UF | IFAS Extension UNIVERSITY of FLORIDA

An Equal Opportunity Institution

SOLUTIONS

Volume 5, Issue 3

A New Leaf

YARD & GARDEN NEWSLETTER

UF/IFAS Extension Duval County

May-June 2024

In this Issue

Extension Update by Larry Figart

"Someone is sitting in the shade today because someone planted a tree a long time ago." -Warren Buffett

We will soon be accepting applications for the 2024 Master Gardener Class with registration opening on May 24th. If you have an interest in gardening and serving your community, please read on.

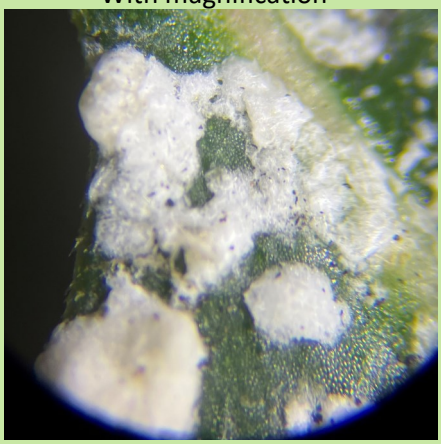
Master Gardeners receive training in horticulture and in exchange agree to give volunteer service by helping their local county extension office. The training will consist of both in-person and online training beginning in August 2024. You need to be a Duval County resident. If you live outside of Duval County, contact your local county extension office. The cost to participate is $150. If you are interested, we've scheduled an informational meeting on May 23rd via zoom. The link for the zoom meeting is https://ufl.zoom.us/j/91425251193?pwd=QVcySUNEbXd3aERJUlQrNTM3L2dlUT09

What's That (answers on page 7)

Firebush with a white substance

A little closer

With magnification



Images taken by Larry Figart, UF/IFAS

UF | IFAS Extension UNIVERSITY of FLORIDA

For more information contact:
UF/IFAS Extension Duval County
Larry Figart lfigart@ufl.edu (904) 255-7450

Around the Yard by Tonya Ashworth

Protect Yourself in the Garden this Summer

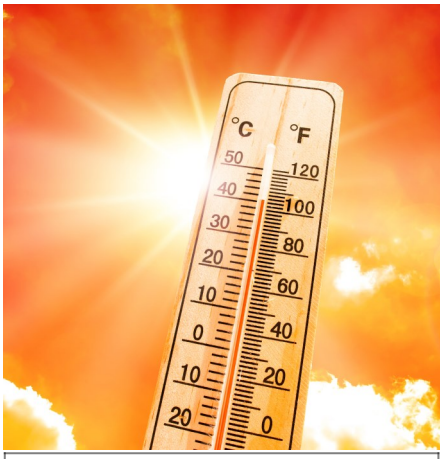


Image Credit: Adobe Stock image, Gunter Albers

Whoa! Who turned up the heat? It seems with temperatures already reaching into the upper 90's, summer has already begun! This doesn't mean we can't keep gardening, but it does mean that we need to take extra precautions when we work outside.

There are many dangers that go along with gardening in the summer. Heat rashes, fainting, heat cramps, heat exhaustion, heat stroke, sun burn and skin damage are all possibilities. Anyone can experience these issues, but certain groups of people are more at-risk than others. Older people, young children, people with heart problems, pregnant people, unfit or overweight people, and people who have not acclimated to working in the heat are most at risk.

Fainting, heat exhaustion, and heat stroke require immediate action. They are caused when the body's natural cooling processes don't work as they should. Fainting can happen when the body tries to cool itself by pumping warm blood to the skin. However, if the person is stationary, whether sitting or standing, the blood will collect in the lower part of the body, causing the brain to not get enough blood flow, and the person faints. If you are with a person who has fainted, have them lie down somewhere cool, drink water, and elevate their feet and legs. They should also consult with a doctor.

