



GN Gardening Magazine

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By: Anna Timmerman

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Cover Photo: A Fortuniana gardenia. Photo by Chris Dunaway

# Poor Pollination

**M**isshapen (And Missing) Fruits and Veggies May be From Lack of Pollination. There's nothing more satisfying than picking fruits and veggies straight out of your own garden. There's nothing more disappointing than expecting a good, photo-ready harvest after months of preparation, and finding lumpy, misshapen fruits. Or worse, nothing at all. If you notice incomplete or malformed fruits and vegetables in your garden, don't automatically reach for pesticides or fertilizer. Take a moment to consider weather conditions, plant varieties and the perils of pollination.

Pollination is the transfer of pollen from the "male" parts of a flower to the "female" parts of the same or another flower, which allows fertilization and fruit formation to take place. Pollen is very small, and sticky. Animals like hummingbirds, bats, insects, and even some mammals will transfer pollen while feeding on nectar or collecting pollen. The wind can also move pollen and is the way in which many trees and grasses transfer their genes throughout the area. Many vegetables, like peppers and tomatoes, are self-pollinating, but can still have issues with properly pollinating if the weather is not right.

Fungus, poor fertility, and diseases are sometimes mistakenly blamed for effects of poorly pollinated crops resulting in the unnecessary application of

pesticides in misguided efforts to control the issue. Diagnosing issues as a result of poor pollination can help gardeners to take the correct actions and to select plant varieties that overcome these problems.

Cucumbers, squash, gourds, cushaw, mirliton, zucchini, pumpkins, and melons are all members of

the cucurbit family. Research has shown that it takes up to nine visits from a bee to pollinate a cucumber completely. When cucurbits grow with a pinched, smaller end, grow into hooks, or grow narrowly in some sections, and not at all in other parts, poor pollination may be to blame. Cucurbits form separate male and female flowers on the same plant. Often, the male flowers will bloom ahead of the females, resulting in no fruit set for a week or so. Male flowers contain large anthers



Photo by Chris Dunaway

Although bumble bees have special structures on their legs to hold pollen, they are also covered with hairs that pollen will stick to and later be deposited to the pistol of the same or another flower.

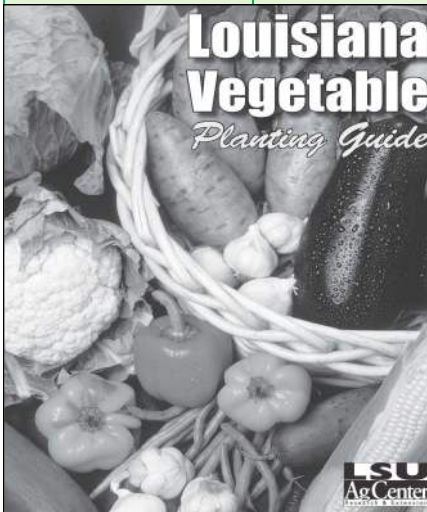
covered in yellow pollen. Female flowers have a small embryo of a fruit at the base of the flower, which is the ovary. If you see signs that your plants are not getting pollinated adequately, hand pollination can help to overcome this. Use a paintbrush, q-tips, or your hands to transfer pollen from the male flowers to the female ones. Mornings are the best time to do this since the flowers are short-lived and open when the sun rises.

Some cucumber types that are grown indoors in greenhouse systems are parthenocarpic and do not

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# June Vegetable Planting Guide

Crop	Recommended Variety	Planting Depth	Spacing Inches	Days Until Harvest * from transplant date
Cantaloupe	Ambrosia, Aphrodite, Athena, Primo, Vienna	¼ inch	18-24	80-85
Collards	Champion, Flash, Georgia, Top Bunch, Yates	⅝ inch	6-12	75
Cucuzza	None Given	½ inch	24	65
Eggplant	Dusky, Night Shadow, Epic, Santana, Calliope	⅝ inch	18-24	80-85
Hot Peppers (transplant)	Grande, Tula, Mariachi, Mitla,	-	--	140
Luffa Gourd	None Given	½ inch	48	90
Okra	Annie Oakley, Cajun Delight, Clemson Spineless	½ inch	12	60
Peanuts	None Given	1 inch	6	130
Pumpkins	Atlantic Giant, Baby Bear, Prankster, Sorcerer	½ inch	36-60	90-120
Southern Peas	Queen Anne, California #5, Quickpick, Colusus	½ inch	4-6	70-80
Sweet Potato	Beauregard, Evangeline, Hernandez, Jewel	Special	12	90-120
Swiss Chard	None Given	¼ inch	6-8	45-55
Watermelon	Seedless: Cooperstown, Gypsy, Matrix, Millennium Seeded: Mickey Lee, Sugar Baby, Amarillo	¼ inch	48	90-110



[Click on the above image to link to the LSU AgCenter Louisiana Vegetable Guide for more information.](#)

## Warm Season Bedding Plants

Blue Daze  
 Celosia  
 Coleus  
 Gaillardia  
 Lantana  
 Marigold  
 Melampodium  
 Narrow-Leaf Zinnia

Pentas  
 Periwinkle  
 Purslane  
 Salvia  
 Scaevola  
 Torenia



Scaevola

# Poor Pollination

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not need traditional

pollinators.

