



Carambola (Star Fruit)

By John Dawson, Master Gardener 2007

We recently lost our pummelo (*Citrus maxima*) tree in the Master Gardeners' Education Gardens due to citrus greening disease. We received a donation of a very young carambola (star fruit) seedling to take its place. Star Fruit (*Averrhoa carambola*) was brought to Florida over 100 years ago from Southeast Asia and grows well in our area. Hopefully, we will have a warm winter, because young trees can be killed if temperatures go below 32°F; whereas, mature established trees can withstand short periods of 27°F. The carambola prefers well-draining, slightly acid soils and does not tolerate salty soil conditions. It should be planted in a sunny area protected from high winds.

Carambola can be grown in containers and kept small by pruning. Containers may be moved if frosts or high winds are predicted. Left alone and planted outdoors in a sunny location, the tree can grow to 35 feet high and 25 feet wide in our area, but should be kept to 6 to 12 feet wide and tall, for easier maintenance.

Even though they can be grown from seed, carambolas are normally found in nurseries as grafted trees. Growing from seeds may produce fruit different from the parent tree due to possible cross pollination. Carambolas flower several times a year with fragrant rose to purple flowers. Fruiting from a grafted tree can begin about the second year, with each succeeding year producing more fruit. Be advised, a mature tree can produce several hundred pounds of fruit each year (you may be throwing out more than you eat). There are two types of fruit, sweet (large fruit) and tart (small fruit). The ones you find in the store are the sweet varieties. Fruit are ripe when they change color from green to yellow/yellow-orange. There is at least one variety that stays green.

Although they will continue to ripen off the tree after they start to change color, they are only as sweet as when picked. Since store fruit needs to be shipped and the fruit bruises easily, they must be picked early and therefore are never as sweet as the fruit that fully ripens on the tree, which usually occurs between July through March. There are several varieties of carambola so make sure you taste the varietal before you buy the tree.

Carambolas are in the family Oxalidaceae, which means the plant contains oxalic acid, which can lead to serious complications for those suffering from kidney disease and oxalate kidney stones. If you have kidney problems, consult your doctor before trying carambolas for the first time.

For additional information on growing carambola, please go to "Carambola Growing in the Florida Home Landscape" <http://edis.ifas.ufl.edu/mg269> . Another great source called "Growables – Grow Florida Edibles" <http://growables.org/information/TropicalFruit/carambola.htm>, is a website developed and maintained by two Sarasota County Master Gardeners.





What's This?

By Nancy Hammer, Master Gardener 2014

Woolly Oak Aphids

Woolly oak aphids (*Stegophylla brevirostris*, or *Diphyllaphis microtrema*) are found on various species of oak trees in Florida. The aphids live under secreted, tufted, white wax on the undersides of leaves. The wax is very easy to spot, in some cases so profuse that it fills the entire leaf underside.

Their piercing, sucking mouthparts can cause leaf distortion, and yellowing. Woolly oak aphids do not have the two tubes (cornicles) extending from the end of the abdomen which is a common identifier of many other aphid species. Sometimes these aphids are confused with mealybugs or whiteflies.

They are native to Florida and are prey to native species such as parasitic wasps, lacewings, and lady beetles. Control measures generally are not necessary. However, if beneficial insects do not control the problem, and plant appearance is important, insecticidal soaps, horticultural oils, or systemic pesticides can be used on larger trees.



Credit: Lyle Buss, UF/IFAS

Stegophylla brevirostris colony on oak.

For more information, refer to http://entnemdept.ufl.edu/creatures/TREES/woolly_oak_aphid.htm “Woolly oak aphids *Stegophylla brevirostris* Quednau and *Diphyllaphis microtrema* Quednau (Insecta: Hemiptera: Aphididae)” by Susan E. Halbert, University of Florida, or call the Extension Master Gardener Diagnostic Plant Clinic at (941) 722-4524.

What's an ISA Arborist?

By Joy Derksen, Master Gardener 2004



Master Gardeners in the Plant Diagnostic Clinic frequently get questions about trees from our clients. Often we can help with the problem by viewing leaves, branches, or photographs. But, equally as often, the client needs to get an expert to look at the tree on site and help the client decide on a plan of action.

