GNO Gardening



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GNO Gardening Magazine

July 2024

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Peppers - From Sweet to Scorching
Part 2 - Growing Peppers

Onions, peppers, and celery are the Holy Trinity of Louisiana cuisine. It's generally accepted that the pepper part of the Holy Trinity is bell peppers. But Louisiana is also world famous for their hot sauces and common use of peppers to create zesty foods that delight any and every palette. And it just so happens that Louisiana has the growing conditions for successfully growing almost any variety of pepper.

Germinating Pepper Seed

It is recommended that pepper transplants be started indoors from seed and not direct seeded in the garden.

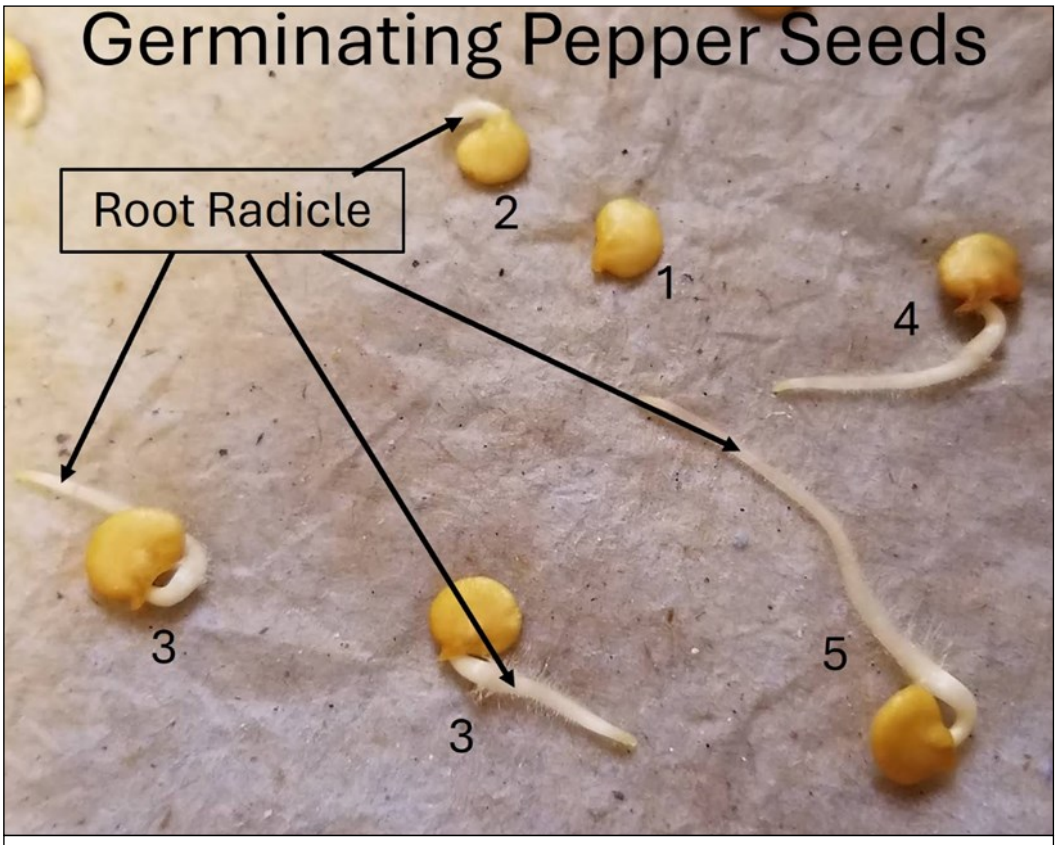


Figure 1: Pepper seeds germinating on moistened paper towel. Note the root radicals of differing lengths. 1. Seed is swollen but not yet germinating. 2. Seed germination has just begun. Radicle is visible. 3. Radicle has lengthened. 4. Radicle is a few days old. Root hairs are developed. 5. Radicle looks more like a root. Lots of root hairs. Seeds like 2 and 3 are best for transferring to potting soil. Roots like 5 are easily damaged or broken when transferring to soil.

Pepper seeds can take from a week up to 3-4 weeks to germinate depending on the variety and the germinating conditions. Most pepper varieties germinate best at soil temperatures of 80-90°F. Pre-soaking the seed overnight in water can help to break the dormancy and speed up germination. There are reports all over the internet about soaking pepper seeds in a weak tea solution, or in hot water, or in a peroxide solution, etc. to improve germination. However, studies have shown that pre-soaking in plain water is just as effective as any of the internet secret soaking methods. Plant the seeds about ¼" deep in a light, fine-textured germinating medium. Place them on a heat mat at 85°F or in a warm location. Keep the soil moist but not soggy. As soon as seedlings begin to emerge, make sure they are getting at least 8 hours of daily sunlight or good artificial lighting. When the first true leaves appear, transplant seedlings into 4" pots and continue to grow in a protected environment until outdoor conditions are suitable. Pepper plants should be hardened off before transplanting into the garden.

There is another method for starting your pepper seedlings that is especially useful if you have expensive varieties or only a few seeds. This is similar to how you do a percent seed germination test. Place your seeds spaced well apart on a folded moistened paper towel. Have the towel folded so it will fit inside

a quart zipping plastic bag. Close the bag and place it in a warm location. Check the seeds daily for signs of germination. As soon as the radical appears, gently remove the seed from the paper towel (tweezers are good for this) and plant in germinating medium just as you would a seed. It's important to check the seeds daily. If the radical grows too long, it can easily get broken during the planting process (Figure 1).

Planting Peppers

Peppers are a warm season crop and should be transplanted into the garden only when soil temperature is 65-70°F. The general recommendation for spacing pepper plants is 12-18"; however, it is best to check the mature size of the pepper variety you are using and adjust plant spacing accordingly.

Like most vegetables, peppers prefer a soil pH of 6.0-6.5 but you can get a good harvest if the soil pH is slightly higher or lower if the other conditions are good. Peppers prefer soil high in organic matter with excellent drainage. Poorly drained locations lead to root problems.

A soil test is recommended prior to planting. Without soil testing, it is recommended to incorporate 1 pound of a balanced fertilizer (e.g. 8-8-8 or 10-10-10) per 100 ft^2 of garden space or 2 Tbsp. per plant. A steady supply of calcium and phosphorous are needed for best production.

Producing Peppers

At first fruit set, side-dress with ½ pound of calcium nitrate per 60 ft^2 or about ½ Tbsp. per plant. Repeat the side-dressing about once per month. Pepper plants need a steady supply of nitrogen to maintain adequate foliage to protect the pepper fruit from sunburn or sun scorch, a common occurrence with many home gardeners.

Peppers need 8-10 hours of direct sunlight daily. Too little light leads to leggy plants and poor fruit production.