These plants are able to form vegetables in the absence of pollination. This is a handy trick and selecting these varieties can improve your success if you lack the necessary “bee power” in your garden. You can also extend your season by growing these plants indoors. Either way, look for parthenocarpic varieties in the seed catalog.

## 2912 Sweet Success F1

Greenhouse



25sd	100sd	500sd	1000 sd	5M (per M)	25M (per M)
8.15	24.95	99.75	143.90	129.90	117.00

- 55 days.
- Greenhouse-type parthenocarpic cucumber also performs well in the garden (sets fruit without pollination).
- Medium green, smooth, high-quality fruits grow 12-14". Grow on stakes or trellis.
- Sweet, crisp flesh, tender skin.
- Tolerant CMV, S. Fresh Mkt, Greenhouse, Garden.
- AAS Winner 1983

Above is an example of a parthenocarpic cucumber variety from Twilley Seeds.

Tomatoes, potatoes, eggplant, and peppers carry both male and female parts within the same flower. They are able to self-pollinate with the help of a good breeze, but problems can occur. Many varieties of tomatoes will fail to bloom, drop their blooms, or fail to pollinate because temperatures above 85°F during the daytime and 75°F at night will make the pollen unviable. Conversely, most peppers and eggplant will fail to pollinate if temperatures are too low. High humidity, on the other hand, can make pollen grains too sticky to move to the right parts of the flowers. Observe proper planting dates, choose recommended varieties (heat tolerant tomatoes for example) and keep plants healthy while waiting for more favorable conditions. Parthenocarpic varieties of these crops are also sometimes available. Many hybrid varieties have

been developed to overcome pollination issues as well.

Citrus trees will bloom profusely in the cooler months, with some fruit drop occurring after initial pollination. Although many people attribute this to poor pollination, this is perfectly normal. In early June many home growers will observe a second fruit drop as the tree sheds and thins out some fruits that it can't support through the summer. Use proper cultivation techniques including pruning, irrigation, and fertilization to maximize citrus production.

Blueberries require cross-pollination to set fruit, meaning that the pollen and ovary must come from different plants. For this reason, it is recommended to plant more than one variety of blueberry in your garden. Choose two or three different varieties to plant that bloom within the same time frame, the LSU AgCenter has a handy chart that breaks them into early, mid-season and late blooming varieties here (<https://www.lsuagcenter.com/NR/rdonlyres/D30270C0-F2DC-4B33-8AB7-036865AB6AAE/43117/pub1978HomeBlueberryProductionLOWRES.pdf>).

Strawberries can form misshapen fruits if inadequate pollination occurs.

Strawberries that are lobed, especially seedy and juiceless on one section, and lopsided are likely improperly pollinated. Strawberries are self-pollinating but form better fruits when a



Above is a photo of a strawberry that was not sufficiently pollinated.

The seeds of a strawberry develop on the outside of the “berry”. It is growth hormones released from the seeds that direct the development of the fruit. The areas of the fruit that appear normal have seeds that were pollinated

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combined effort of insect and wind pollination takes place. To help ensure good pollination of your strawberries and other fruits and vegetables, plant flowers in the garden to attract and encourage pollinators and other beneficial insects.

Blackberries with small sections (called drupelets) that



Each individual drupelet of a blackberry is a separate fruit.

are brown or unformed are the result of incomplete pollination. Blackberries are aggregate fruits, with clusters of small drupelets that form the entire fruit, and each drupelet must be pollinated to form a complete blackberry. If bees or other pollinators miss a flower, these brown sections can occur. Blackberries have 100-125 individual female flower parts, and 75-85 of those must be pollinated for a good sized berry to form. Cool, cloudy, wet weather can slow or discourage bees from foraging, resulting in poor pollination.

So remember, we need nature to continue the work of the birds and the bees. It could be the pesticides that we are spraying that is actually causing the problems of poor pollination by eliminating the beneficial insects that are needed for the job. To attract more pollinators to your garden, make intelligent decisions about pesticide use and install more plants that produce pollen and nectar. ~Anna Timmerman

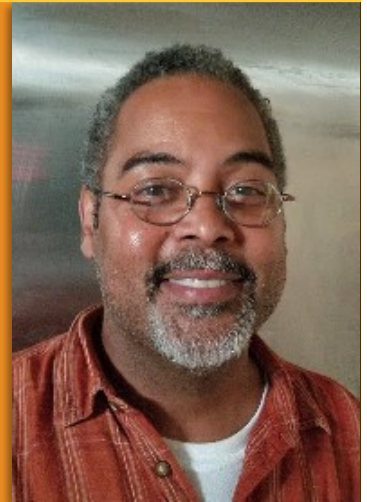
## In the Kitchen with Austin

### Corn Pudding

There's nothing like the excitement of seeing those first ears of fresh corn in your neighborhood grocery store at the beginning of summer. The anticipation about how to prepare it is often irresistible. Well, this recipe highlights corn's natural sweetness and pairs wonderfully with grilled meat...perfect for any backyard barbecue.