Trees are a very valuable part of any homeowner's landscape and they should be handled by professionals. The Extension Office often recommends that the client telephone a certified arborist.

Certified arborists are men and women who have a certain level of knowledge in the care of trees. They are certified after proving their experience in the field of tree care and by taking a comprehensive examination administered by the International Society of Arboriculture. They must keep up with new advances in their field with

continuing education and they must adhere to a Code of Ethics.

More information about what an arborist can do for your trees can be found at:
http://www.treesaregood.org/treecare/resources/hire_arborist.pdf

A list of certified arborists in our area can be found at:
<http://www.treesaregood.org/findanarborist/findanarborist.aspx>

If you don't have access to a computer, the Plant Diagnostic Clinic (call 941-722-4524) is always happy to give you the names of several certified arborists.

Remember, Florida's Arbor Day is January 20th!





Perico Preserve Restoration

By Damon Moore, Environmental Program Manager - Ecological Resources - Parks & Natural Resources Dept.

In November 2007, Manatee County acquired a 176-acre parcel that would become Perico Preserve. This land contained 120 acres of mangrove swamp and bay bottom habitat as well as 56 acres of uplands. While the wetland portions of this site were relatively undisturbed and providing valuable habitat and ecosystem services, the upland areas had lost much of their ecological value.

Sometime in the 1940's, the ground was tilled and the pine flatwoods and coastal scrub that historically existed at the site were plowed up and put into agricultural production, which continued on the site for nearly 70 years. When the farming stopped the nuisance and exotic plants took over the site.

Instead of native pines (*Pinus* spp.) and oaks (*Quercus* spp.) dominating the canopy, with a rich assemblage of native grasses and forbs (herbaceous growth) beneath them, exotic species such as Brazilian pepper trees (*Schinus terebinthifolia*) and Australian pine trees (*Casuarina equisetifolia*) became prevalent. Grasses like torpedo grass (*Panicum repens*) and cogon grass (*Imperata cylindrica*) became the dominant ground cover on the upland areas of the site. From an ecological standpoint, the damage had been done. Upland areas of the site were dominated by plants hailing from all corners of the world and providing little support to wildlife.

Local wildlife, especially insects, often have an affinity for specific native plants because they have developed adaptations that allow them to use a specific and narrow group of related plants as food. Most of our local herbivorous insects do not have the adaptations necessary to digest exotic plants.

The exotic plants grow and reproduce unchecked because there are very few insect predators munching at their leaves or making meals of their seeds, which gives them a competitive advantage over most native plants. Without diverse native plants, local insect populations decline since

Q: What is this pale lavender groundcover I see starting in the fall and really abundant in winter months here? Where can I get seeds? A.H, Palmetto

A: The groundcover you're seeing is *Richardia grandiflora*, commonly called Mexican Clover or largeflower Brazilian pusley, a native of South America.

The flowers range from white and pale blue to pale pink and are quite abundant on the low growing, creeping stems which allow them to escape from mower blades, thus creating a carpet of flowers that lend to the descriptive name "Florida snow."

Several species of butterflies and moths are fond of the pusley nectar. This plant is a prolific seed producer and can be difficult to eradicate once established in your lawn. It's unknown how this non-native plant became established although it is believed the seeds are spread on mower blades.

If you really want this weed in your lawn, just hire a lawn service that mows roadsides and in time the weed will gain a foothold in your yard!

I'm including a link to information about this weed: <http://okeechobee.ifas.ufl.edu/News%20columns/Now.weed.htm>.

"Ask a Master Gardener" by emailing ManateeMG@gmail.com. Questions are answered by Master Gardener Karen Holleran. You can also visit our Plant Diagnostic Clinic every weekday except Wednesday, 9:00 A.M. to 4:00 P.M. at the Manatee County Agriculture and Extension Office, 1303 17th Street W., Palmetto, telephone 941-722-4524.

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cannot find food. With fewer insects there is less food for all of the wildlife that depends on them for food: think hungry baby birds! However, this sad turn of events was a major factor in the restoration planning for habitat restoration at Perico Preserve.