Peppers need about 1 inch of water per week for optimal production. This can be provided by rain or irrigation. Peppers tend to have shallow root systems so water thoroughly when the top one inch of soil is dry.



Figure 2: Staking pepper plants. Left uses individual bamboo stakes. Right uses a wire plant cage.

Most commercial pepper varieties are bred to be heavy fruit producers. This desirable trait has the side effect of plants that can't support the weight of their fruit. Therefore, it is recommended that peppers be staked, caged, or provided with some support system (Figure 2). This will keep the plants from breaking due to fruit weight, will help the plants withstand high winds, and will keep the foliage well-positioned to protect the fruit from sun damage. My personal preference is wire cages. They more easily contain all the pepper branches without tying them individually.

It is also a good idea to mulch around the pepper plants. Mulching helps maintain soil moisture, moderate soil temperatures, and reduce weeds (Figure 3).

Harvesting Peppers

Peppers are harvested for culinary purposes as both green and ripe fruits. Most pepper varieties have green immature fruit that will change to red, orange, yellow, or purple when they mature and ripen. Some varieties start out some color other than green and mature to some color other than those mentioned. Peppers are generally classified as non-climacteric fruit, which means they don't continue to ripen once removed from the plant. However, recent studies indicate that pepper varieties of the *Capsicum frutescens* species are climacteric and will continue to ripen if picked at maturity. The taste of green peppers has been described as slightly bitter and, in most cases, as peppers ripen, they get sweeter. While hot peppers also get sweeter as they ripen, they also get hotter. Hot dry growing conditions also tend to increase the hotness level of peppers.



Figure 3: Raised bed of pepper transplants with pine straw mulch.

Fresh harvested peppers store best in mesh bags or open containers in the refrigerator. Clean, dry, unblemished peppers can easily store for two weeks or more like this.

Next month, we will look at "Pepper Pests and Diseases".

~ Dr. Joe W. Willis

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July Planting Guide

Crop	Recommended Variety
Broccoli (Seeds for transplant)	Green Magic, Everest, Castle Dome, Packman
Brussels Sprouts (Seeds for transplant)	Jade Cross E, Long Island Improved
Cabbage (Seeds for transplant)	Bravo, Rio Verde, Caraflex, Blue Vantage
Cantaloupe	Ambrosia, Aphrodite, Passport, Primo, Verona
Cauliflower (Seeds for transplant)	Snow Crown, Cumberland, Incline, Freedom
Collards	Champion, Flash, Georgia, Top Bunch, Yates
Chinese Cabbage (Seeds for transplant)	None Given
Cucumbers	**Slicers** = Dasher II, Diva, Fanfare HG, Indy **Pickler** = Calypso
Luffa Gourd	None Given
Okra	Annie Oakley, Cajun Delight, Clemson Spineless
Peppers, Bell (Seeds for transplant)	Aristotle XR3, King Arthur, Paladin, Carmen
Pumpkins	Atlantic Giant, Baby Bear, Prankster, Sorcerer
Shallots	Matador, Prisma
Southern Peas	Queen Anne, California #5, Quickpick, Colussus
Squash	**Zucchini** = Declaration II, Justice III, Payroll **Straight Neck** = Multipik, Patriot II, Liberator III **Crook Neck** = Destiny III, Gentry, Medallion
Tomatoes (Seeds for transplant)	Bella Rosa, Sun Chaser, Florida 91, Phoenix, Solar Fire, BHN-216, Solar Set
Watermelon	**Seedless:** Cooperstown, Gypsy, Matrix, Millennium **Seeded:** Mickey Lee, Sugar Baby, Amarillo

For more recommended varieties and supplier information click here to visit the Recommended Varieties Database on the LSUAgCenter website.

http://apps.lsuagcenter.com/diseaseresistance/

Look at Me:
Century Plant (*Agave americana*)

Walking through the New Orleans Botanical Gardens or driving around New Orleans, you may have been struck by the appearance of a towering candelabra-like flower stalk rising majestically into the sky (Figure 1). You do a double-take and exclaim, "I don't remember seeing that before!" And, depending on how old you are, you may be right. What you are seeing is the flower stalk of *Agave americana*, commonly called the Century Plant.

Agave americana is a North American native from the southern U.S. to north and central Mexico. Their ideal growing conditions include lots of sun, well-drained soil, and, as succulents, they can handle long periods of drought just fine. *Agave americana* has a better-known cousin *Agave tequilana*, the blue agave, from which we get a wonderful elixir of merriment.

Agave americana (Figure 2) has long, narrow, grey-green leaves that grow to 3-6 feet long and 10 inches wide with a stout, sharp spike at the tip. The leaves develop as a rosette that can be 6-12 feet wide. Century plant is a bit of a misnomer because it doesn't really require 100 years of growth before flowering. However, it can take as long as 80 years or as little as 10 years before flowering. We don't really know all the factors that go into triggering flower production. The plants have to grow and store enough food reserves to support the massive flower stalk and subsequent seed production. So, naturally, the environment and growing conditions have some part to play. And the plant's genetic determinants are involved as well. The plants do exhibit some element of flowering synchronicity, as do most plants. It is a survival advantage and aid to genetic diversity and stability if flowering is synchronized to allow for cross-pollination, even if it only happens every few decades.

Speaking of pollination, hundreds of flowers are produced in clustered panicles on a flower stalk up to 30 feet tall. The 3-4" long greenish-yellow perfect



Figure 1: Flower stalk of *Agave americana* reaching 30 feet into the sky.



Figure 2: Large rosette of long, slender, grey-green leaves. Note the spike at the tip of each leaf.

incomplete flowers produce abundant nectar that attracts all kinds of pollinators. But a close examination of the flowers (Figure 3) shows that insects (bees, butterflies, moths, etc.) can get to the flower's nectar without ever encountering the pollen-ladened anthers which are held high above the lip of the flower. The copious amounts of pollen and nectar are also mainly produced at night. While hawkmoths and some larger nocturnal pollinators may pollinate the agave flowers, the main pollinators are nectar-feeding bats. Unfortunately for us, the range for nectar-feeding bats in the U.S. is California, New Mexico, Arizona, and Texas so we will have to settle for the occasional encounter by a hawkmoth or the like to pollinate our Century plants.

