urban gardeners we have catered to a lot of different needs. We had one patron out in the East who had an acre of land and he was literally trying to get every variety of watermelon he could find, because he wanted to taste them all.”

For the future of the seed library, “The new grant from the Friends of the New Orleans Public Library is really going to let us catch up and get to where we really want to be.” Morin smiles. “We have a plan and a way to do it.”

~Jennifer Prout

Jennifer Prout is an active member of the Native Plant Initiative of Greater New Orleans, a Louisiana Master Gardener, and licensed landscape horticulturist

What's Bugging You? Asian Citrus Psyllid!

Citrus as a backyard fruit tree is common in the Greater New Orleans Area. Our area is also home to some of the best commercial citrus in the nation. There are several diseases that are a constant threat to our citrus and, unfortunately, new ones are always on the horizon. One of the new major threats to our citrus is Citrus Greening or Huanlongbing (HLB) disease. This disease is caused by a bacterium (*Candidatus* Liberibacter *asiaticus*) that is transmitted (vectored) from infected trees to uninfected trees by a small insect - the Asian Citrus Psyllid or ACP (*Diaphorina citri*). See the LSU AgCenter publication 3359.

Asian Citrus Psyllids feeding on a citrus leaf. Photo by Dr. Joe Willis

The Asian citrus psyllid is a tiny, mottled brown insect about the size of an aphid. This psyllid damages citrus directly by feeding on new leaf growth (flush) causing burn back of new shoots or twisted notched leaves as they mature. But spreading HLB is the more serious threat. The psyllid takes the bacteria into its body when it feeds on bacteria-infected plants then flies to a healthy plant and injects bacteria into it as it feeds. One way to curtail the spread of this disease is to control the vector.

The adult Asian citrus psyllid is a small brownish-winged insect about the size of an aphid. Its body is ⅛ to ⅛ inch long with a pointed front end, red eyes, and short antennae. The wings are mottled brown around the outer edge except where a clear stripe breaks up the pattern at the back. The adult psyllid feeds with its head down, almost touching the leaf, and the rest of its body is raised from the surface at an almost 45-degree angle with its tail end in the air. No other insect pest of citrus positions its body this way while feeding.

Adults typically live one to two months. Females lay tiny yellow-orange almond-shaped eggs in the folds of the newly developing leaves of citrus. The psyllid feeds on all varieties of citrus (e.g. oranges, grapefruit, satsumas, lemons, limes and mandarins). Each female can lay several hundred eggs during her lifespan. The eggs hatch into nymphs that are wingless, flattened, yellow or orange to brownish, and 1/100 to 1/14 inch long. Nymphs molt four times, increasing in size with each nymphal stage (instar), before maturing into adult psyllids. The nymphs feed on soft, young leaf and stem tissue and flowers of citrus. As they feed, they excrete a large quantity of sugary liquid (honeydew). Each nymph also produces a waxy tubule from its rear end to help clear the sugary waste product away from its body. The tubule's shape—a curly tube with a bulb at the end—is unique to the Asian citrus psyllid and can be used to identify the insect.

The optimal temperature range for the Asian citrus psyllid is 68°F to 82°F; however, it can survive a range of 21°F to 113°F. So it is pretty much a year-round active resident in the Greater New Orleans area. Citrus Greening Disease (HLB) has been detected in only a few locations in our area. It is recommended

What's Bugging You? Asian Citrus Psyllid!

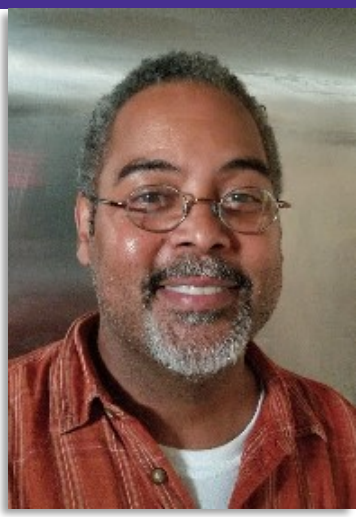
that any infected tree be immediately removed and destroyed. If we want to continue to enjoy fresh, home-grown citrus, it is important to do all that we can to protect our trees from devastating disease. Controlling the Asian citrus psyllid is one important step. Check with your local LSU AgCenter county agent, or consult the LSU AgCenter Insect Management Guide for up-to-date information on use and selection of insecticides to manage Asian citrus psyllids. If you suspect your citrus trees are infected with citrus greening, please consult the LSU AgCenter "plant doctor" Raj Singh at 225-578-4562 or rsingh@agcenter.lsu.edu.

~Dr. Joe Willis

Adult Asian Citrus Psyllid.