#### Ingredients:

1½ Tbs. all-purpose flour	½ tsp. salt	¼ cup butter, melted
⅛ cup sugar	3 eggs	5 ears of fresh corn kernels
1 tsp. baking powder	1 cup whipping cream	



#### Directions:

Combine dry ingredients in a bowl and set aside. Whisk together eggs, cream, and butter in a separate bowl. Add dry ingredients to wet, whisking until smooth. Fold in corn. Pour batter into a lightly greased 9 x 9 baking pan. Bake at 350° for 45 to 50 minutes until golden brown.

*Bon Manger!*

# Gardenia – That Fragrant Southern Favorite

When gardeners think of the South, there are certain plants that always come to mind; notably, okra, black-eye peas, camellias, live oaks, magnolias and gardenias. Is there anything more romantic than a slow Spring stroll through a moonlit garden filled with the heady fragrance of gardenia and the pure white blossoms shining in the landscape's darkening green background. Even the name is southern; named after Alexander Garden (1730-1791), a Scottish naturalist who lived in Charleston, SC. There are over 200 recognized species of *Gardenia*, but *Gardenia jasminoides* (formerly *G. augusta*) is the common ornamental species that everyone recognizes. Though native to China, gardenias definitely call the South home.

## GROWING

Gardenias can be grown inground or in containers. Some varieties are smaller and better suited to container growing than other large shrub varieties. Wherever they are grown, gardenias need moist well-drained soil, high in organic matter. In poorly drained areas, gardenias will quickly succumb to root rot and death. The optimal soil pH is acidic from 4.5 to 6.0. When grown in higher pH soils, gardenia will often develop chlorotic leaves with dark veins. This is most often due to iron deficiency. This is because Soil incorporation of sulfur or aluminum sulfate to lower the pH will often remedy this situation. You can also

spray the plants with chelated iron for quicker results, but you still need to lower the soil pH to prevent this from happening again.

Fertilize gardenias using a fertilizer formulated for acid-loving plants with a ratio of 2-1-1. Plant growth

and flower production is best if fertilized two to four times per year. The recommended times are in early spring (March) and again in summer (June) for most of the area. In areas with very mild winters, you may also want to fertilize in fall (September) and in winter (January). Gardenias are evergreen shrubs with dark green, leathery, shiny leaves most often twice as long as wide and need soil nutrients year-round.

Gardenias are best

planted in the fall. Prepare the area prior to planting to match the optimal soil conditions described above. Gardenias can grow in full sun to partial shade. The more sun they get the more they will flower. An ideal location would get morning sun (4 hours or more) with afternoon shading to protect from the summer sun heat intensity.

Water management is also important for optimal gardenia flower production. If fully budded plants are water stressed, they will often drop many of their buds before they open. A soil with good water holding capacity (high organic matter) goes a long way in preventing water stress and irrigation during long dry periods works wonders.



Photo by Chris Dunaway

A Frostproof Gardenia growing in the Historic Garden District in Alexandria Louisiana.

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# Gardenia – That Fragrant Southern Favorite

(Continued from Page 6) All varieties of gardenia have a huge spring flush of flowers and may bloom periodically throughout the year. Some varieties are



Chlorosis, the condition in which leaves produce insufficient chlorophyll, is typically caused by deficiencies in the element Iron. Although this is a nutrient issue, the problem is frequently due to excessively high soil alkalinity.

selected to have a strong reblooming habit. With all varieties, pruning should be done after the big spring flush but not after October 1<sup>st</sup>. Gardenias set the next year's flower buds in the fall and pruning after October 1<sup>st</sup> will greatly reduce the spring floral display. Pruning is only necessary to remove dead limbs or to shape and maintain plant size.

Deadheading, while not necessary, will keep gardenias looking more attractive during the bloom period.

## PESTS AND PROBLEMS

Gardenias are susceptible to several disease and insect problems all of which are exacerbated by poor growing conditions.

**Root rot** of gardenia can be caused by several soil fungi *Phytophthora*, *Rhizoctonia*, *Pythium*. Symptoms of *Phytophthora* root rot, crown rot and stem canker include leaf yellowing, leaf drop, wilting, decline, and

plant death. Root rot is common in plants that are chronically over-watered or are growing in poorly drained soil. An infected gardenia will show signs of wilting in sectors or the entire plant even when there is sufficient soil moisture. Examination of the roots will show brown or rotting feeder roots instead of the normal healthy white roots. There are currently no fungicides labelled for use on gardenia for *Phytophthora* root rot. The best control measure is prevention. Plant gardenias only in areas with excellent drainage.