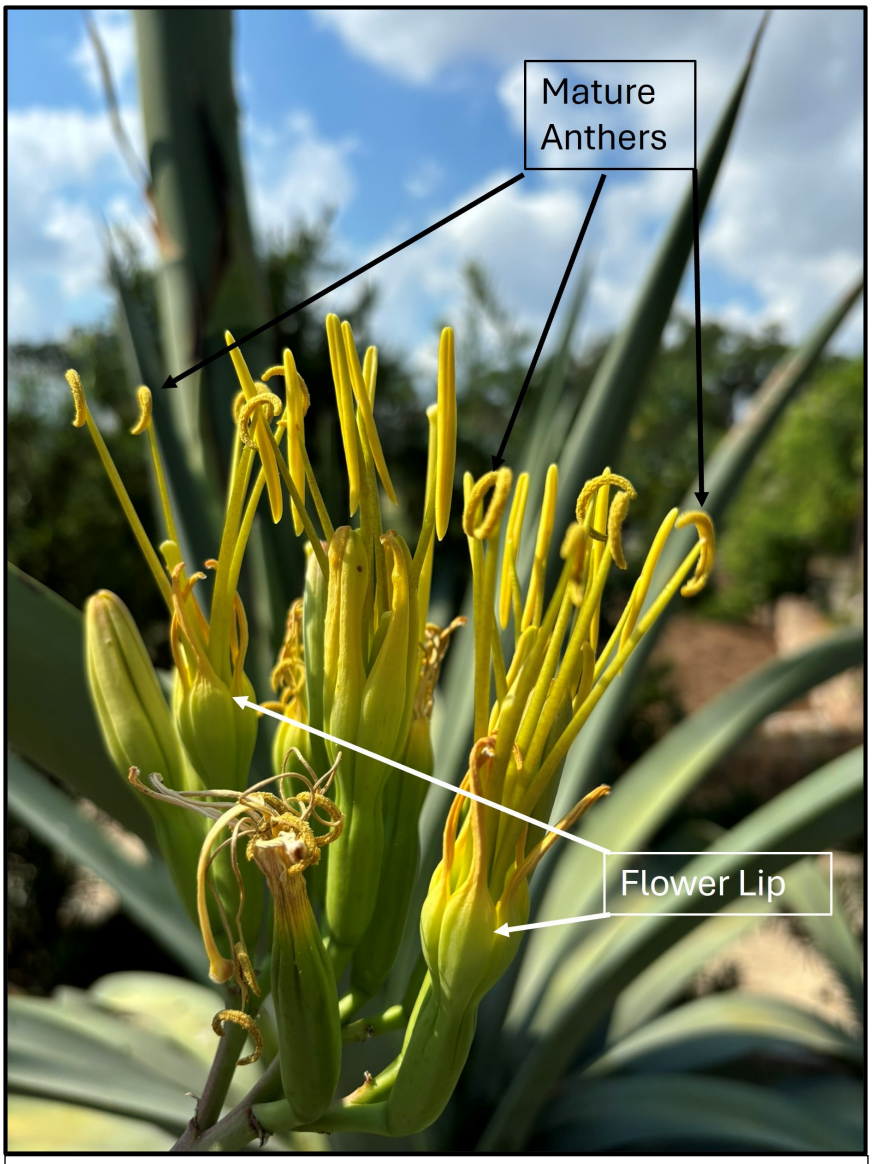


Figure 3: Century plant flower. Note the anthers are held high above the rest of the flower.

Another distinctive aspect of the Century plant is that it is monocarpic. Monocarpic plants are plants that flower only once during their lifetime and after flowering, they die. While that may seem strange at first glance for such a massive, long-lived plant, the phenomenon is very common since all true annuals and biennials are also monocarpic. The Century plant has a built-in mechanism for ensuring its survival. While it can reproduce by seed if the flowers get fertilized, the mother plant also produces suckers before it dies. This form of asexual reproduction guarantees that there will be offspring. Once flowering is initiated, the plant will flower for about a month or so before its demise. So take the opportunity to pause and wonder at this once-in-a-lifetime (at least as far as the mother plant is concerned) marvel of nature.

~ Dr. Joe W. Willis

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Asha McIntyre: Cultivating Urban Agriculture and Community Resilience

Please help me to welcome a new member to the GNO Gardening horticulture team.



Asha McIntyre is a dedicated Urban Agriculture Extension Agent at the Southern University Agricultural Research and Extension Center. With a passion for sustainable urban farming and community development, Asha brings a wealth of knowledge and experience to her role, working to transform urban spaces into thriving agricultural hubs.

Born in Baton Rouge and having spent over 20 years in Chicago, IL, Asha offers a unique and diverse perspective. Her rich background in teaching, woodworking, and photography, combined with her strong family ties to New Orleans, strengthens her connection to the local culture and community.

Asha holds a Bachelor's degree in Agricultural Science focusing on Plant and Soil Science from Southern University and A&M College. Her academic background, coupled with hands-on experience in community gardening projects, makes her an invaluable asset to both the Southern University Agricultural Research and Extension Center and the City of New Orleans.

Asha's commitment to agriculture is deeply rooted in her love for nature, cultivated during her early years on her great-grandparents' farm in North Louisiana. This early exposure to farming ignited her passion for sustainable agriculture and her desire to inspire and educate others. Her work at the Southern University Agricultural Research and Extension Center is helping to transform urban landscapes and foster a sense of community and resilience, perfectly embodying the SU Ag Center's motto: "Linking citizens of Louisiana with opportunities for success."

In her role, Asha works closely with local communities, providing education and resources to support urban farming initiatives. She is dedicated to promoting sustainable practices, enhancing food security, and improving the quality of life in urban areas. Her efforts include conducting workshops, developing educational materials, and offering personalized support to urban farmers.

Asha McIntyre's commitment to sustainable urban agriculture and her ability to inspire and educate others make her a standout leader in the field, but Asha wants everyone to know that she is also very much a team player and is looking forward to future collaborations and partnerships with others within the urban agriculture landscape.

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Disease of the Month
Cercospora Leaf Spot of Hydrangea

South Louisiana and the rest of the region has been blessed with cool springs over the last few years. Now that summer is officially here, daily temperatures are almost unbearable! The thought of drought is still in the back of people's mind though. We are getting more rain this year than last year and that's a positive that we can work on. Summer rain showers make it a little easier for us humans to deal with summer heat, but it sure can make your hydrangeas look bad!

Garden hydrangeas are a popular Mother's Day gift in Louisiana. They usually start flowering around that time and will continue flowering off and on during the summer months. Pruning is done at the end of summer and then they practically disappear during the winter because they are deciduous plants, meaning they drop all their leaves at one time and enter a dormant period. As light quality increases and temperatures start to rise in spring, the garden hydrangea comes back to life and starts the process all over again.



Cercospora Leaf Spot starts out as purple spots lower leaves of the plant, enlarging to irregular and angular shaped leasions.

Hydrangeas are well-known amongst gardeners and are mostly free of issues. However, if we get rainy weather during the summer months or use a lot of overhead irrigation, then Cercospora Leaf Spot will become a concern. Believe it not, if you have any experience with growing hydrangeas in the southeast part of this country you have most likely seen the symptoms of Cercospora Leaf Spot. Its not something that would kill a hydrangea plant, but it will cause an unsightly mess when left unmanaged.