In the Kitchen with Austin

Asian Inspired Mustard Greens



As delicious as the recipes we grew up eating may be, sometimes we have a taste for something different. This recipe for Asian Inspired Mustard Greens is a great example of taking a familiar ingredient and preparing it in a different way.

Ingredients:

1 Tbs. sesame seeds (optional)
1 tsp. toasted sesame oil
6 cups washed and chopped mustard greens
¼ cup water
1 clove garlic, minced
1 Tbs. soy sauce
2 tsp. Japanese rice wine vinegar
1 tsp. sugar

Directions:

Place the sesame seeds in a large skillet over medium heat, stirring constantly until the seeds are toasted a golden brown, 1 to 2 minutes. Transfer the seeds immediately to a bowl to stop the cooking process. Set seeds aside.

Place sesame oil in the hot skillet. Place mustard greens into the hot oil, and pour in the water. Stir the greens until they are wilted, about 2 minutes. Combine garlic, soy sauce, rice wine vinegar, and sugar in a separate bowl.

Add mixture to greens and stir gently until sugar has dissolved. Partially cover the skillet, and reduce heat to a simmer. Cook until the greens are tender, 10 to 15 minutes or until the liquid has cooked down to a glaze. Sprinkle with toasted sesame seeds and enjoy!

Bon Manger!

Coming Events

Cultivating Communities Students
@Crescent City Farmer's Market
Tuesday, February 4th, 2020, 9:00 AM-1:00 PM
Cost=Free
https://www.facebook.com/events/3245519098798475/?event_time_id=3245519102131808

Natural Beekeeping:
All You Need and Maypop Community Herb Shop
Wednesday, February 5th, 6:30 AM-8:00 PM
2701 St. Claude Ave., New Orleans, LA
Cost=$30
https://www.facebook.com/events/428030608104315/
*Master Gardener Continuing Ed Credit!

New Orleans Town Gardeners: Walk in the Woods with David Baker @ A Studio in the Woods
Friday, February 7th, 11:00 AM-12:30 PM
13401 Patterson Rd., New Orleans, LA
Cost=Free with RSVP
https://www.facebook.com/events/616551999098782/
*Master Gardener Continuing Ed Credit!

Broadmoor Tree Planting with SOUL NOLA
Saturday, February 8th, 9:30 AM-2:00 PM
4505 S. Claiborne Ave., New Orleans, LA
Cost=Free with RSVP
https://www.facebook.com/events/638588260247737/
*Master Gardener Volunteer Hours!

Recirculating Farms Coalition Volunteer Day
Saturday, February 8th, 10:00AM-1:00 PM
1916 Jackson Ave., New Orleans, LA
Cost=Free with RSVP
https://www.facebook.com/events/638588260247737/
*Master Gardener Volunteer Hours!

Citizen Science Training @ Barataria Preserve
Saturday, February 8th, 10:00 AM-6:00 PM
6588 Barataria Blvd., Marrero, LA
Cost=Free with RSVP
https://www.facebook.com/events/650873132336912/
*Master Gardener Continuing Ed Credit!

Winter Botany Field Walk @ The Crosby Arboretum
Saturday, February 8th, 1:00-2:00 PM
370 Ridge, Rd., Picayune, MS
Cost=Free to Members, $5 non-members RSVP
https://www.facebook.com/events/599150457582315/
*Master Gardener Continuing Ed Credit!

New Orleans Permaculture Action Day @ Gloria's Garden
Saturday, February 8th, 10:00 AM-6:00 PM
900 N Claiborne, New Orleans, LA
Cost=Free
https://www.facebook.com/events/515180712452064/

Lawn and Garden Weeds with André Brock
Tuesday, February 11th, 3:00-4:00 pm
Norris Millet Library, 2920 Hwy. 51 LaPlace, LA
Cost=Free
*Master Gardener Continuing Credit!
https://www.facebook.com/events/1119714276083039/

Native Plant Sale @The Crosbey Arboretum
Saturday, February 15th, 10:00 AM-Noon
370 Ridge, Rd., Picayune, MS
Cost=Free
https://www.facebook.com/events/2923184947711822/

SOUL NOLA Algiers Tree Planting
Saturday, February 15th, 9:30 AM-2 PM
1039 Teche St., New Orleans, LA
Cost=Free
https://soulnola.org/
*Master Gardener Volunteer Hours!

Rose Propagation @ The New Orleans Botanical Garden
Saturday, February 15th, 10:30 AM—Noon
5 Victory Ave., New Orleans, LA
Cost=$15
https://www.facebook.com/events/708291683015314/
*Master Gardener Continuing Ed Credit!

Herb Day @ Burden Botanic Garden
Saturday, February 29th, 8:00 AM-2:0 PM
4560 Essen Ln., Baton Rouge, LA
Cost=Free
https://www.facebook.com/events/1270649939810675/
*Master Gardener Continuing Ed Credit!