**Powdery mildew** *Erysiphe polygoni* on gardenia appears as a whitish to grayish powdery fungal growth in patches or over entire leaves – mainly on the upper surface. Powdery mildew is more prevalent in high humidity environments so spacing plants to allow for good air circulation will help to prevent powdery mildew. Fungicides that may be used include myclobutanil, thiophanate-methyl, chlorothalonil, propiconazole, and triforine. Applications containing sulfur or Neem oil also show some control activity.

**Stem canker** *Phomopsis gardeniae* on gardenia is characterized by dark elongated stem lesions, often sunken with raised edges, usually near the soil level. Leaves and roots are also susceptible. The fungus usually infects gardenia through wounds and is a localized disease. Remove infected stems and infected plants. The fungus overwinters in the canker. Prevention is the best control measure by protecting the plant from injuries. Though not often used in home settings, fungicides effective against canker include chlorothalonil and thiophanate-methyl.

**Root-knot nematode** *Meloidogyne incognito* is characterized by an overall decline and stunting of the plant. Examination of the roots shows galls all along the roots caused by nematode infection. There are no nematicides available for home use, so the best control is prevention and removal of infected plants. Solarization of areas where gardenias are to be

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# Gardenia – That Fragrant Southern Favorite

(Continued from page 7) planted will reduce the nematode population and may give good control. However, the best current practice, if root-knot is a problem, is to plant gardenia varieties that have been grafted onto *Gardenia thunbergia* rootstock which shows resistance to root-knot nematode.



Photo by: J. McLeod Scott

Whitefly adults (*Dialeurodes citri*)

**Whiteflies** *Dialeurodes citri* on gardenia are small (1/10 – 1/16”) white insects that suck the sap from gardenia as immatures and adults. The plant leaves may turn yellow and drop and the plant may be stunted. If disturbed, a cloud of tiny white flying insects are readily seen. Insecticidal soaps and oils will control whitefly but only with complete coverage. Insecticides containing bifenthrin, permethrin, pyrethrin, cyfluthrin, acephate, imidacloprid, or disulfoton are effective against whiteflies. Acephate, disulfoton and imidacloprid are systemic insecticides.

**Aphids** (green peach *Myzus persicae* and melon *Aphis gossypii*) are small (1/8”) soft-bodied pear-shaped insects that feed mainly on young tender tissue and cause distorted, curled or stunted



Melon aphids *Aphis gossypii* feeding on the new growth of a camellia .

growth. They also excrete honeydew that can lead to sooty mold. Plant horticultural soaps and oils work well on aphids. Chemical insecticides that also work contain acephate, bifenthrin, cyfluthrin, permethrin, lamda cyhalothrin, malathion, neem oil, pyrethrin, imidacloprid, dinotefuran, or disulfoton. Aphids have many natural enemies and chemical insecticides should only be used if populations are high enough to cause severe damage.

There are several different **scale insects** that can attack gardenias – Japanese wax scale *Ceroplastes japonicus*, cottony cushion scale *Icerya purchasi*, tea scale *Fiorinia theae*, greedy scale *Hemiberlesia rapax* and oleander scale *Aspidiotus nerii*. Use of horticultural oils are very effective but total coverage is important for control. Chemical insecticides work mainly against the crawler stage and include acephate, permethrin, lamda cyhalothrin, cyfluthrin, bifenthrin, carbaryl, imidacloprid and dinotefuran. The systemics imidacloprid and dinotefuran, also are effective against adults.

**Thrips** of several types (*Frankliniella tritici*, *Frankliniella occidentalis*, and others) can sometimes attack gardenia. Thrips are tiny (less than 1/16”) dark insects that are often found on young leaves and flower petals. Feeding on leaves causes a flecking appearance and/or leaf curl and distortion. Feeding on flower buds can cause distortion, browning or bud drop. Insecticides that are effective against thrips

include bifenthrin, cyfluthrin, lamda cyhalothrin, permethrin, and Spinosad. Systemic insecticides work better on flower thrips and include acephate, imidacloprid, disulfoton and dinotefuran.

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# Gardenia – That Fragrant Southern Favorite

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**Two-spotted spider mites** *Tetranychus urticae* can become a problem on gardenias during dry hot summers. Damage results in a flecking appearance on the leaves and heavy infestations result in leaf drop, stunting and signs of webbing. Control options include insecticidal soaps and horticultural oils. Homeowner available miticides include tau-fluvalinate or bifenthrin.

All the insect and mite pests of gardenia have naturally occurring predators like ladybugs, lacewings, parasitic wasps and predatory mites. The chemical insecticides mentioned will also kill these naturally occurring predators so use of these chemicals should be a last resort. Quite often, these biological control agents will handle the job adequately.

## VARIETIES

Gardenias are grown for their handsome evergreen foliage and pure white fragrant blooms. Varieties come in single and double flower types with a range of flower diameters. There is also a range of sizes from 12" dwarfs to 10' trees. Below is a description of several popular varieties.

### Dwarf Varieties:

Radicans – Ht. 6"-1', Spread 2-3'. A small, prostrate spreading variety with 1" fragrant double flowers.



Radicans variety of dwarf gardenia.