Cercospora Leaf Spot is a plant disease caused by the fungus, *Cercospora hydrangea*. Infection usually occurs mid-spring through summer. Wet, humid weather and overhead irrigation during this time can exacerbate symptoms. Purple spots are first noticed on the lower leaves of the plant. As the spots grow in size, they often take on an angular or irregular shape. The centers eventually turn tan or grey surrounded by a purple or brown colored border. As leaves become engulfed with leaf spots, they eventually lose vigor and become pale yellow-green. To confirm cercospora in the field, take a magnifying glass and look closely at the tan-grey centers and look for black specks. The black specks are spores of the fungus and is how the

fungal proliferates itself.

Managing cercospora leaf spot in the home landscape starts with sanitation. During years with high disease pressure, make it a point to clean out and remove any old hydrangea leaves from the planting area. Those old leaves are what provide the organism with a way to wait out the winter period. Gather these old leaves in a separate bag and throw them out with the trash. Do not add them to a compost pile.

Fungicides can add another layer of control but should be used preventatively for best results. Products with chlorothalnil (Daconil, Hi-Yield Vegetable, Flower, Fruit and Ornamental Fungicide), myclobutanil (Spectracide Immunox Multi-Purpose Fungicide, Fertilome F-Stop, Dow AgroSciences Eagle), and thiophanate-methyl (Cleary 3336, Southern Ag Thiomyl) all have activity on cercospora. If reapplication is needed, then look to rotate active ingredients to help prevent resistance issues and always remember to read and follow label instructions before applying and pesticide products.

~William Afton



You can confirm Cercospora Leaf Spot in the field by examining the grey centers and looking for little black specks, which are the spores of the fungal pathogen.

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Fall Webworm Invasion this Summer

While buck moth caterpillars were out in full force in the springtime, there were also a lot of sightings of another caterpillar, the fall webworm (*Hyphantria cunea*), in addition to reports of the adult moths being found as well. The fall webworm is a relatively common defoliator of tree leaves. Caterpillars can be variable in coloration, with either black or red-heads, which were thought to be two different species, but they are the same with different "morphs". The bodies of the larva can be yellow to dark grey and have long and short hairs. Both caterpillar morphs have two cream-colored stripes running the length of their body. The red-headed morph has four generations a year, and the black-headed morph has five generations each year in Louisiana. The full-grown black morph larva is yellow or light green in color, whereas the red morph is yellow, dark orange, and has red bumps with white hairs. The red-headed morph is more common in the Southern US; however, their populations vary dramatically from year to year and by location. Lately in Louisiana, we have been encountering the black-headed or northern morph of fall webworms. I have found both individual caterpillars crawling on the ground or moving through foliage, in addition to their web encased aggregations on trees. Adults are primarily white and may have small black dots on their wings.



An aggregation of fall webworms feeding on the leaves of a tree. The black spots seen suspended in the webbing are fecal pellets excreted by the caterpillars.

Fall webworms make webbed areas at the ends of tree branches and form an aggregation there, where they will feed on the foliage. The leaves inside the webbing will be consumed, skeletonizing the leaf tissue. As the larva grow, they will create more web tents to protect themselves while they feed on the leaves inside. The fall webworm has a wide host range and can consume over 400 species of trees! The webbing can combine to cover larger sections of the tree where defoliation is occurring. In heavily forested areas, they are not as problematic as the damage can be tolerated if their populations are dispersed amongst trees. In urban settings where people are relying on tree leaves to

provide shade, their damage can be more severe. Additionally, they attack fruit and nut bearing trees, which can greatly impact production. Therefore, in some cases, control may be warranted. Many natural enemies exist for fall webworms, such as general predators, parasitoid wasps, and different species of flies. Therefore, we recommend using reduced risk insecticides, such as those that contain *Bacillus thuringiensis* or chlorantraniliprole. Other broad-spectrum products such as carbaryl and pyrethroids can be used but will affect off target insects. As always be sure to follow the label instructions and use products that are approved for fall webworm. To assist with the insecticidal products that are not *Bt* based with the penetration of caterpillar webs, we recommend the addition of dish soap to help with penetration of the insecticides. Caterpillars are also susceptible to heavy rains and other weather events. Removing the tree branches that have caterpillars on them is not recommended as it causes more harm to the trees than the pests themselves. We are likely amid the second generation of fall webworms. Be prepared to see them a lot more this summer. If you have any questions about fall webworm identification or management, reach out to the LSU Department of Entomology or your local LSU Parish Extension Agent.

~Dr. Aaron Ashbrook



The black-headed morph of the fall webworm caterpillar that had fallen from its aggregation in the trees. They can be found by themselves or in aggregations in webbing.



An adult fall webworm moth of the black-headed morph is all white. Shortly after mating and laying eggs, the adults die, only living for about a week. Females will lay several hundred eggs on leaves.

To Pick or Not to Pick? That is the Question

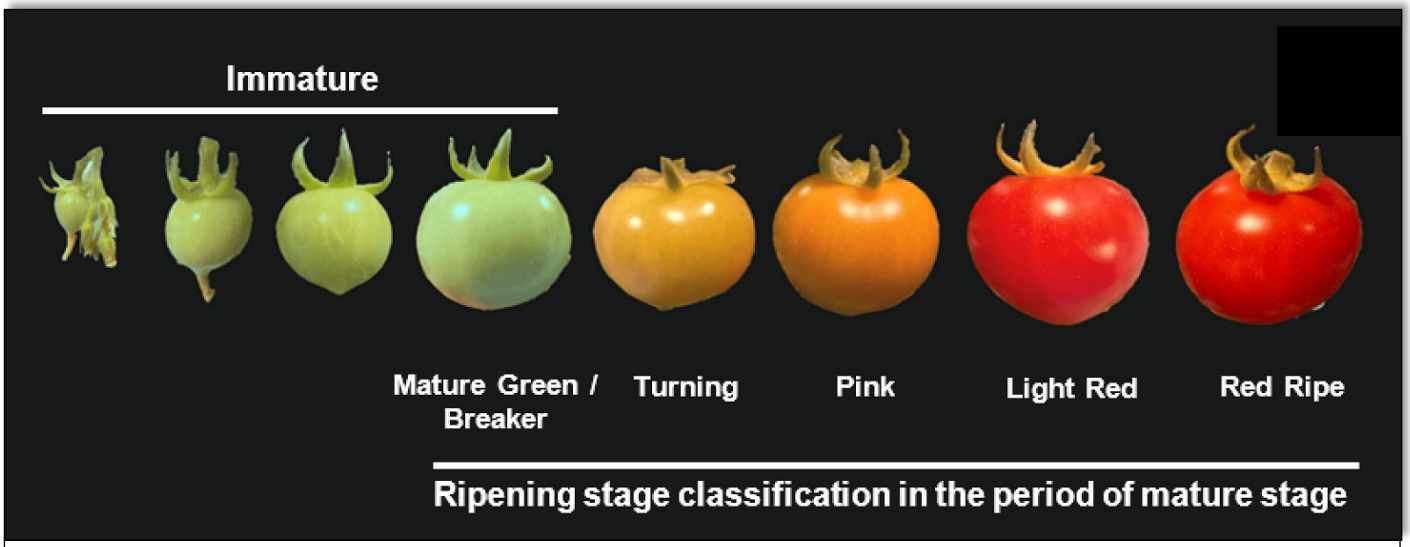
Have you ever walked through your garden and noticed a beautiful pink tomato and your mouth starts to water when you imagine what it will taste like when fully red ripe? And at the same instant you realize that if you aren't quick enough, the bugs, bunnies or rats will beat you to it. Or watched the figs swell with deliciousness as you test them daily to see if they are ripe because you know the squirrels and grackles are checking them too? Well, I have some good news and some bad news. Go ahead and pick that pink tomato and let it ripen on your windowsill and it will be just as tasty as if you left it to ripen on the vine. But do all you can to keep the varmints away from your figs because once you pick them, they won't get any sweeter. That's because one of those fruits is climacteric and the other is not. Strictly speaking in botany terms, climacteric is defined as the ripening period of certain fruits, involving increased metabolism and only possible while still on the plant.