SOUL NOLA Bywater/Marginy/Sr. Roch Tree Planting
Saturday, February 29th, 9:30 AM-2 PM
Cost=Free
https://soulnola.org/
*Master Gardener Volunteer Hours!

Farmers Markets in the Greater New Orleans Area

Jefferson Parish

Fat City Farmer's Market
3215 Edenborn, Metairie
Every 2nd and 4th Sunday, 9AM-1PM

Gretna Farmer's Market
739 Third Street, Gretna
Every Saturday, except the Saturday of Gretna Fest, 8:30AM-12:30PM

Kenner Rivertown Farmer's Market
2115 Rev. Richard Wilson Drive, Kenner
Every Saturday, October-July, 9AM-1PM

Nawlins Outdoor Market
1048 Scotsdale Dr., Harvey
Every Saturday & Sunday, 9AM-5PM

Old Metairie Farmer's Market
Bayou Metairie Park, Between Metairie Lawn Dr. and Labarre
3rd Tuesday of the month, 3:30PM-7:30PM

Westwego Shrimp Lot
100 Westbank Expressway at Louisiana St., Westwego
Daily Mon-Sat 8AM-8PM, Sun 8AM-6PM

Crescent City Farmer's Market- Ochsner West Campus
2614 Jefferson Highway, Ochsner Rehab Facility
Wednesdays, 3PM-7PM

Bucktown Farmer's Market
325 Hammond Hwy., Metairie
Weekly on Fridays, 3-7 PM

Orleans Parish

Crescent City Farmer's Market- Uptown
200 Broadway Street at the River, New Orleans
Tuesdays, 9AM-1PM

Crescent City Farmer's Market- Bywater
Chartres and Piety, at Rusty Rainbow Bridge
Wednesdays, 3PM-7PM

Crescent City Farmer's Market- Mid-City
3700 Orleans Avenue, New Orleans
Thursdays, 3PM-7PM

Crescent City Farmer's Market- Bucktown
325 Metairie-Hammond, Highway at Bucktown Harbor
Fridays, 3PM-7PM

Crescent City Farmer's Market- Downtown
750 Carondelet St at Julia, New Orleans
Saturdays, 8am-12PM

Crescent City Farmer's Market- Rivertown
Williams Boulevard at the River
Saturdays, 9AM-1PM

Sankofa Market
5029 St. Claude St., New Orleans
Monday-Thursday, 9:30AM-4:00PM

ReFresh Farmer's Market
300 North Broad St., New Orleans
Mondays, 4:00PM-7:00PM

Vietnamese Farmer's Market
14401 Alcee Fortier Blvd., New Orleans East
Saturdays, 5:30AM-8:30AM

Marketplace at Armstrong Park
901 N. Rampart, New Orleans
Thursdays, 3PM-7PM

Mid-City Arts and Farmer's Market
Comiskey Park, New Orleans
Market dates vary, check http://www.midcityaf.org

Treme Farmer's Market
814 N. Claiborne, New Orleans
Market dates vary, check https://www.gloriastremegarden.com/treme-farmers-market/

Laughing Buddha Farm Hubs
Bywater, Broadmoor, Lakeview, Irish Channel, Mid-City, Algiers Point, Uptown Locations
https://www.www.laughingbuddhanursery.com/events

Second Saturday Community Market at the Audubon Louisiana Nature Center
11000 Lake Forest Blvd., New Orleans, LA 70127
Second Saturday of the month, 8:30-11:30 AM

Marketplace at Armstrong Park
901 Rampart St., New Orleans (Between St. Ann and St. Philip) Thursdays 3-7 PM

Grow On Urban Farm
2358 Urquhart St, New Orleans
Sundays 10:30 AM-2:00 PM

24 Carrot Farm
2120 Port St, New Orleans
Saturdays 10:00 AM-2:00 PM

St. Charles Parish

German Coast Farmers Market
Saturdays-Ormond Plantation
13786 River Road, Destrahan

Wednesdays-Winnwood Shopping Center
1313 Paul Maillard Road, Luling

St. Bernard Parish

St. Bernard Seafood and Farmer's Market
409 Aycock St., Aycock Barn, Old Arabi
2nd Saturdays, 10AM-2PM

February Checklist/Garden Tips

February is the month to fertilize hardy fruit trees such as apple, peach, nectarine, fig and fruit bushes such as blackberry and blueberry. Citrus are fertilized in late January or early February. Wait until March to fertilize tender fruit trees like banana, guava and avocado. For information on growing fruit trees in our area click on the link for the LSU AgCenter publication Louisiana Home Orchard.

Plant gladiolus corms this month through mid March. Plant groups of corms every two weeks during the planting season to extend the display of flowers.