Buttons – Ht. 2-3', Spread 2-3'. Has lance-shaped dark green leaves and 2" semi-double intensely fragrant flowers with button centers. A sporadic rebloomer.

### Small Varieties:

Chuck Hayes – Ht. 3-4', Spread 3-4'. A cold-hardy, heat-tolerant variety with 2-3" double flowers into late summer with a fall rebloom.

Double Mint – Ht. 2.5-3', Spread 2.5-3'. A compact dense variety with 2" double flowers with repeat bloom throughout the summer.



Double Mint gardenia flower.

Kleim's Hardy – Ht. 2-3', Spread 2-3'. A compact dense variety with small roundish leaves and 2" star-like single flowers. It is noted for extreme cold tolerance to 10°F.

Golden Magic – Ht. 2-3', Spread 2-3'. A variety developed with 2-3" pure white flowers that turn to creamy yellow and finally golden yellow as they age.

Jubilation – Ht. 3-4', Spread 3'. A cold hardy selection from the Southern Living Plant Collection with a profusion of 2" double flowers in early spring and sporadic reblooming into the fall.

ScentAmazing – Ht. 2.5-3', Spread 2.5-3'. Another selection from the Southern Living Plant Collection formerly known as ScentSation with fragrant 2" single flowers with yellow buttons. This variety is a strong rebloomer.

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# Gardenia – That Fragrant Southern Favorite

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Gold Doubloon – Ht. 3-4', Spread 4-5'. Not your typical gardenia variety. It has intensely fragrant 2" double white flowers set against a background golden yellow variegated foliage.

Daisy – Ht. 2-4', Spread 3-4'. A densely compact shrub with 2" star-like single flowers. It is naturally vase-shaped and takes well to shaping pruning.

## Large Varieties

August Beauty – Ht. 4-5', Spread 3-4'. A familiar older variety with highly fragrant double 3" flowers produced heavily from mid-spring to fall.

Aimee – Ht. 4-6', Spread 4-6'. This variety is noted for its rose-like double 4-5" fragrant flowers. Aimee is the variety often used to make the potted "tree gardenias".

Belmont – Ht. 5-8', Spread 4-6'. Belmont is an older variety with heavily scented, double rose-like 4" flowers borne heavily from spring through early summer and sporadic rebloom.



Gold Doubloon Gardenia

Celestial Star – Ht. 3-4', Spread 3-4'. Produces double 3" flowers heavily in the spring and a robust rebloom in the fall.

Frostproof – Ht. 4-5', Spread 3-4'. A Louisiana Super Plant with narrow lance-shaped leaves and 3" double flowers. It is noted for its cold hardiness.

Miami Supreme – Ht. 6', Spread 6'. Noted for its huge 4-6" double flowers produced heavily from

spring to early summer and sporadically into the fall.

Mystery – Ht. 6-8', Spread 6-8'. An old familiar variety noted for huge 4-5" powerfully fragrant double flowers from spring to early summer and sporadic rebloom into the fall.

Martha Turnbull – Ht. 4-6', Spread 5-7'. A free-flowering variety with 3" star-like single flowers selected from seeds collected at Rosedown Plantation, St. Francisville, LA and named for the garden's owner and horticulturist. Cross-pollinated flowers produce large hips that turn orange in the fall.

Fortuniana - Ht. 6-8', Spread 6-8'. Large evergreen shrub with lance shaped leaves producing a pure white double flower. (See photo on magazine cover.)

With the large number of gardenia varieties available, there should be one for everybody's taste. The smaller and dwarf varieties do excellent in containers.

Gardenias are a favorite for wedding ceremonies with their elegant pure white blossoms and pleasant romantic fragrance. Gene Bussell in Southern Living described it thusly, "Sultry as a summer evening and as intoxicating as an exotic perfume, the scent of gardenias settles like a memory onto your soul." Give your gardenias a little care and they will bless you with years of romantic moonlit intoxicating strolls.



A tree form Aimee gardenia growing in a container. Note: container grown plants need more frequent watering and fertilization that those grown in the soil.

~Dr. Joe Willis

# What's Bugging You? Pecan Phylloxera

If pecan trees are part of your landscape or just trees in the neighborhood, you may have noticed an unusual occurrence for this time of year. Are the pecan trees dropping a lot of their leaves? Do the leaves look like the ones below? If so, you're witness to the attack of phylloxera.

Phylloxeras are tiny, cream colored to pale yellow insects that resemble aphids but lack cornicles (the tubes found on the rear end of aphids). They have sucking mouthparts and are 1/10 to 1/5 inch long. These insects cause conspicuous swellings, called galls, to form on leaves, twigs and nuts. There are three species that attack pecans. All three species of phylloxera overwinter as eggs in protected places on the branches of pecan trees. The young that hatch from these eggs are known as "stem mothers" and first appear about the time that the leaves begin to unfold. The stem mothers migrate to opening buds or leaf tissue and begin to feed on the new growth. This feeding stimulates the development of galls which enclose the feeding insects in a few days. Inside, the stem mother matures, lays her eggs, and dies. Nymphs hatch from the eggs and feed within the galls until they mature. In late May or early June the galls split open and the new adults emerge.