Though the maturation and ripening process involves a lot of biochemical and physiological processes, most fruit ripening is influenced greatly by the action of ethylene, a naturally occurring plant hormone. In fruits, ethylene is involved in causing the color, firmness, flavor and characteristic aromas of each fruit to change. However, once the fruit has been harvested, the effect of ethylene is not the same in all cases. Depending on the interaction of ethylene with other biochemical processes, fruits are classified into two types. Climacteric fruits have the inherent ability to continue ripening after being removed from the plant and are characterized by a rapid increase in the respiration rate and release of ethylene. Non-climacteric fruits, on the other hand, do not continue the ripening process once harvested. Instead, with these fruits, ethylene accelerates fruit degradation and senescence.

Ethylene is a very unusual plant hormone because it is a gas that is not translocated but rather freely diffuses across cell membranes.

In lay-gardener terms, climacteric fruit can continue to ripen off the plant when they are mature; non-climacteric fruit have to mature and ripen on the plant.

Knowing the involvement of ethylene in fruit ripening has led to the development of two different agricultural industries. One is the commercial production of ethylene products that are used to speed the ripening process of harvested fruits.



This image shows the color of tomatoes at the different levels of maturity. Tomatoes may be picked at the breaker stage when they show the first blush of pink.

Another is the commercial production of products that inhibit the action of ethylene so that harvested fruits have a longer storage life.

But for everyday utility, what we need to know is, "Which fruits are climacteric and which fruits are non-climacteric?"

Climacteric Fruits	
Apple	Nectarines
Apricot	Papaya
Avocado	Peaches
Banana	Pear
Chile Pepper (*Capsicum frutescens*)	Persimmon
Guava	Plantain
Kiwi	Plum
Mango	Tomato

Non-Climacteric Fruits	
Blackberries	Olive
Blueberries	Peppers (*C. annuum, C. baccatum, C. chinense, C. pubescens*)
Cantaloupe (may soften after picking but does not become sweeter)	Pineapple (may soften after picking but does not become sweeter)
Cherries	Pomegranate
Citrus	Pumpkin
Cucumber	Raspberry
Eggplant	Squash
Figs	Strawberries
Grapes	Watermelon
Honeydew Melon (may soften after picking but does not become sweeter)	

Remember, a climacteric fruit is one that will continue to ripen off the plant **once it reaches maturity on the plant.**

For practical purposes, knowing whether fruits are climacteric or non-climacteric helps us decide when to harvest fruits and what to look for when buying fruits at the grocery store – never buy blueberries or strawberries that still have green color but grab those firm avocadoes or pink tomatoes and, in time, you'll have delicious ripe fruits.

~ Dr. Joe W. Willis

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Xin Li, Bairu Li, Shaobin Gu, Xinyue Pang, Patrick Mason, Jiangfeng Yuan, Jingyu Jia, Jiaju Sun, Chunyan Zhao & Robert Henry. 2024. Single-cell and spatial RNA sequencing reveal the spatiotemporal trajectories of fruit senescence. Single-cell and spatial RNA sequencing reveal the spatiotemporal trajectories of fruit senescence | Nature Communications

Weed of the Month: Dwarf Cinquefoil (*Potentilla canadensis*)

This neat little weed has some interesting attributes, and often goes unnoticed. The *Potentilla* genus has hundreds of members, all within the rose (Rosacea) family. Potentilla, commonly called cinquefoil, or five -fingers, or silverweeds, can be found worldwide. We have several native cinquefoils in Louisiana. The foliage of the dwarf cinquefoil (*P. canadensis*) looks very similar to Indian mock strawberry (*P. indica*), another common low-growing weed in our area. The leaves are palmately compound and arranged in groups of five. Leaves alternate along a spreading stem, giving it a creeping growth habit. The leaflets are oblong and serrated, measuring around 1.5 inches in length.



Dwarf Cinquefoil (*Potentilla canadensis*) plants growing in a lawn.

The fruit of dwarf cinquefoil looks like a dry, inedible strawberry, and is actually botanically classified as a nut. Dwarf cinquefoil does make tiny flowers that are gold or yellow in color, with 4-5 ray pedals arranged around a ring of five green sepals. The flowers are less than one inch across, but showy and attractive to pollinators such as bees.

Dwarf cinquefoil is native to North America and is semi evergreen in the New Orleans area. It is more common on the Eastern seaboard and into the midwestern states, but does make appearances in southern states, particularly urban areas. It caught my eye because of its potential use as a native groundcover. Dwarf cinquefoil makes a thick mat in full sun, high compaction areas. It needs a well-drained area and a neutral pH to thrive. It tolerates mowing and tends to stay under 6" tall. It can be planted from seeds or plants and grows quickly and spreads widely without being overly aggressive. It transplants well. Several online nursery vendors carry *P. canadensis,* but it does seem unusual in the nursery trade. Other Potentilla species are available more readily but have differing growth habits and growing ranges.

~Anna Timmerman

Resources:

Potentilla canadensis (Dwarf cinquefoil) | Native Plants of North America (wildflower.org)

https://plants.ces.ncsu.edu/plants/potentilla-canadensis/

In the Kitchen with Austin

Zucchini & Tomato Frittata



If you are looking for an addition to your brunch repertoire, look no further! This frittata is delicious and it feeds a crowd. The recipe can also be halved for a great lunch or supper served with a green salad.