Pick snow peas in the vegetable garden frequently. Ideally the pods should be harvested when flat before the seeds begin to enlarge.

You may clip ground covers back now before new growth appears to remove unattractive foliage, rejuvenate the plants and control growth. Liriope, monkey grass, ferns (if browned back by freezes), wedelia, Japanese ardisia and Asiatic jasmine among others can be cut back with a lawn mower adjusted to its highest setting (make sure the blade is sharp), a string trimmer or even hedge clippers on small plantings. Selectively remove unattractive leaves on aspidistra (cast iron plant) and holly ferns by hand.

Keep beds mulched to a depth of two to three inches to control weeds in beds. Use leaves, pine straw or other available materials. Use your bagging lawn mower or shredder to chop up the leaves prior to putting down. This reduces the volume of the leaves, increases surface area to help the leaves break down and release nutrients, reduces matting and fungal growth, reduces movement by wind and makes for a cleaner look . Mulch helps prevent weed seeds from germinating and helps to retain moisture in the soil.

If you are growing caladiums from tubers, plant them indoors this month to get a head start. Plant the tubers in trays or pots of potting soil, placing them in a warm area of the house. Water them when the soil is dry to the touch. As the leaves appear, move them to a sunny windowsill or a shady area outdoors (if day temps are 70ish and evenings in the 60s). Plant pre-sprouted tubers into the garden in early April.

Finish harvesting any citrus fruit remaining on the trees. Quality will begin to decline as the trees get ready to flower.

Onions, shallots, garlic and leeks are susceptible to an insect called thrips which causes small white marks on the foliage called stippling. Heavy infestations can damage foliage to the point that the harvest is reduced. Control thrips with Malathion.

Clean out your pond garden or aquatic garden this month, if you need to. It is advisable to do this if there is a thick layer of gunk on the bottom. It is best to get this done while the weather is cool, the plants are dormant and the fish are less active. Pond cleaning is the best time to divide and repot water and bog plants that are dormant or semi-dormant. Do not divide those in active growth such as Louisiana irises and calla lilies.

Plant rose bushes in well prepared beds with good drainage and plenty of sun. It is important for the graft union to be 2 inches above the soil of the bed. If you plant roses purchased in containers, this was taken care of by the nursery. Just plant the bush so the top of the root ball is level with the soil of the bed. In the case of bare root roses, you must see to this yourself during planting. Finish planting bare root roses by the end of February.

Plant hardy bedding plants now for a spring burst of color. Foxglove, delphiniums, and hollyhocks need to be planted now so that they will bloom before the summer. Plant snapdragons, dianthus, petunia, stock, phlox, and lobelia as spring annuals in sunny areas. Need cool season color in a partial shade area? The best choices are cyclamen, primroses, pansy, viola, nicotiana, foxglove, alyssum and forget-me-not.

Sow some herbs to enjoy this spring into your garden beds or in containers. Chervil, dill, fennel, cilantro, stevia, oregano, parsley, and rosemary can be planted now. Basil needs warmer temperatures, so hold off until the end of the month.

In the vegetable garden, it’s time to get spring crops started! Do a soil test to determine what amendments need to be added.

Lawn Care Do's & Don't's

Do:

1. If you have a history of problems with crabgrass or goosegrass, apply a pre-emergent herbicide now. Click here to see more information on Crabgrass from the LSU AgCenter.
2. Apply selective herbicides and sedge killers to kill off winter weeds growing in the lawn. You may also scout the lawn and remove weeds by hand. Make a game out of it with kids and grandkids.
3. Continue to scout for fungal damage and control with fungicides if necessary. The most prevalent is called Large Patch of Warm-Season Turfgrass. Click here to find information about large patch disease from the LSU AgCenter.

Crabgrass in a lawn.

4. Take a soil test.
5. Apply sulfur or lime to adjust the pH if necessary according to soil lab recommendations.
6. Use a mulching mower to shred fallen leaves without removing them or use a bagging mower to collect them and put them in your compost pile or use them as mulch in your gardens.
7. Late winter to early spring is a good time to address drainage issues in your lawn. Consider installing a rain garden. Dedicating a small portion of your property to water management can improve the health of your lawn.

Do Not:

1. Do not apply fertilizer until mid-March as the weather warms up.
2. Do not lay down fill over the lawn grass.
3. Do not lay sod or spread warm-season turfgrass seed.
4. Do not dethatch or aerate the lawn.
5. Do not aerate the lawn.

Click here for info.

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Joe Willis
Orleans Parish
Horticulture Agent
(504)483-9471

Anna Timmerman
Jefferson Parish
Horticulture Agent
(504)736-6519

Chris Dunaway
GNO Area
Extension Associate
(504)736-6519