Heat exhaustion is caused from sweating out excessive body fluids and salts along with decreased blood flow to the brain and other organs. If you experience dizziness, headache, nausea, weakness, or confusion, and your skin is cool and pale, it could be heat exhaustion. Lie down somewhere cool, elevate your feet, remove excess clothing, and drink cold fluids. Be careful about going into the air conditioning immediately, as this can cause some people to pass out.

Woman being treated for Heat Stroke.
Photo Credit: Adobe Stock image, New Africa

Heat Stroke requires immediate medical attention. Some symptoms of heat stroke are confusion, chills, headache, nausea, dizziness, convulsions, and unconsciousness. The skin will feel hot and dry. To help someone who may be suffering from heat stroke, you should first call for an ambulance. Next, remove their outer clothing and apply cold water or ice packs to their skin or immerse them in cold water if possible. Do not give a person with heat stroke anything to drink. If you are alone and suspect you are experiencing a heat stroke, call 911 immediately. Heat stroke can be fatal.

Fortunately, there are several things you can do to prevent overheating illnesses. Garden early in the morning or in the evenings to avoid the most intense heat of the day. Make sure you are drinking water whether you are thirsty or not. Take a break in the shade at least every two hours. Wear lightweight, light colored clothing. Avoid caffeine, alcohol, and large amounts of sugar as those can speed up dehydration. If possible, ramp up to long gardening sessions to get your body used to the heat.

As the humidity and heat start to rise, so should your vigilance to keep yourself hydrated and safe as you garden and have fun outdoors.

Out on a Limb by Larry Figart

What's in a label

Early in my career as a forester I received a call from a homeowner as to why all the trees that had just leafed out were suddenly losing their leaves. During the conversation it was revealed that her husband had just applied 10 bags of weed and feed fertilizer to her 5,000 square foot lawn. According to the label, 2 bags would have been sufficient and that using 10 bags meant that 5 times the label rate was applied and had killed or damaged all her turf, and defoliated her trees. Additionally, she lived on a water body. It doesn't take much to imagine how much nutrient runoff occurred from the overapplication.

All pesticides, herbicides, insecticides, fungicides, and even fertilizers are required to have a label. The label contains all the information needed to use the product safely. In addition to causing unintended plant damage, the mis-application of landscape products can mean harmful residues, or long-lasting injury.


STOP!

STOP! READ THE ENTIRE LABEL FIRST. OBSERVE ALL PRECAUTIONS AND FOLLOW DIRECTIONS CAREFULLY.

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION: Harmful if absorbed through the skin. Avoid contact with skin, eyes, or clothing. Harmful if swallowed. When using this product, wear long-sleeved shirt, long pants, socks, shoes, and chemical resistant gloves.

The purpose of the label is to legally describe how the product is to be used and not be used. Generally, the pesticide label contains:

- **Where the product can be used**. This might include what plants, or locations the product is intended for. This is important for a couple of reasons. For instance, if the label prohibits use on edible plants, you will not want to use it on your vegetables.
- **What pests are controlled**. Some labels will have general descriptions of pests while others will be more specific. An example of a general description might be “lawn pests”, whereas a specific example might include “chinch bugs”.
- **How to apply the product**. This might include a backpack sprayer, or if it is a granular product, it might mention a spreader setting. Another thing that is often mentioned in this section includes temperatures, or days after rainfall. A common example goes back to herbicides we use to kill weeds in turf. Some products are not meant to be used when average temperatures are above 90°F and can kill or stress the turf when used during warm weather.
- **The rate of application**. This includes instructions for mixing the product such as how much the product should be diluted, and what settings the sprayer, or spreader should be set on.
- **How often** the product should be applied as well as how much time should pass before you can harvest or enter the area.
- One of the most important parts of the label spells out **what kind of protective equipment** you should be wearing while applying the product. For instance, a common statement includes wearing long sleeve shirts or closed toed shoes. The label also includes important first aid instructions.
- **How to store and dispose** of the product after you have applied it.