Ingredients:

1.5 Tbs. olive oil
1 small onion, chopped
2 medium zucchinis, diced
1/2 c cherry tomatoes, halved
12 eggs
3/4 c half-and-half
Salt & pepper, to taste
2 Tbs. basil, torn
1/3 c Gruyere cheese

Directions:

Preheat oven to 350° and oil 9 x 12 baking pan with ½ Tbs. of olive oil.



A pan of zucchini & Tomato Frittata.

In a skillet over medium heat, sauté onion, zucchini, and tomatoes in 1 Tbs. olive oil until tender. Season with salt & pepper, to taste.

Cool veggie mixture for five minutes while whisking eggs, half-and-half, basil, Gruyere and a bit more salt & pepper in a large mixing bowl.

Spread veggie mixture evenly in prepared pan. Carefully pour egg mixture over veggies and bake for about 25 minutes, until puffed and just set in the center.

Let cool for five minutes before slicing and enjoy!

Bien Manger

Help Support Horticulture programs in the Greater New Orleans Area

Funding helps the LSU AgCenter agents provide help for:

- School and Community Gardens
- Seed Libraries
- Demonstration Gardens
- Educational Scholarships
- Local Research
- and Much More

We Need Your Help

Scan the QR code above to go to the LSU Foundation donation webpage.

Click here or go to: https://bit.ly/3UQRS7H

Search for Greater New Orleans Horticulture Support Fund

Farmers Markets in the GNO Area

Orleans Parish

Crescent City Farmer's Market- Mid-City
500 N. Norman C. Francis
Thursdays from 3-7PM
Walk-up and curbside pre-orders at www.crescentcityfarmersmarket.org

Crescent City Farmer's Market- City Park
Tad Gormley Stadium parking lot at Marconi and Navarre
Sundays from 8AM-Noon
Preorder contact-free drive through only, info at www.crescentcityfarmersmarket.org

Crescent City Farmer's Market- Uptown
200 Broadway
Tuesdays from 8AM-Noon
Walk-up and curbside pre-orders, info at www.crescentcityfarmersmarket.org

SPROUT NOLA Truck Farm Table
200 N. Broad (In Whole Foods lobby or in parking lot, weather permitting)
Walk up https://www.sproutnolafarm.org/

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

Marketplace at Armstrong Park
901 N. Rampart
Thursdays from 3-7PM
https://www.facebook.com/MarketplaceArmstrongPark/

New Orleans French Market
Lower Decatur Street
Daily, 9AM-6PM

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

Laughing Buddha Farm Hubs
Pick up points vary, pre-orders available
Bywater, Broadmoor, Lakeview, Irish Channel, Mid-City, Algiers Point, Uptown Locations
https://www.laughingbuddhanursery.com/events

Barcelo Gardens Farmer's Market- Upper 9th Ward
2301 Gallier Street at the garden, Saturdays from 10AM-1PM
3440 Piety Street Fresh Market open daily, weekly bulk produce sale.
https://www.facebook.com/BarceloGardens/

Bywater Market at Trap Kitchen-Bywater
1043 Poland Ave
Sundays from 10AM-3PM

BOUNYFUL Farmer's Market-Algiers Point
4123 Woodland Dr. Algiers
First and Third Sundays of the month, from 10AM-1PM
https://www.bounyfulgreenmarket.com/

Sankofa Fresh Stop Market
Coming soon!
https://sankofanola.org/rfqs/

Sheaux Fresh Sustainable Foods-Treme-Laffite
585 N. Claiborne at Lafitte Greenway (under overpass)
Check for current dates/times at www.sheauxfresh.org

FUBU Market
3101 Erato Street New Orleans, location changes, check website/social media
https://www.facebook.com/TheFUBUMarket
www.fubumarket.com/

St. Tammany Parish

Covington Farmers' Market
Covington Police Department
609 North Columbia St., Covington, LA 70433
Saturday: 8:00 AM – 12:00 PM (rain or shine)
Covington Trailhead
419 N. New Hampshire
Wednesday: 10:00 AM – 2:00 PM (rain or shine)www.covingtonfarmersmarket.org
General information: 985.966.1786

Mandeville Trailhead Community Market
Mandeville Trailhead
675 Lafitte St, Mandeville, LA 70448
Saturday: 9:00 AM – 1:00 PM (rain or shine)
https://www.facebook.com/TheMandevilleTrailhead
985.624.3147

Madisonville Market
Riverside Park South
Water St., Madisonville, LA 70447
Sunday: 10:00 AM – 2:00 PM
www.madisonvillemarket.org

Folsom Village Market
Hwy 40, one block east of Hwy 25
Saturday: 9:00 AM – 1:00 PM (weather permitting)
Every 2nd and 4th Saturday
985.507.6496 (daytime only)

Abita Springs Art and Farmers' Market
22049 Main St., Abita Springs, LA 70420
Sunday: 12:00 PM – 4:00 PM (rain or shine)
https://www.townofabitasprings.com/farmers-market
985.892.0711

Camellia City Farmer's Market
Old Towne Slidell
333 Erlanger St. (Corner of Third St.)
Saturday: 8:00 AM – 12:00 PM (rain or shine)
https://www.facebook.com/CamelliaCityMarket/
985.640.7112

St. Charles Parish

Luling Farmer's Market at Westbank Bridge Park-Luling
13825 River Road, Luling, LA
Wednesdays, from 1-5PM
http://www.germancoastfarmersmarket.org/

German Coast Farmer's Market
160 West Campus Drive, Destrehan, LA
Saturdays, from 8AM-Noon
http://www.germancoastfarmersmarket.org/

Farmers Markets in the GNO Area

Jefferson Parish

Gretna Farmer's Market
739 Third Street, Gretna
Every Saturday, except the Saturday of Gretna Fest, 8:30AM-12:30PM
https://www.gretnala.com/visitors/farmers-market/

Nawlins Outdoor Market
1048 Scotsdale Dr., Harvey
Every Saturday & Sunday, 9AM-5PM
https://www.facebook.com/NawlinsMarket/

Jean Lafitte Town Market-Lafitte
920 Jean Lafitte Blvd.
Last Saturday of the month, 9AM-1PM
https://www.facebook.com/JeanLafitteLa/

Lafreniere Park Market-Metairie
3000 Downs Blvd.
Wednesdays, from 2-7PM
https://www.facebook.com/profile.php?id=100064920097975

Westwego Farmer's Market
484 Sala Ave., Westwego
3rd Tuesday of the month, 10AM-2PM
https://www.facebook.com/profile.php?id=100075979938725

Westwego Shrimp Lot
100 Westbank Expressway at Louisiana St., Westwego
Daily Mon-Thurs 8AM-6PM, Fri 8AM-7PM, Sat 7AM-7PM, and Sun 7AM-6PM
https://www.facebook.com/officialwestwegoshrimplot