## Pecan phylloxera

(*Phylloxera devastatrix*). This species produces a large, green gall on stems, twigs, petioles, midribs and nuts. Winged phylloxera are produced in these galls. In the pecan phylloxera, winged, asexual adults emerge from the galls. These migrate to other parts of the same tree or to nearby trees where they lay eggs

of two sizes. The small eggs hatch into male sexual forms and the larger eggs into female sexuals. After mating, the females find protected places on the trees and die with a single, fertilized egg inside them,

protected for the winter. There is one generation of galls per year.

## Pecan leaf phylloxera

(*Phylloxera notabilis*). This species produces small galls next to the midribs or secondary veins of the leaflets. The galls are ovoid to globular, open on the ventral surface of the leaf, are evenly green on the top and often reddish beneath when first formed. In the pecan leaf phylloxera, winged, sexual adults emerge from the galls caused by the stem mother. These sexual forms mate and the females find a protected place to lay a single egg before dying. They also hatch asexual, gall-forming nymphs in the same galls from which the sexual forms emerge. These crawl to new areas of foliage on the

same tree and form a second and, in some cases, eventually a third generation of galls in one season.

## Southern pecan leaf phylloxera

(*Phylloxera russellae*). This species produces small galls between the secondary veins on the leaf surface. The galls are round and flattened, open on the ventral surface, and show a reticulated pattern on their surface. The opening is marked by dense, short, white hairs. The phylloxera produced from these galls lack wings as compared to other pecan phylloxera. The females crawl to protected places to lay their single egg. The egg is usually not completely laid by the female and remains attached to her dead body. There is one generation of galls per year.



Pecan leaf infested with Southern Pecan Leaf Phylloxera top view (left) and underside view (right). Note the white tufts of hairs on the underside.

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# What's Bugging You? Pecan Phylloxera



Galls due to pecan phylloxera feeding are light green in color when they are first formed. They will harden and turn dark brown to black later in the development cycle.

## Control:

### NON-CHEMICAL CONTROL

- Plant native trees and improved varieties less susceptible to phylloxera
- Unless tree is stressed for other reasons, they usually recover
- Once galls are present, no effective control of Phylloxera is available.

### CHEMICAL CONTROL

- Spraying after the galls split open will kill some of the insects, but is not effective because of the extended time over which galls release insects
  - Most effective control is in spring when eggs hatch and insects crawl to buds (early April), but before nymphs are protected inside gall
  - Carbaryl (Sevin XLR 4F, or other formulations of Sevin) are available for home use • Dormant oil spray applied to tree trunks and limbs in dormant season is also effective, thorough coverage is essential to ensure that the eggs are killed.
- ~Dr. Joe Willis



Eggs and imature Southern Pecan Leaf Phylloxera inside of a gall. Photo from the University of Georgia Extension.

# Coming Events

Date	Event	Cost	Link
All of June	Eat Local Challenge, Many events throughout the city during the entire month of June! Celebrate locally grown foods!	Free!	<a href="http://eatlocalno.org/">http://eatlocalno.org/</a>
Friday, June 7 <sup>th</sup> 8 am-10 am	2nd Friday Composting Class from Parkway Partners and All You Need, 3700 Toledano, New Orleans	\$5	<a href="https://www.facebook.com/events/309142613311782/">https://www.facebook.com/events/309142613311782/</a> *Master Gardener Continuing Education Credit
Friday, June 7 <sup>th</sup> 6:30 pm-8 pm	Intro to Beekeeping at Grow On Urban Farm, hosted by All You Need, 2358 Urquhart St. New Orleans	\$20	<a href="https://www.facebook.com/events/376687162945239/">https://www.facebook.com/events/376687162945239/</a> *Master Gardener Continuing Education Credit
Saturday, June 8 <sup>th</sup> 9-11 am	Couturie Forest Family Volunteer Day @ New Orleans City Park	Free	<a href="https://www.facebook.com/events/311393966149851/">https://www.facebook.com/events/311393966149851/</a>
Saturday, June 8 <sup>th</sup> 10 am-2 pm	Water Wise Upper 9th Ward Workshops, hosted by Water Wise Gulf South and Bunnyfriend Neighborhood Assoc., 3811 N. Galvez, New Orleans	Free with RSVP	<a href="https://www.facebook.com/events/801266416937957/">https://www.facebook.com/events/801266416937957/</a> *Master Gardener Continuing Education Credit
Saturday June 8 <sup>th</sup> Sunday, June 9 <sup>th</sup> 11 am-6 pm	Creole Tomato Festival @ The French Market and Old US Mint. LSU AgCenter tomato booth will be near the Mint .	Free	<a href="https://www.facebook.com/events/848851705462476/?event_time_id=848851708795809">https://www.facebook.com/events/848851705462476/?event_time_id=848851708795809</a>
Thursday, June 13 <sup>th</sup> 6:30-8 pm	Raising Urban Chickens @ Grow On Urban Farm, hosted by All You Need, 2358 Urquhart St., New Orleans	\$20	<a href="https://www.facebook.com/events/2185971144857855/">https://www.facebook.com/events/2185971144857855/</a>
Saturday, June 15 <sup>th</sup> 9 am-Noon	Pelican Greenhouse Plant Sale @ Pelican Greenhouse in City Park near the I-610 overpass.	Free	<a href="https://www.facebook.com/events/596592247515874/">https://www.facebook.com/events/596592247515874/</a>