In the simplest way of looking at it, the exotic plants had to go and good native plants needed to be restored. To do this, Manatee County Parks and Natural Resources - with a lot of help from the Southwest Florida Water Management District and hundreds of volunteers - implemented an aggressive plan that involved re-shaping the land form, removal of exotic plants, and to the extent possible depleting the seed bank of exotic plants. This was followed by replanting thousands upon thousands of native plants (consisting of over 150 species) which keep weeds at bay. Once native plants were established, Manatee County executed a prescribed fire on the site in April 2016 in order to restore natural germination of seeds.

It will take many more years for site to achieve the beautiful complexity of natural unaltered habitat as created by Mother Nature, but local wildlife has responded well to the restoration efforts. There are nice hiking trails and boardwalks for you to enjoy. Perico Preserve is located at 11700 Manatee Avenue West in Bradenton and is open 7 days a week from sunrise to sunset.

<https://www.mymanatee.org/home/government/departments/parks-and-recreation/natural-resources/preserves/perico-preserve>

Damon Moore is a Program Manager with the Manatee County Parks and Natural Resources Department, plant geek, and nature lover.



Scrub restoration area after exotic plants were removed. January 2013. Photograph by MCPNRD



Scrub restoration area with early establishment of desirable native plants. June 2014. Photograph by MCPNRD



Scrub restoration nearly four years after planting. November 2016. Photograph by MCPNRD.



Manatee County staff during a prescribed fire at Perico Preserve. April 2016. Photograph by Rob Hamilton.

Update on Invasive Plants

By Amy Stripe, Master Gardener 2008

Invasive plants are those that displace native plants and upset natural ecosystems as a result. Spreading rapidly, invasives can quickly take over the resources (sun, water, nutrients, space) that native plants need. Ultimately, native wildlife dependent on those plants is also affected. It is estimated that 42% of all endangered and threatened flora and fauna species are declining due to invasive species.




Florida is particularly at risk: 85% of nonnative plant species enter the U.S. through our state. And our hospitable climate and diverse ecosystems, coupled with shrinking natural habitat due to agriculture and development, elevate that risk.

The UF/IFAS Assessment of Non-native Plants in Florida's Natural Areas ("the Assessment") is an on-going scientific endeavor to assess the invasive potential of plant species. Over 850

plants have been evaluated so far and the results can be easily accessed at <http://assessment.ifas.ufl.edu>, complete with color photos.

Homeowners should be aware of the Assessment's classification of any plant they wish to use in their landscape. Even if you make an informed decision to use an invasive species, such as the ever-popular Mexican petunia (*Ruellia simplex*), remember you cannot control the plant's spread outside of your own yard. (This particular plant pumps out seeds that are dispersed by wind.) And, if you live anywhere near a park or preserve, the onus is even greater for you to be a responsible gardener.

Plants are reassessed every two to ten years and plant classifications have been known to change. Here are classifications for Central Florida you may not know:

Common Name	Scientific Name	Image	Type of Plant	Now Classified As:
Brownbud allamanda, yellow allamanda	<i>Allamanda cathartica</i>		Ornamental vine	INVASIVE
Indian shot	<i>Canna indica</i>		Perennial	INVASIVE
Japanese barberry, crimson pygmy	<i>Berberis thunbergii</i>		Tree	INVASIVE

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Common Name	Scientific Name	Image	Type of Plant	Now Classified As:
Princess flower	<i>Tibouchina urvilleana</i>		Large shrub	INVASIVE
Tiger grass	<i>Thysanoloena latifolia</i>		Ornamental grass	INVASIVE
Trailing lantana	<i>Lantana montevidensis</i>		Groundcover	INVASIVE
Cardboard palm, cardboard plant	<i>Zamia furfuracea</i>		Cycad	CAUTION
Solitary palm, Alexander palm	<i>Ptychosperma elegans</i>		Palm	CAUTION

Photo Credits: *Allamanda cathartica*: John Ruter, University of Georgia, all others <http://commons.wikipedia.org>

These plants were considered "Florida-Friendly" as recently as six years ago. So, it pays to refer to the Assessment frequently, especially before purchasing or installing new plants. (Please also note that the scientific name is extremely important when identifying plants; there are many species of

Canna, for example that are native and / or not invasive.)