Laughing Buddha Farm Hub-Clearview
4516 Clearview
Store Pickups, preorder online at https://www.laughingbuddhanursery.com/buy-groceries-1

Harahan Farmer's Market
501 Oak Ave., Zeringue Park, Harahan
Sundays, 9AM-1PM
https://www.facebook.com/HarahanMarket

Rivertown Farmer's Market
400 Block of Williams Blvd., Kenner
Thursdays Noon-6PM (Off for August)
https://www.facebook.com/RivertownFarmersMarket

Old Metairie Farmer's Market
Bayou Metairie Park, Between Metairie Lawn Dr. and Labarre
1st & 3rd Tuesday of the month, 3:30PM-7:30PM** Check for seasonal dates!
https://www.oldmetairiegardenclub.com/tag/farmers-art-metairie-market/

Local Independent Garden Centers

Jefferson

Perino's Garden Center	3100 Veterans Memorial Blvd., Metairie, LA 70002	(504) 834-7888
Rose Garden Center	4005 Westbank Expressway, Marerro, LA 70072	(504) 341-5664
Rose Garden & Pet Store	5420 Lapalco Blvd., Marrero, LA 70072	(504) 347-8777
Banting's Nursery	3425 River Rd., Bridge City, LA 70094	(504) 436-4343
Jefferson Feed	4421 Jefferson Hwy., Jefferson, LA 70121	(504) 733-8572
Nine Mile Point Plant Nursery	2141 River Rd., Westwego, LA 70094	(504) 436-4915
Palm Garden Depot	351 Hickory Ave., Harahan, LA 70123	(504) 305-6170
Double M Feed Harahan	8400 Jefferson Hwy., Harahan, LA 70123	(504) 738-5007
Double M Feed Metairie	3212 W. Esplanade Ave., Metairie, LA 70002	(504) 835-9800
Double M Feed Terrytown	543 Holmes Blvd., Terrytown, LA 70056	(504) 361-4405
Sunrise Trading Co. Inc.	42 3rd St., Kenner, LA 70062	(504) 469-0077
Laughing Buddha Garden Center	4516 Clearview Pkwy., Metairie, LA 70006	(504) 887-4336
Creative Gardens & Landscape	2309 Manhattan Blvd., Harvey, LA 70058	(504) 367-9099
Plumeria Insanity Nursery	https://www.facebook.com/Plumeria-Insanity-Nursery-102123651930419	

Soil Vendors

Schmelly's Dirt Farm	8301 Olive St., New Orleans, LA 70118	(504) 535-GROW
Laughing Buddha Garden Center	4516 Clearview Pkwy., Metairie, LA 70006	(504) 887-433
Reliable Soil	725 Reverand Richard Wilson Dr., Kenner, LA 70062	(504) 467-1078
Renaissance Gardens	9123 W. Judge Perez Dr., Chalmette, LA 70043	(504) 682-9911
Rock n' Soil NOLA	9119 Airline Hwy., New Orleans, LA 70118	(504) 488-0908
Grow Wiser Garden Supply	2109 Decatur St., New Orleans, LA 70116	(504) 644-4713

If you would like your licensed retail nursery listed, please email gnogardening@agcenter.lsu.edu

Local Independent Garden Centers

Orleans

Urban Roots	2375 Tchoupitoulas St., New Orleans, LA 70130	(504) 522-4949
The Plant Gallery	9401 Airline Hwy., New Orleans, LA 70118	(504) 488-8887
Harold's Plants	1135 Press St., New Orleans, LA 70117	(504) 947-7554
We Bite Rare and Unusual Plants	1225 Mandeville St., New Orleans, LA 70117	(504) 380-4628
Hot Plants	1715 Feliciana St., New Orleans, LA 70117	www.hotplantsnursery.com
Pelican Greenhouse Sales	2 Celebration Dr., New Orleans, LA 70124	(504) 483-9437
Grow Wiser Garden Supply	2109 Decatur St., New Orleans, LA 70116	(504) 644-4713
Jefferson Feed Mid-City	309 N. Carrollton Ave., New Orleans, LA 70119	(504) 488-8118
Jefferson Feed Uptown	6047 Magazine St., New Orleans, LA 70118	(504) 218-4220
Ninth Ward Nursery	2641 Deslonde St., New Orleans, LA 70117	(504) 296-8398
Crazy Plant Bae	800 N. Claiborne Ave., New Orleans LA 70119	(504) 327-7008
Canopy Plant Company	6030 St. Claude, New Orleans, LA 70117	(504) 381-4033
Too Tall Nursery	2817 N. Roman, New Orleans, LA 70117	tootallfarm@gmail.com
Plantery NOLA	Pop Up Locations	www.planterynola.com
Canopy Plant Co.	Pop Up and Online Sales	www.canopyplantco.com
New Orleans Succulent Boutique	Online Sales	https://sites.google.com/view/nolasucculentshop/home
Root Life Mobile Plant Nursery	Pop Up Locations	https://rootlifeplantnursery.com/
New Orleans Green LLC	Online Sales	www.neworleans-green.com

Plaquemines

Southern Gateway Garden Center	107 Timber Ridge St., Belle Chasse, LA 70037	(504) 393-9300
Belle Danse Orchids	14079 Belle Chasse Hwy., Belle Chasse, LA 70037	(504) 419-5416

St. Charles

Plant & Palm Tropical Outlet	10018 River Rd., St. Rose, LA 70087	(504) 468-7256
Martin's Nursery & Landscape	320 3rd St., Luling, LA 70070	(985) 785-6165

St. Bernard

Plant Pricks	Pop Up Locations	https://plantpricks.com/



A very large live oak tree split in half. Both halves seem to be doing fine.

July Checklist/Garden Tips

Sharpen your lawn mower blades. They have generally gotten dull by this time of the year.

Fine, silvery webbing appearing on the bark of area trees is completely harmless. The webbing is produced by tiny scavenging insects called bark lice.

Cut back perennials in the garden when they finish flowering and the foliage begins to look tired.

Keep caladiums well watered during hot, dry weather to keep the foliage in good shape through the summer. You may apply a fertilizer now to encourage vigorous growth. Break off any flowers that form.

Remember to harvest herbs such as mints, basil, rosemary, lemon balm and Mexican tarragon regularly to keep the plants shapely and under control. Some herbs such as thyme, sage and lavender tolerate heat and rain poorly and may not be doing well now as a result.

Keep up with weeding. This time of year weeds can get out of hand very fast. Use mulches wherever possible. If you need help with herbicide recommendations, contact your local LSU AgCenter Extension office.

Container plants should not be placed directly onto wooden decks. The moisture underneath can damage the wood (saucers do the same thing). Boost pots off of the surface an inch or two with pieces of brick, small blocks of wood or special terra-cotta pot supports available at some local nurseries and garden shops.