What about organic pesticides, aren’t they safer? Typically, an organic product, whether it is a pesticide or a fertilizer is made from products found in nature such as remains or byproducts of a living or once-living

….continued on pg. 6

Growing in the Vegetable Garden by Beth Marlowe

Garden happenings in May and June

Harvesting:

By early May, most of the cool season crops have been harvested. The peas have been suffering in the heat and succumbing to powdery mildew, so we harvest and pull up the plants. The lettuce has threatened to bolt, so it too has been harvested. The onion tops have fallen over, so we lift them up, lay them in the sun to dry for several days, and then cure them for two weeks in a cool, dark, dry place (indoors!). We check to see if the tops of our potato plants have begun to die back. If so, this means tubers are maturing and we can harvest them in another 2-3 weeks. Mature tubers store much longer than those harvested earlier because their skins are tougher. They're usually ready by late May if they were planted in mid-February (or after 80-115 days).

Fruiting:

Stippling on the fronts of the leaves shows mite damage. Credit: B. Marlowe, UF/IFAS

The rest of May and June are peak spring crop production weeks especially for tomato, pepper and eggplant. We check irrigation to ensure it's functioning and providing adequate water. As crops get bigger and the weather gets hotter, we sometimes increase the watering time on specific beds or lines. We fertilize at the beginning of each month to ensure the plants have everything they need to produce. Because most large-fruited tomatoes stop producing when nighttime temperatures get too high, and humidity and insects begin to take their toll, we focus on early varieties that produce ripe fruit 50-60 days after transplanting. 'Glacier' was our first harvested this year, with a ripe tomato on April 29. Jalapeno peppers are not far behind. Bell peppers take a bit longer, especially if we want to wait until they are red. The first eggplants this year are an Asian variety called Orient Express. Gardeners who planted summer squash early are harvesting by the beginning of May. This is one important way of avoiding insect problems; getting as much production as possible before pest populations can find them. If you are not getting fruit yet, watch to see if bees are pollinating your flowers. If not, you can hand pollinate by pulling off a male flower and using it like a paint brush to transfer pollen from its anther to the female flower's stigma. If you are late planting or just can't wait, you can also harvest female flowers (along with the embryonic squash behind them), dip them in batter and deep fry them for a tasty vegetable side dish or appetizer.

Aphids on muscadine leaves with ants tending them.
Credit B. Marlowe, UF/IFAS

Scouting:

Bush and pole beans are flowering by May and should soon be producing pods. With our warm and dry April weather, we've seen lots of spider mites this year, especially on the beans. If infestations are not too high, we spray them off with a blast of water, or remove individual leaves. If populations continue to grow, we may also treat with an insecticidal soap or oil labeled for mites.

But mites are not our only challenge! As those tasty plants grow, all the other insects looking for a meal begin to show up too. We spend time in the garden turning over leaves and looking for damage or insects themselves. So far, we are also seeing aphids, armyworms and leaf-footed bugs. In mid-April, for example, one of our muscadine vines was heavily infested with We knew muscadines should be able to withstand a little aphids. This

…. continued on pg. 6

Friendly Landscapes by Stephanie Means

How to Pick the Best Plants

So you've researched for weeks, and even consulted the Florida-Friendly Plant Guide (https://ffl.ifas.ufl.edu/plants/) to figure out which plants should do best in your garden based on how much sun and water they'll get, but now you're at the nursery faced with many choices. How do you know EXACTLY which plant to select? Should you get the biggest one, the one with the most flowers, or the one that is a little droopy and lopsided but less than half price on the clearance rack? Read on to find a few helpful tips that will set you and your new plant up for success.