NEW ORLEANS CITY PARK  
**BOTANICAL  
GARDEN**

## PELICAN GREENHOUSE PLANT SALE

**June 15  
9 AM—NOON**

The Pelican Greenhouse is located in City Park just South of the I-610 overpass.

For additional information, call 504/483-9464.

# Coming Events

Date	Event	Cost	Link
Saturday, June 15 <sup>th</sup> 8 am-Noon	Garden Fest @ Burden Gardens & museum, 4560 Essen Lane, Baton Rouge	\$5, children 3 and under free	<a href="https://www.facebook.com/events/547274672452263/">https://www.facebook.com/events/547274672452263/</a> 
Saturday, June 15 <sup>th</sup> 10 am– 1 pm	Native Wildflower Field Trip, Sponsored by Louisiana Native Plant Society, 320 Bienville Rd. Folsom	Free	<a href="https://www.facebook.com/events/707127073038376/">https://www.facebook.com/events/707127073038376/</a> *Master Gardener Continuing Education Credit
Thursday, June 20 <sup>th</sup> 6:30-8 pm	Growing Mushrooms on Coffee Grounds @ Grow On Urban Farm, hosted by All You Need, 2358 Urquhart, New Orleans	\$20	<a href="https://www.facebook.com/events/432938297540624/">https://www.facebook.com/events/432938297540624/</a> *Master Gardener Continuing Education Credit
Friday, June 21 <sup>st</sup> 6:30-8 pm	Make a Worm Bin + Composting Class @ Grow On Urban Farm, hosted by All You Need, 2358 Urquhart, New Orleans	\$20 + \$20 for a build your own bin kit	<a href="https://www.facebook.com/events/442969889809515/">https://www.facebook.com/events/442969889809515/</a>
Saturday, June 22 <sup>nd</sup> 9 am– Noon	Greater New Orleans Iris Society General Meeting @ Jefferson East Bank Regional Library, 4747 W Napoleon, Metairie	Free, \$10 to join	<a href="https://www.facebook.com/events/2170278516343361/">https://www.facebook.com/events/2170278516343361/</a> *Master Gardener Continuing Education Credit
Saturday, June 22 <sup>nd</sup> 10:30 am—Noon	Growing Mushrooms on Logs @ Laughing Buddha Nursery, 4516 Clearview, Metairie	\$35, includes take home log	<a href="https://www.facebook.com/events/330853720966261/">https://www.facebook.com/events/330853720966261/</a> *Master Gardener Continuing Education Credit
Thursday, June 27 <sup>th</sup> 6:30-8 pm	Creating Edible Ecosystems @ Grow On Urban Farm, hosted by All You Need, 2358 Urquhart, New Orleans	\$20	<a href="https://www.facebook.com/events/864987573840366/">https://www.facebook.com/events/864987573840366/</a> *Master Gardener Continuing Education Credit
Friday, June 28 <sup>th</sup> 6:30-8 pm	Backyard Farming @ Grow On Urban Farm, hosted by All You Need, 2358 Urquhart, New Orleans	\$20	<a href="https://www.facebook.com/events/1253786571438236/">https://www.facebook.com/events/1253786571438236/</a> *Master Gardener Continuing Education Credit
Saturday, June 29 <sup>th</sup> 10:30 am—Noon	Intro To Permaculture @ Laughing Buddha Nursery, 4516 Clearview Pkwy, Metairie	\$20	<a href="https://www.facebook.com/events/358962271417265/">https://www.facebook.com/events/358962271417265/</a> *Master Gardener Continuing Education Credit