Attend our Invasive Plants Workshop being held on Monday, February 6, 2017 from 6:30 to 8:30 P.M. to learn more. To sign up, call the Master Gardeners at 941-722-4524.

January CALENDAR OF EVENTS



Date	Time	Event
3 rd Tuesday of each Month	10:00 a.m.	Monthly Guided Tours of the Master Gardener Educational Gardens - Join us for a guided tour lasting about one hour. The gardens illustrate a variety of garden styles and techniques, demonstrate Florida-Friendly Landscaping™ principles, educate residents about plants that perform well in Florida landscapes, and inspire garden visitors to follow recommended gardening practices at home. Register by calling the Master Gardener Plant Diagnostic Clinic (941) 722-4524.
1 st Saturday	10:00 a.m.-1:00 p.m.	Ask a Master Gardener – Island Library – 5701 Marina Drive, Holmes Beach. Visit the Extension Master Gardener information table and get answers to your gardening questions.
2 nd & 4 th Saturday	10:00 a.m.-1:00 p.m.	Ask a Master Gardener – Rocky Bluff Library – 6750 US Highway 301 N., Ellenton. Visit the Extension Master Gardener information table and get answers to your gardening questions.
2 nd Saturday	10:00 a.m.-1:00 p.m.	Ask a Master Gardener – South Manatee Library – 6081 26 th Street West, Bradenton. Visit the Extension Master Gardener information table and get answers to your gardening questions.
Saturday January 14	9:00-11:00 a.m.	Extension Master Gardener Plant ID Tour – Emerson Point Preserve - Stroll through Emerson Point Preserve to learn more about Florida's native plants and inhabitants of a coastal habitat. Suitable for all ages. Tour begins in tower parking area at 5801 17 th Street West, Palmetto. Call the Extension Master Gardeners at (941) 722-4524 to register.
Saturday January 14	9:00-11:00 a.m.	Extension Master Gardener Plant ID Tour - Riverview Pointe Preserve & DeSoto National Memorial - Stroll through Riverview Pointe Preserve to learn more about Florida's native plants and inhabitants of a coastal habitat. Suitable for all ages. The hike begins in the parking area of the DeSoto National Memorial Park and enters into the Riverview Preserve at 8250 DeSoto Memorial Highway, Bradenton. To register call the Extension Master Gardeners at (941) 722-4524.
Saturday January 14	1:00 p.m. 2:00 p.m. 3:00 p.m.	This year at the Manatee County Fair, the Manatee County Extension Urban Horticulture Program will host brief hands-on workshops (30 minutes each) in the Extension Master Gardener Educational Gardens: Growing & Caring for Bromeliads Growing & Caring for Orchids Compost Benefits in the Garden
Sunday January 15	9:00-11:00 a.m.	Extension Master Gardener Plant ID Tour - Robinson Preserve – Stroll through the Robinson Preserve's salt marshes to learn more about Florida's native plants and inhabitants of a coastal habitat. Suitable for all ages. Tour begins in parking area by main entrance at 1704 99 th Street Northwest, Bradenton. To register call the Extension Master Gardeners (941) 722-4524.
Saturday January 21	1:00 p.m. 2:00 p.m. 3:00 p.m.	This year at the Manatee County Fair, the Manatee County Extension Urban Horticulture Program will host brief hands-on workshops (30 minutes each) in the Extension Master Gardener Educational Gardens: Growing & Caring for Fruit Trees Butterfly Gardening Basics Plant Propagation Basics
Tuesday January 31	1:00-3:00 p.m.	Landscape Tips for Water Conservation - This class satisfies the landscape educational requirement for the Manatee County Outdoor Water Conservation Rebate Program. Topics will focus on Florida-Friendly Landscaping™ tips such as right plant vs right place, watering efficiently, and the benefits of mulch. Register online at http://manatee.ifas.ufl.edu or call Joann at (941) 722-4524.



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