Insect infestation found under leaf

Image Credit: UF/IFAS

First, no matter whether it's an annual, perennial, shrub or tree, look for full form and even development. Generally, the plant that is more compact is better grown and has received the most light. In selecting trees, form is particularly important. The canopy should be aesthetically pleasing and evenly developed, indicating it was grown in the open with ample room. A lopsided tree, or one with dead branches on one side is a red flag. Another thing is to make sure the tree has not been topped. A topped tree will have multiple leaders instead of one dominant leader. Except for some fruit trees, topping is an inappropriate method of reducing the size of the canopy. Topping uses heading cuts through woody tissue several years old. This method results in decay and a weak structure over time.

Second, look carefully at the leaves. Check for insect damage and disease, avoiding plants with infested, distorted, mottled, spotted, or otherwise damaged leaves. Take time to examine the stems, undersides of the leaves, and in small crevices for any signs of insects that shouldn't be there. Scout for miniscule crawling critters (thrips), black, brown, or white raised dots that scrape off with your fingernail (scale), fine spider webbing (spider mites), or white fuzzy substance (mealybugs). Look for abundant foliage with good, rich color. Yellowing, mottling, or brown spots can indicate stress such as nutrient deficiencies, fungal issues, or disease. Buying infected plants not only hurts the plant you've added to your landscape, but it can also spread the insects and disease to other plants in your garden.

Tree roots circling the trunk

Image Credit: UF/IFAS

Lastly, smart buyers evaluate root systems thoroughly. Check how well each plant fills its allotted space. Gently hold the plant on its side and slide it out of the pot. Ideally, you should see a mix of roots and soil. White roots are healthy roots but if you see roots coming out of the pot, or a solid mass of white, fibrous roots encircling the pot the plant is too heavily rooted. On a rootbound plant such as this, some of the roots will need to be cut away before planting, which could set the plant back a bit. If the plant doesn't slide from the pot and soil spills out, or if the plant seems small in its pot and is surrounded by soil, it is probably not sufficiently rooted. Trees with severe circling roots should not be planted at all. Stem girdling roots can eventually slow growth and girdle the trunk.

Selecting healthy specimens and placing them in the appropriate location is crucial for achieving a successful landscape. While low-quality plants may seem like a budget-friendly option, they often underperform and require more resources to restore them to their optimal state. Good quality nursery plants offer additional benefits. These plants have a higher chance of thriving after being planted, establish themselves faster, and have a longer lifespan in the landscape. Happy plant shopping!

Growing in the Vegetable Garden continued from pg. 4

Armyworms and their damage on underside of tomato leaf.
Image credit: B. Marlowe, UF/IFAS

Adult leaf-footed bug hiding under leaf of artichoke
Image Credit: B. Marlowe UF/IFAS

seemed unusual. Aphid pressure, so we decided to wait and see if the aphids would attract enough beneficial insects to control the population. They were there by the first of May. Sometimes, simply watching and waiting can be helpful.

Armyworms are caterpillars of several moth species, and need to be addressed quickly. Numerous larvae hatch out at the same time on undersides of tomato, pepper or other vegetable leaves, and can do significant damage if not controlled early. Squishing them by hand is easy when they're tiny. Bacillus thuringiensis, or Bt, works quite well on those too large for squishing. Follow label directions when applying.

Leaf-footed bugs, related to stink bugs, are hardest to control. They are large and built like tanks so insecticides don't have much impact on adults. Treating earlier nymph stages with insecticidal soap can be effective. Placing the adults into a bucket of soapy water is the easiest way to get rid of them.

Planting

Planting in May and June is limited to only the most heat-tolerant crops such as sweet potatoes, okra, luffa gourds, Seminole pumpkins and southern peas. Sweet potatoes are planted using slips, or the newly sprouted stems of a sweet potato. They can be ordered online and shipped via mail. Be sure to open and plant them immediately upon delivery. Don't store them in the refrigerator to buy some time. They are very cold sensitive. Southern peas, gourds and pumpkins are typically direct-seeded where they will grow. All these crops can handle the heat of July and August, providing harvests long after our spring crops are finished. The UF/IFAS infographic for May and June are helpful for remembering what we can plant at these times. For monthly planting guides go to: https://gardeningsolutions.ifas.ufl.edu/plants/edibles/vegetables/vegetable-gardening-in-florida.html#monthly

Out on a Limb continued from page 3

organism, or naturally occurring minerals. It is important to note that just because a product is organic, or natural, it does not mean it is not dangerous. The same rules of following the label instructions apply. An example is the use of landscape vinegar as a non-selective weed killer. Even though it is a natural product, the label is clear that it is a corrosive acid and you should wear eye protection when applying the product.

