

Message from Flagler Horticulture Agent

Flagler County Horticulture Friends,

The 2018 Master Gardener Class has gotten off to an excellent start. State experts including Extension Botanist and Museum of Natural History Herbarium Curator, Marc Frank have helped to deliver the latest horticultural information to participants to equip them with the skills and knowledge they will need to succeed as volunteers.

We have many new projects going on right now at the extension center including construction of new raised beds for seasonal vegetables. The concrete block garden that was located on the rear corner was disassembled due to a drainage issue. By the end of September the new gardens should be complete, just in time for the cool season crop. New plastic film for greenhouse awaits installation. I have been hedging my bets to wait until hurricane season is over. The old plastic is torn in a few places, but is still holding together for now. The ventilation fan recently stopped working and a replacement has been ordered. We were also able to order two new ebb tables for easier watering in the greenhouse. The old spray system was unreliable and the spay emitters often clogged with minerals.

The Flagler County Community Garden has been graced with involvement from the UF/IFAS Extension Family Nutrition Program (FNP). The purpose of FNP is to



Flagler County Community Garden

provide SNAP-Ed or Supplemental Nutrition Assistance Program Education in Florida. The goal of FNP is to educate SNAP-eligible residents of Florida, using evidence-based approaches, about healthy eating habits and being active, in order to reduce the risk of obesity. Margaret Cruz, Program Assistant, with the Family Nutrition Program has been working with the Boys & Girls Club of Volusia and Flagler Counties. Starting this fall she will be implementing an educational program introducing growing vegetables and linking it with the class curriculum. As a result the garden has received additional supplies. We hope to schedule some work days in the near future to assist with getting the garden in good shape for the fall plantings. As always there is a need for dedicated volunteers to assist in various roles.

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**SOL LOOKER—UF/IFAS Flagler County Extension
Horticulture Extension Agent I, Master Gardener Coordinator**





Image By Forest and Kim Starr

Tropical Spiderwort (TSW)

By Sol Looker

UF/IFAS Residential Horticulture Agent I

What is that weed? This is Tropical Spiderwort (TSW), a serious invasive plant that is classified as a Noxious Weed.

Noxious weeds are weeds that are regulated by the state of Florida or the USDA. By state and federal laws it is illegal to **introduce, multiply, possess, move or release** any noxious weed or invasive plant regulated by the Florida Department of Agriculture or the USDA except under permit issued by the department or USDA with concurrence by the department. The state of Florida also has a list of Prohibited Aquatic Plants that fall under the same restrictions. The state of Florida Noxious weed list can be accessed by following this link <http://bit.ly/FL-St-NW-List>, the Florida Prohibited Aquatic Plants can be accessed at <http://bit.ly/FL-St-NW-Aquatic>, and the Federal Noxious weed List can be accessed at <http://bit.ly/Fed-NW-List>.

Tropical spiderwort is thought to be native to tropical Asia and Africa where it grows as a perennial, it is not certain how the plant has spread, but it is now found in many parts of the world including more temperate climates where it grows as an annual. Tropical Spiderwort was first reported in the Continental United States in 1928, and thought to be common throughout Florida by the mid-1930s.

There are many native and introduced plants similar to Tropical Spiderwort. TSW can be identified by leaves that are broad and short, the presence of long hairs at the summit of the leaf sheath, and TSW is the only dayflower species that produces underground flowers. The plant's stems will climb when supported, otherwise they creep along the ground rooting at the nodes. The flowers of TSW are said to be more purple or lavender than other dayflower species which are blue.

Homeowners should be aware of how to recognize this invader. Early detection and eradication from your property is the best strategy for control. Hand pulling followed by spot treatments of newly emerging seedlings with glyphosate before plants reach 2 inches in height is the best strategy. Heavily infested areas may take multiple attempts to gain control.