Keep old flowers cut off roses. Trim back to the first five leaflet leaf. Spray weekly with a combination insecticide/ fungicide product labeled for roses if the types you grow are susceptible to black spot.

Pinch out the terminal growth of chrysanthemums during July. This encourages branching and more compact plants for fall blooming.

For late summer color, continue to plant heat tolerant bedding plants. Excellent choices for sunny areas include torenia, periwinkle, melampodium, salvia, scaevola, purslane, pentas, blue daze, narrow leaf zinnia, lantana and verbena, Purple Homestead. In part shade plant caladium, impatiens, begonia, torenia and coleus.

A long growing season and rapid growth often leads to over-grown beds this time of year. Feel free to trim bedding plants and tropicals to keep them under control. Stake or otherwise support plants that need it.

Keep old flowers cut off roses. Trim back to the first five leaflet leaf. Spray weekly with a combination insecticide/ fungicide product labeled for roses if the types you grow are susceptible to black spot.

Numerous bedding plants such as impatiens, begonias, salvias and geraniums may look a little stressed now. Blame the heat, both day and night. Many bedding plants (especially the tender perennials we grow as annuals) can be cut back in August. They will revive as the weather cools and provide color until November or longer.

Keep old flowers cut off roses. Trim back to the first five leaflet leaf. Spray weekly with a combination insecticide/ fungicide product labeled for roses if the types you grow are susceptible to black spot.

Pinch out the terminal growth of chrysanthemums during July. This encourages branching and more compact plants for fall blooming.

If you need to cut back your hydrangeas or gardenias, do so by the end of this month. If you need to cut back your hydrangeas, do so by early July. Flower buds are set in late July and August. When pruning hydrangeas, cut off faded flower heads with stems long enough to shape and control the size of the bush. Cut back excessively tall vegetative (leafy) shoots if necessary, but generally leave the vegetative shoots alone. They will produce flowers next year.

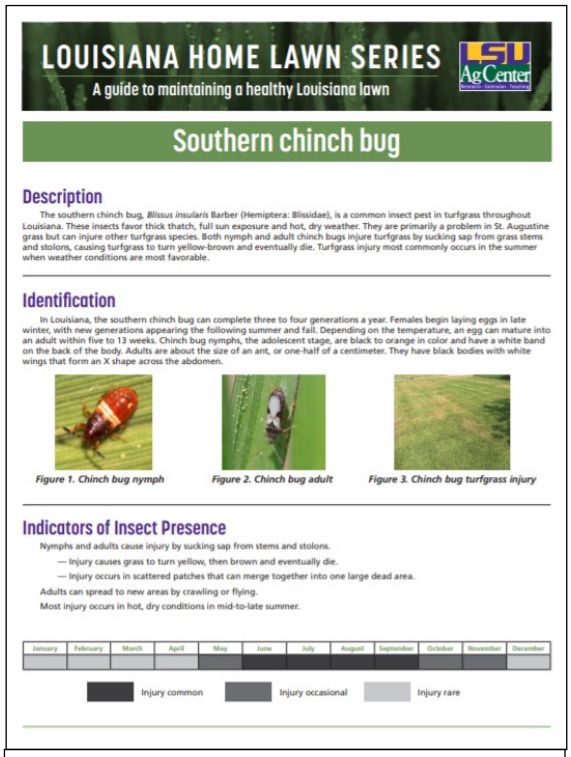
Lawn Care Do's & Don't's

Do's:

1. This is the last month to lay sod for Centipede, Zoyia, or St. Augustine grasses. Bermudagrass may be installed through August. Seeding of Centipede may be done this month but is not recommended.
2. You may fertilize at this time if you have not already done so. Look on page 5 of the Louisiana Lawns Best Management Practices Guide for information on the correct timing and application rates.
3. Chinch bugs are historically active this month so keep scouting for damage and apply treatment if chinch bugs are detected.
4. Irrigate as necessary to moisten the soil to a depth of 4-6 inches. The best time to water is in the morning. It is safest, from a disease standpoint, not to keep a grass wet all night long. Watering established sod during midday is discouraged because of extra loss from evaporation
5. Aerate the soil if necessary to alleviate compaction.
6. Dethatch the lawn if necessary.
7. Spread fill soil and compost over the lawn to add organic material and smooth out the lawn. Do not add more than 2 inches over actively growing grass.
8. Set your mower to the correct height for your turfgrass type.

Don't's

1. Do not apply selective herbicides with heat restrictions to the lawn.
2. Do not cut more than 1/3 of the height at a single time.
3. Do not try to grow grass in deep shade.


LOUISIANA HOME LAWN SERIES
A guide to maintaining a healthy Louisiana lawn
LSU AgCenter

Southern chinch bug

Description

The southern chinch bug, *Blissus insularis* Barber (Hemiptera: Blissidae), is a common insect pest in turfgrass throughout Louisiana. These insects favor thick thatch, full sun exposure and hot, dry weather. They are primarily a problem in St. Augustine grass but can injure other turfgrass species. Both nymph and adult chinch bugs injure turfgrass by sucking sap from grass stems and stolons, causing turfgrass to turn yellow-brown and eventually die. Turfgrass injury most commonly occurs in the summer when weather conditions are most favorable.

Identification

In Louisiana, the southern chinch bug can complete three to four generations a year. Females begin laying eggs in late winter, with new generations appearing the following summer and fall. Depending on the temperature, an egg can mature into an adult within five to 13 weeks. Chinch bug nymphs, the adolescent stage, are black to orange in color and have a white band on the back of the body. Adults are about the size of an ant, or one-half of a centimeter. They have black bodies with white wings that form an X shape across the abdomen.

Figure 1. Chinch bug nymph

Figure 2. Chinch bug adult

Figure 3. Chinch bug turfgrass injury

Indicators of Insect Presence

Nymphs and adults cause injury by sucking sap from stems and stolons.
— Injury causes grass to turn yellow, then brown and eventually die.
— Injury occurs in scattered patches that can merge together into one large dead area.
Adults can spread to new areas by crawling or flying.
Most injury occurs in hot, dry conditions in mid-to-late summer.

January February March April May June July August September October November December

Injury common Injury occasional Injury rare

The LSU AgCenter Louisiana Home Lawn Series publication on Southern Chinch bugs. The publication has information on identification and treatment options. To see the publication click here or go to: https://www.lsuagcenter.com/~/media/system/3/b/0/5/3b055b020a2dea5e457ff74afe70121b/p3624r_lahomelawnsouthernchinchbugpdf.pdf.

Your Local Extension Office is Here to Help

Follow us on Facebook at GNOGardening

For more information visit LSUAgCenter.com

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GNO Gardening Magazine published by Chris Dunaway

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