



November 2015

Pollinators are essential to our environment. Seventy percent of the world's flowering plants, including more than two thirds of the world's crop species, rely on pollinators to reproduce. The fruits and seeds from these crops are necessary for 30 percent of the fruits and vegetables that we consume, and include the most nutritious and interesting parts of our diet: apple, watermelon, blueberries, carrots, broccoli, and almonds to name but a few. According to estimates, managed and wild native bee species are responsible for close to one quarter of this value while honey bees were responsible for the rest.

Over the past 50 years, however, the honeybee keeping industry has been on decline with a 50 percent reduction in the number of managed colonies in the United States. This trend is a result of stagnant honey prices, combined with a barrage of new introduced pests and diseases.

Fortunately there has been an increase in the number of colonies over the past two years. But even with this increase, we can no longer assume that honey bees will be able to provide all of our farmers' future pollination needs. Scientists have demonstrated that native bees play a role in crop pollination. Other researchers continue to experiment with new species of managed native bees and the additional floral resources needed to support their successful reproduction. All this work, however, raises concerns about how we man-

age our farm landscapes. The continued trend toward large monoculture, insecticide use, and the continued loss of habitat-particularly a decline in the number and diversity of flowering plants available when crops are not in bloom-creates a landscape where few pollinators can survive.



A bumble bee (*Bombus impatiens*) collects nectar and pollen from a zinnia flower at the New Orleans Botanical Garden.

To diversify our pollinators, we must better understand how to manage a variety of bee species as well as the habitat that supports them and their wild counterparts. We cannot expect our natives to perform if we do not consider and provide for all of their habitat needs.

In the coming years, honey bees will continue to be critically important for production agriculture. To improve

The sustainability and security of farming in the United States, however, it is important for growers to diversify the pollinators upon which they rely. It also might be time for beekeepers to diversify their own operations and expand their management to native bees. We are being asked to picture a future in agriculture where even the most intensively managed almond orchards, cranberry bogs, and squash fields make room for flowering plants that complement blooming crops and have strategically placed hives of honey bees, tubes of leaf-cutters, boxes of bumble bees, and natural habitat that provides a home for wild native bees. (Mace Vaughan, *Conservation Director, The Xerces Society for Invertebrate Conservation*)

November Planting Guide

Edibles:

Beet	Collard	Leek	Radish	Swiss chard
Cabbage	Garlic	Lettuce	Rutabaga	Turnip
Carrot	Kale	Mustard	Shallot	
Celery	Kohlrabi	Onion	Spinach	



'Detroit Dark Red' Beets



'Red Creole' Onions



'Bloomsdale' Spinach



'Winner' Kohlrabi

Ornamentals:

Sweet alyssum	Ageratum	Blue bonnet	Iceland poppy
Lobelia	Snapdragons	Dianthus	Shirley poppy
Pansy	Candytuft	Sweet William	Stock
Johnny-jump-up	Calendula	Ornamental kale	Statice
Viola	Annual phlox	Nasturtium	Larkspur
Ornamental cabbage	Peony-flowered poppy	California poppy	Sweet peas



Johnny Jump-ups



Iceland Poppy



Sweet Alyssum



Lobelia



Calendula



Sweet Pea



Snapdragon



Dianthus

Citrus Harvest

In south Louisiana, we have begun harvesting citrus for the year. Since rind color is a poor indicator of ripeness on citrus, and fall weather conditions modify harvest dates each year, we often receive questions about when to begin harvesting. Even with a little green on the satsuma or kumquat skin, it may be sweet enough to enjoy; however, other types of citrus should be allowed to change color completely before they will be the desired sweetness. The best way for you to know if your fruit is ready for harvest is to pick one and taste it. If it tastes good to you, begin harvesting fruit as needed. Citrus will not continue to ripen once it is picked from the tree.

A great characteristic of citrus for the backyard gardener is that the fruit can remain on the tree for many weeks and stay good quality, longer than it would last if you picked and stored it. This time of year we tend to have a few cool snaps, and the cooler temperatures will actually cause your citrus to concentrate sugars and taste better! Cold is only a problem for citrus fruit if the temperatures are expected to be at hard freeze levels for several hours. It is not often that we get these types of freezes in the greater New Orleans area; however, it is a good idea to pick all of the fruit off of your citrus tree by January so that your tree can be as dormant as possible if we should receive some cold weather during the late winter. Picking fruit much later than this will also decrease the number of blooms your tree will produce for next year's crop.

When you are picking fruit, use a pair of hand pruners to remove satsumas from the tree, because they do not typically separate cleanly from the tree otherwise. Relieve the lowest-hanging branches first so that ripe citrus is not near the ground where rainwater can splash disease organisms onto it from the soil.

As it becomes time to harvest, most homeowners are paying more attention to their trees than they have all year, so you may be noticing old pest damage for the first time. Some of the pests whose damage you may be noticing right now are below:

Citrus rust mite – a mite that feeds on the citrus rind during the summer when the weather is hot and dry, causing the fruit to look brown on the outside at ripening. This is cosmetic damage and your fruit are still good to eat.

Leafminers – small flying insects who lay eggs on brand new citrus leaves, and the larvae feed completely inside the leaf before curling up an edge and emerging as a flying adult. Damage is not typically severe enough to warrant control.