For additional information please visit

<http://bit.ly/FDACS-TSW> "*Commelina benghalensis*, Tropical Spiderwort" and

<http://bit.ly/IFAS-EDIS-TSW>

"Benghal Dayflower (*Commelina benghalensis*, L.) Identification and Control"

PLANTS FOR THE COASTAL ENVIRONMENT

By Julia Wilson, Master Gardener

After two recent hurricanes and with our usual heat and humidity, we are left wondering what will grow in coastal Flagler County and survive. This column will review some plants recommended by the University of Florida and successfully used by Master Gardeners. Our focus is on the coastal side of the Intracoastal Waterway and the salt water canals. It will not include direct oceanfront. That is a challenge where you have the additional issues of ocean spray and wind.

Image By Forest & Kim Starr



The Natal Plum (*Carissa grandiflora*) and the Dwarf Natal Plum (*Carissa macrocarpa*)

The Natal Plum is considered one of the best seaside shrubs for Florida. Although the Natal Plum is listed as hardy starting in zone 9B, it has been growing in landscapes in Flagler Beach for several years. Even the freezes this past winter did little damage. So what makes them a good choice for the landscape? Both are evergreen with rich green oval leaves. With their dense growth and little need for pruning they show off larger shrubs and trees. And there are flowers—white, star shaped and somewhat fragrant— that appear throughout the plant. The fruit is bright red and plum shaped. Both the flowers and fruit may be on the plant at the same time presenting quite a show. The fruit is edible with a taste like cranberries and has been used to make jam. The difference between the two Natal Plums as indicated by the names is the growth habit. The dwarf is classed as a ground cover spreading four to eight feet but reaching a height of only 12 to 18 inches. Be aware though that both plants have sharp, forked spines along the branches. So it is not advised to plant these near walkways. The dwarf variety works well as a border, a low hedge or foundation mass planting, or a container plant. The *Carissa grandiflora* is moderately fast growing and can reach 6 to 10 feet spreading 4 to 10 feet. This makes it useful as a screen or hedge or a full foundation shrub. Both grow in full sun to part shade and tolerate most soils. They are highly drought and salt tolerant and require no irrigation once established. They do not like wet feet and can develop root rot from overwatering. However, they did survive the heavy rains and flooding from Hurricane Irma.

References: UF/IFAS Extension Documents FPS107 and 108, "*Carissa Grandiflora* Natal Plum", <http://edis.ifas.ufl.edu/fp107>, "*Carissa macrocarpa* Dwarf Natal Plum", <http://edis.ifas.ufl.edu/fp108>

Swamp Hibiscus: Hibiscus coccineus

By Elizabeth Rourke, Master Gardener



The flower above is on a Native plant called Swamp Hibiscus in the Wildlife garden. Other names for this plant are Scarlet Rose Mallow and Scarlet Hibiscus

In the wild, plants are found in swampy areas, around ponds or along canals. We have found that it also does well in normal garden settings. We have planted it in three areas that have different types of soil and water availability. The Wildlife garden is a very wet area due to the water runoff from the building and sidewalk and tends to retain water. In the area in front of the greenhouse and in the Native garden, the water availability varies with the amount of rain we receive. The plant in the garden by the front door is in a dry area and is doing well.

The Swamp hibiscus plant grows to heights of 4 to 6 ft and will bloom from late spring to fall. Its beautiful red blossoms will provide constant color and interest to your flower beds. Unlike other types of Hibiscus my experience has been that the deer **do not eat them!**

The plant is perennial in zone 8 and will survive winter in protected areas of our zone 9a. The plant is easily propagated from the generous number of seeds produced on each plant.

Swamp hibiscus statistics: Native to Florida

Height: 4-8ft Spread: 3 to 4ft

Light requirement: full to part sun

Soil: Tolerates most soils, moderate drought tolerance, not salt tolerant.

Leaf arrangement: alternate

Leaf shape: star-shaped, lobed; serrated, green

Flower: large (6-8in) wide with oval broadly spreading red petals tapering at base surrounded by a column of red flower parts with 5 large pointed green sepals (calyx) behind the petals.

Fruit: rounded green capsule that turns brown contains 5 chambered sections that split open to disperse the seeds.