# Area Farmer's Market Guide

Jefferson Parish	Where	When
Fat City Farmer's Market	3215 Edenborn, Metairie	Every 2 <sup>nd</sup> and 4 <sup>th</sup> 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	3 <sup>rd</sup> Tuesday of the month, 3:30PM-7:30PM
Westwego Shrimp Lot	100 Westbank Expressway, Westwego	Daily Mon-Sat 8AM-8PM, Sun 8AM-6PM
Crescent City Farmer's Market-Bucktown	325 Metairie-Hammond, Highway at Bucktown Harbor	Fridays, 3PM-7PM
Crescent City Farmer's Market-Rivertown New Orleans	Williams Boulevard at the River	Saturdays, 9AM-1PM
Crescent City Farmer's Market-Ochsner West Campus	2614 Jefferson Highway, Ochsner Rehab Facility	Wednesdays, 3PM-7PM
Orleans Parish	When	Where
Crescent City Farmer's Market-Uptown	200 Broadway Street at the River	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	Thursdays, 3PM-7PM
Crescent City Farmer's Market-Downtown	750 Carondelet St at Julia	Saturdays, 8am-12PM
Sankofa Market	5029 St. Claude St.	Monday-Thursday, 9:30AM-4:00PM
ReFresh Farmer's Market	300 North Broad St.	Mondays, 4:00PM-7:00PM
Vietnamese Farmer's Market	14401 Alcee Fortier Blvd.	Saturdays, 5:30AM-8:30AM
Marketplace at Armstrong Park	901 N. Rampart	Thursdays, 3PM-7PM
Mid-City Arts and Farmer's Market	Comiskey Park,	<a href="http://midcityaf.org">Market dates vary, check http://midcityaf.org</a>
Treme Farmer's Market	814 N. Claiborne	<a href="https://gloriastremegarden.com/treme-farmers-market/">Market dates vary, check https://gloriastremegarden.com/treme-farmers-market/</a>
St. Bernard Parish	When	Where
St. Bernard Seafood and Farmer's Market	409 Aycock St., Arabi	2 <sup>nd</sup> Saturdays, 10AM-2PM

# June Checklist/Garden Tips

During dry weather don't forget to keep your compost pile evenly moist. Dry organic matter will not decompose. Do not, however, keep the pile saturated as that can cause bad odors.

Powdery mildew continues to be a problem on many ornamentals (crape myrtles, euonymus, roses) and vegetables (squash, cucumbers). Treat with chlorothalonil or other labeled fungicides.

Apply paint or shade cloth to greenhouses to prevent heat buildup. Fans should run just about constantly.

Prune climbing roses and ramblers that bloom on one year old growth now if needed to shape and train them.

Prepare trees for hurricane season by pruning out all weak, rotting or dead branches. Remove dead or rotten trees that might blow over in high winds.

Remove any flowers that appear on caladiums or coleus to promote continued production of colorful foliage.

When a gladiolus finishes blooming, prune off the faded flower spike but leave the foliage intact. The foliage will produce food that is stored in the newly developing corm ensuring a large, healthy corm that will bloom well next year.

Trim dead flowers from chrysanthemums that bloomed earlier if you have not done so already. Cut plants back about half way and fertilize to encourage vigorous growth. Pinch vigorous shoots over the next six weeks to create a bushier, fuller plant. Do not pinch or cut back after late July.

Plant a row or two of peanuts in the home garden now as early summer crops are pulled up. Shell raw peanuts and plant about three to four seeds per foot of row. Water once a day until the seeds come up. Peanuts also make an excellent green manure crop. Just as the plants come into flower turn them under. They will enrich the soil with nitrogen and organic matter. Allow the bed to sit for a few weeks while the organic matter decomposes, and you will be ready to plant a fall crop.

Dig and store gladiolus corms after the foliage turns brown. The largest corms are the ones that will flower next year.

Watch the rainfall you receive carefully, as it varies widely around the area. Cut back on irrigation whenever your garden receives one half inch or more of rain. Over watering is entirely possible if you are not careful, and that can lead to fungus problems such as stem, crown and root rot.

High temperatures and high humidity create a high heat index here in the summer. Adjust your gardening schedule to take advantage of cooler times of the day. Remember to drink plenty of water.

Spray peach tree trunks with permethrin to prevent the peach tree borer from getting into the trunk and causing damage.

Keep caladiums well watered during hot, dry weather to keep the foliage in good shape through the summer. Fertilize occasionally to encourage vigorous growth. Break off any flowers that form.



# Lawn Care Do's & Don't's

## Do:

1. Chinch bugs, which are most damaging during hot dry weather, often begin to show up in June. Look for irregular dead areas that enlarge fairly rapidly. The grass will have a dry, straw-like appearance. Treat with acephate, permethrin, cyfluthrin or other labeled insecticides to prevent extensive damage. Follow label directions carefully.



Image at left shows the life stages of a chinch bug from egg to adult.

2. Irrigate as necessary to moisten the soil to a depth of 4-6 inches.
3. Aerate the soil if necessary to alleviate compaction.
4. You may fertilize Your lawn in June if desired. See page 5 of the [Louisiana Lawns Best Management Guide](#) for information about proper fertilization rates for your turf grass variety.
5. Dethatch the lawn if necessary.
6. 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.
7. Set your mower to the correct height. See page 5 of the [Louisiana Lawns Best Management Guide](#) for information about proper mowing height for your turf grass variety.
8. You may still plant warm season grasses such as St. Augustine, centipede, bermuda and zoysia. You may need to pay particular attention to watering properly. Do not let the new grass dry out.

## Don't's

1. Do not apply selective herbicides (weed killer) to the lawn. It is too hot. Pull weeds by hand or spot treat with non-selective herbicides.
2. Do not cut more than 1/3 of the height at a single time.

**Your Local Extension Office is Here to Help**

**E-mail us at: [GNOGardening@agcenter.lsu.edu](mailto:GNOGardening@agcenter.lsu.edu)**



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