While it may not be exciting to read the label before you mix or apply pesticides, herbicides, or fertilizers, they contain very important instructions and details about the product. In addition, following the label directions will help you control the pest or weed you want to control, protect yourself, your family, and the environment while you are using the product. As I end this article I must include ….."Make sure you read and follow the label instructions when mixing and applying the product". For more information on pesticide labels go to : https://edis.ifas.ufl.edu/publication/PI141

What to Plant in May and June

Flowers: Ageratum, Amaranthus, Angelonia, Balsam, Begonia (Wax), Celosia, Crossandra, Dusty Miller, Gaillardia, Gomphrena, Impatiens, Marigold, Melampodium, Milkweed, Moss Rose, Pentas, Periwinkle, Rudbeckia, Salvia, Scarlet Sage, Torenia, Zinnia

Bulbs: Planting (early, mid and late-blooming) varieties of daylily ensures months of color from these low-maintenance plants.

Vegetables: Roselle, Tropical Spinaches, Long Squash, Luffa, Pigeon Pea, Seminole Pumpkin, Sweet Potatoes, okra, peanuts,, southern peas

Herbs: heat-loving herbs, including basil, oregano, sage, Mexican tarragon, and rosemary.

Upcoming Classes

Scan Code for current list of ALL Duval Extension Classes

Date, Time, Cost	Event & Registration	Location
May 22nd 2:00 - 3:30 pm $10.00	**May Backyard Hen Training** This informational course is on caring for backyard hens and is a prerequisite to receive a Backyard Hen Permit from Duval County.	Extension Office 1010 N McDuff Ave
June 1st 9:00- 10:30 am Free	**Improve Your Garden Soil Over the Summer: Solarize it!** Join us for this outdoor class and learn what solarizing is, how to implement it, and how it works.	Dutton Island Garden 96 Dutton Island Road Atlantic Beach, FL 32233
June 6th 1:00 pm $75.00 Includes rain barrel $5.00 class only	**Summer Rain Barrel Workshop** Celebrate World Environment Day at the Duval County Extension Office! Learn all about saving the rain and protecting our precious water resources during this informative class. Rain barrels provide the Florida homeowner with over 50 gallons of free water for their landscape each time it fills up.	Extension Office 1010 N McDuff Ave
June 28th 10:00 – 11:30 am $5.00	**Improve Your Garden Soil Over the Summer: Solarize or Cover Crop It** As your spring crops fade, you may wonder what to do in the garden over the summer. If you are planning to go on vacation, don't have time to actively garden, or just don't want to deal with the heat, try improving your garden soil. This class will present two methods of improving your garden soil: Solarization and Cover Crops.	Urban Demonstration Garden 1032 Superior St

What's That? Answer!

The key to figuring this out was looking closely at the white substance under magnification. We realized it was crystal-like and not a scale or whitefly. We felt we had to look further. There were aphids all up and down the stems that had the white crystal. Our hypothesis is that the white substance is crystalized sap oozing from piercing wounds made by the aphids. Aphids are small soft bodied insects that use their piercing sucking mouthparts to feed on plant sap. Typically, aphids are kept in check by predatory insects like ladybugs. If you encounter a lot of aphids, you can try spraying them off with water. If that does not work, try insecticidal soaps and oils, following the label. For more information go to:
Aphids on Plants and their Management

Image by L. Figart, UF/IFAS