Cole Crops, Wonders of Selective Breeding

By Sol Looker

You may have heard the term cole crop used at some point to describe cabbage or some close relative of cabbage. Cole crops are members of the mustard family or the Brassicaceae genus that are informally referred to as cruciferous vegetables. Cole crops include Brussels Sprouts, cabbage, cauliflower, collards, kale, kohlrabi, mustard, broccoli, and turnips. Cruciferous refers to the first set of cotyledons that emerge from seeds which resembles a cross. Without going into the complicated breeding history and the multiple crosses that have been made during this genus' long history of human cultivation, it will suffice to say all cole crops originated from breeding between a small number of domesticated wild relatives. Over hundreds of years humans has developed plants with strikingly different appearances and tastes, ranging from edible white flower clusters of cauliflower, to tightly folded leaves forming dense heads of cabbage.



The key to growing cole crops in Florida is timing and plant selection to get an early start once weather begins to cool. Some of temperature is location specific. Urban areas tend to be warmer than rural areas. Flagler County has areas in both USDA cold hardiness zones 9A and 9B, divided East and West by I-95, indicating temperatures tend to be about 5 degrees colder on average West of the interstate.

Because cole crops thrive under similar growing conditions, they have similar cultural requirements and thrive when planted together. These crops do best with cold temperatures and full sun. Here in Florida it remains warm a little too long to produce good starts of cabbage. For success growing cabbage it is good to avoid direct seeding and use transplants produced in states with earlier cool weather. Crops including broccoli do best when started in flats with rich soil prior to transplanting. Cole crops like rich soils high in organic matter and plenty of water. Growing cruciferous vegetables in the same location year after year will encourage the buildup of pathogens that favor the crop. For this reason, crop rotation every couple of years is encouraged.

It is truly amazing that so many of the things we love to eat came from a few wild ancestors. With proper timing and care, these cool season crops can provide a bounty of nutritious produce for homeowners. I suggest gardeners new to the area try cool season vegetables because some of the limiting factors, including pests and disease, are less prevalent during winter making gardening easier.

Cole Crop Basics

By George Murgitroyde



Cabbage—*Brassica oleraceae* Capitata group.

Suggested Planting Date: August – February

Spacing: 24 – 40 inches between rows, 9-16 inches between plants

UF Suggested Cultivars: (Green) ‘Bravo’, ‘Bronco’, ‘Capture’, ‘Cheers’, ‘Expat’, ‘Superstar’

(Red) ‘Cairo’, ‘Garnet’, ‘Red Dynasty’, ‘Red Hawk’, ‘Red Jewel’, ‘Rio Grande’

(Savoy) ‘Clarissa’, ‘Melissa’, ‘Savoy Ace’, ‘Savoy King’

Notes: Heading cabbage take 85-110 days to mature from seed. Purchasing transplants will help ensure plants finish before warm weather.

Broccoli - *Brassica oleraceae* Italica group, Brassicaceae (Cruciferae).

Suggested Planting Date: August – February

Spacing: 24-40 inches between rows, 10-15 inches between plants

UF Suggested Cultivars: ‘DuraPak 19’, ‘Emerald Crown’, ‘Emperial’, ‘Green Magic’, and ‘Packman’

Notes: Direct seeding results in poor stands, start with 4-6 week transplants, extended periods below freezing can damage or stunt plants.

Cauliflower—*Brassica oleraceae* Botrytis group.

Suggested Planting Date: August – February

Spacing: 24-40 inches between rows, 12-18 inches between plants

UF Suggested Cultivars: ‘Albacete’, ‘Flamenco’, ‘Majestic’, ‘Whistler’, ‘White Passion’

Notes: Upon head formation, the leaves should be wrapped with a rubber band around the head to prevent exposure to the sun.

Kohlrabi—*Brassica oleracea* var. gongylodes

Suggested Planting Date: August-February

Spacing: 14-24 inches between rows, 14-18 inches between plants

UF Suggested Cultivars: ‘Green Beauty’, ‘Kolibri’, ‘Peking Purple’, ‘Purple Vienna’, ‘Winner’



Broccoli Images by Sol Looker UF/IFAS



Collards—*Brassica oleraceae* Acephala group.