Sooty mold – a black coating on your citrus leaves that can be scraped off is sooty mold. Although it is a fungus, the fungus is not your problem. This black fungus is colonizing honeydew that has been excreted from insects such as scales, aphids, whiteflies, or mealybugs feeding on your tree. Oil applications can be made to control most small insects on citrus.-Sarah Bertrand

As you are picking your fruit, continue checking for symptoms of citrus canker, a highly-contagious bacterial disease of citrus. If you notice citrus canker, and you are in upper Jefferson or Orleans Parishes you should consider removing your citrus tree so that it does not serve as a source of the infection for other trees in your neighborhood. All other parishes should report the disease to the LSU AgCenter or LDAF. Another disease to be on the lookout for during harvest is citrus greening, whose most noticeable symptom is lopsided fruit. If you notice this symptom on the fruit you're picking, contact the LSU AgCenter or LDAF immediately.

-Sarah Bertrand



Rust mite damage on citrus.



Leaf miner damage on leaves.



Florida wax scale & sooty mold.



Citrus canker damage.



Symptoms of citrus greening.

Armillaria Root Rot

Armillaria Root Rot is a soil-borne fungal pathogen caused by the species *Armillaria tabescens*. This is a highly destructive disease that attacks shrubs. Aside from our shrubs, *A. tabescens* has a very diverse host range including many trees, shrubs, and vines. The first symptoms of Armillaria Root Rot that one will notice is the presence of yellowing of leaves, and wilting. Next visible symptoms include complete death of branches and ultimately the entire plant. The disease can be spread from root-to-root contact with other infected shrubs. At the base of an infected shrub there will be the presence of white mycelia underneath the bark. Unfortunately there is no cure for this disease. If the pathogen is present in the shrub, completely remove the plant, including the roots. Put the shrub in a plastic garbage bag and discard. Sterilize all tools with alcohol that were used to remove the plants.

Though there is no cure, there are ways to prevent the disease. Start with a disease free plant. Plant the shrub at the appropriate depth. Do not plant susceptible host in the same location that previously contained an infected plant. Avoid over watering or keeping the crown of the shrub moist. And finally, keep mulch away from the crown of the shrub. If you suspect your rose to be infected with *Armillaria tabescens*, submit sample to Plant Diagnostic Center for confirmation. www.lsuagcenter.com/plantdiagnostics.

Some plants that are resistant to armillaria root rot include: ginkgo, ash, bald cypress, catalpa, Chinese elm, Chinese pistache, crabapple, eucalyptus, hackberry, maple, pine, privet, smoke tree, sweetgum, and wisteria.-Lee Rouse



In this photo, a thin slice taken from the root exposes the white mycelium created by the fungus.

Volunteer Spotlight



Rosalind Rowell

Rosalind “Ros” Rowell is a graduate of the 2014 Master Gardener class. She is one of an exclusive minority that achieved her certification one year ahead of schedule. Ros has been an active member of MGGNO and is currently serving as Chairman of the Communications Committee for the 2016 LA Master Gardener State Conference as well as the Chairman for the Handbook and Member Directory Committee. She also volunteers at the New Orleans Botanical Garden and the LaSalle Park Demonstration Garden.

Plant of the Month

Camellia Sasanqua

Camellia sasanqua are sometimes called ‘the other camellia’ but these hardy plants should be considered for a place in your garden. The sasanqua’s produce prolific numbers of short lived flowers from the fall to early winter. As the flowers expire, they will fall creating a beautiful carpet of petals around the base of the plant.

Now is the perfect time to select your plant because they will likely be in bloom at your local nursery. You may purchase them now but wait to install them until between January and March. Choose a location with morning sun and partial shade in the afternoon. They preferred well drained acidic soil. Before planting, take a soil test and make adjustments as necessary. Once established, fertilize the plants in the spring when new growth begins. Use a fertilizer recommended for acid loving plants.



Leslie ann



Snow white mountain



Yuletide



Assacura

November Checklist/Garden Tips

Cut back chrysanthemums after they finish flowering to remove the old faded flowers. Sometimes the plants will set a new crop of flower buds and produce more flowers during the winter if weather is mild.

Harvest broccoli when the largest buds in the head are the size of the head of a kitchen match. Do not focus on the size of the head itself as that is not an indication of when the broccoli is ready to harvest. If you begin to see yellow flowers you waited too long.

Don't forget to hose off and check outdoor container tropicals carefully for pests and critters before moving them inside for the winter.

Make sure you mulch new beds of cool season bedding plants as soon as they are planted to control weeds. It's also helpful to water them in with a soluble fertilizer to get them off to a good start.

Mirlitons are ready for harvest this month. This vining relative of squash and cucumbers is popular in south Louisiana and virtually unknown to gardeners in the northern part of the state. Popular for use in Cajun dishes, mirlitons are light green pear shaped vegetables that have a mild squash-like flavor. The mirliton vine grows vigorously all summer, but generally does not begin to bloom and produce fruit until October and November (an early summer lagniappe crop sometimes occurs). Harvest continues until the first killing frost. At that time, remove the dead vine and heavily mulch the perennial roots. The vine will usually return in the spring.

Direct seed poppies, larkspur and sweet peas into well prepared beds where you want them to grow. Planting the seeds in the spring or even in late winter will not work well with these plants. It gets too hot too early.

Finish planting spring flowering bulbs such as daffodils, Dutch irises, narcissus, lilies, etc. this month. Buy tulips and hyacinths by mid November, and refrigerate them for at least six weeks before planting them in late December or early January.

Use the same trellises used during the summer for cucumbers and luffa to grow cool season vegetables such as English peas, snow peas and edible podded peas.

Your Local Extension Office is Here to Help

E-mail us at: GNOGardening@agcenter.lsu.edu



Follow us on Facebook at [GNOGardening](https://www.facebook.com/GNOGardening)

For more information visit LSUAgCenter.com

Sarah Bertrand
Jefferson Parish
Horticulture Agent

(504)736-6519



Lee Rouse
Orleans Parish
Horticulture Agent

(504)483-9471