Suggested Planting Date: August-February

Spacing: 24-36 inches between rows, 6-18 inches between plants

UF Suggested Cultivars: 'Bull Dog', 'Flash', 'Georgia', 'Hi Crop', 'Top Bunch', 'Vates'

Notes: Plants can grow up to 4 feet tall providing continued harvest of older leaves. Cooler temperatures are said to produce tender more palatable leaves.

Kale—*Brassica oleraceae* Acephala group.

Suggested Planting Date: August-February

Spacing: 24-36 Inches between rows, 6-18 inches between plants

UF Suggested Cultivars: 'Dwarf Siberian', 'Dwarf Green Curled Scotch', 'Dwarf Blue Scotch', 'Imperial Long Standing', 'Siberian', 'Spring', 'Flowering Kale'

Notes: As leaves are stripped new ones form. You should never remove more than 1/3 of the leaves at a time

Mustard—*Brassica juncea*.

Suggested Planting Dates: August – February

Spacing: 12-36 inches between rows, 5-10 inches between plants

UF Suggested Cultivars: 'Florida Broad Leaf', 'Green Wave', 'Red Giant', Southern Giant Curled' 'Tendergreen'

Notes: Broadleaf varieties require more space and may be damaged by frost. Warm temperatures create a bitter flavor in the leaves

Turnip—*Brassica rapa* Rapifera group.

Suggested Planting Dates: August- February

Spacing: 12-36 inches between rows, 2-6 inches between plants

UF Suggested Cultivars: 'Just Right', 'Purple Top', 'Royal Crown', 'Southern Green'

Notes: Both tops and roots are edible. Root quality is best when harvested between 2 and 3 inches in size.



Upcoming Events

Invasive Plants Taking Over Florida

Please join us October 24 from 10am – 11:30am at the UF/IFAS Flagler County Extension Center located at 150 Sawgrass Rd. Bunnell, FL 32110
PH: 386-437-7464
Email: lookers@ufl.edu
Horticulture Agent Sol Looker will be presenting information on invasive plant recognition and control.



FREE & OPEN TO
THE PUBLIC

UF | **IFAS Extension**
UNIVERSITY of FLORIDA 

UF IFAS Flagler County Community Horticulture Education

Future Horticulture Education is listed on www.eventbrite.com

Registration on <https://www.eventbrite.com>

150 Sawgrass Road Bunnell, FL 32110-4325

“Speakers Bureau” available to non-profits, homeowners associations, clubs, etc. Contact us if you would like an Agent or Master Gardener to present information to your group on horticultural topics.

Contact us for More Info: Sol Looker 386-437-7464 or lookers@ufl.edu

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University of Florida Master Gardener Volunteers

Our Mission

To assist Extension Agents in providing research-based horticultural education to Florida residents.

Our Vision

To be the most trusted resource for horticultural education in Florida.

Name That Creature, first correct answer earns \$5 credit towards admission to Horticulture classes held at the Flagler UF/IFAS Extension Service.

Contact Sol Looker Via email with your answer lookers@ufl.edu



Stay Connected with Flagler County Horticulture!

Flagler County Extension.....<http://district3.extension.ifas.ufl.edu/flagler.shtml>

University of Florida Solutions for Your Life.....<http://solutionsforyourlife.ufl.edu/>

Florida Friendly Landscaping.....<http://http://fyn.ifas.ufl.edu/>

University of Florida Gardening Solutions.....<http://gardeningsolutions.ifas.ufl.edu/>

University of Florida Master Gardener.....<http://gardeningsolutions.ifas.ufl.edu/mastergardener>

If you are interested in joining the Flagler County Master Gardener Program, please contact Sol Looker at lookers@ufl.edu or 386-437-7464.

The Flagler County Master Gardener and Horticulture program is open to all regardless of gender, race, color, nationality, creed or disability.