





Know, Sow, Grow newsletter

UF/IFAS Extension Flagler County

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THE GARDEN'S GREEN NEMESIS: UNDERSTANDING AND CONTROLLING EASTERN LUBBER GRASSHOPPERS

By Judy Jean, Extension Agent, Urban Horticulture

During this time of year, gardeners may notice immature black grasshoppers, commonly referred to as "lubbers," appearing in their gardens. These young lubbers often travel in groups and can wreak havoc on garden plants by chewing irregular holes in the foliage before moving on to the next plant. They tend to congregate in areas with abundant weeds or semi-aquatic vegetation, such as irrigation ditches and pond edges. Keeping vegetation mowed short can help reduce their presence, as shorter vegetation is less supportive of grasshoppers.

So, what can gardeners do to manage these pests? The most effective method is to physically remove them when only a few lubbers are present. However, due to their size and their ability to detoxify natural toxins found in plants, lubbers can be challenging to eliminate, especially through foliar spraying.

If insecticides are deemed necessary, several options are available. These include carbaryl, bifenthrin, cyhalothrin, permethrin, esfenvalerate, and Spinosad. It's important to note that these are the technical or active ingredients of insecticides, not the trade names, which can be found in the "ingredients" section of the label. When using insecticides, always follow the instructions on the label carefully to ensure safe and effective application.

By taking proactive measures and employing appropriate management strategies, gardeners can effectively control lubber grasshoppers and minimize damage to their gardens. With that being said, it is a seasonal issue that comes every year. It is best to control lubbers when they are younger. When lubbers become adults, insecticides are less likely to be effective.

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Your Master Gardener **Volunteers**



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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.

Green Nemesis continued from page 1

You may be wondering, are there any natural enemies? Unfortunately, there are not any well documented. The best mode of removing infestations is by stepping on them or getting a netting as a barrier. However, do not let these pests prevent you from gardening!

Feel free to stop by the UF/IFAS Extension Flagler County office or email our Master Gardeners at mgardener@flaglercounty.gov and follow us on our Facebook UF IFAS Flagler County Master Gardeners page for any of your plant and insect questions. Also, for additional educational materials go to edis.ifas.ufl.edu to get more information.

Happy planting!

PHOTO: Adult Eastern Lubber Grasshopper, Rafael Alvarez

UPCOMING ACTIVITIES

Here are some of the places you can find us this summer:

Palm Coast Library

We'll be in the lobby to answer your questions. Typically the 4th Saturday of each month from 9:30 - 11:30 am June 22, July 27, August 24, September 28

Washington Oaks Gardens State Park

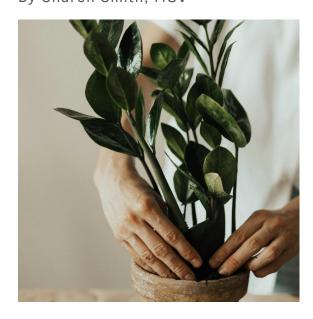
6400 N Ocean Shore Blvd. in Palm Coast 10:00 am - 1:00 pm July 13, August 10, September 14

РНОТО

MGV 2024 May Plant Sale, George Carfagno

POTTING TIP

By Sharon Smith, MGV



This is so easy and works perfectly every time when transplanting to a larger pot.

- Add a few inches of soil to the bottom of the pot.
- Place the plant in the original pot on top of soil to be almost level to top of the pot.
- Add soil around the smaller pot. It doesn't matter if soil gets in the potted plant.
- Remove pot with the plant. You now have a perfectly sized hole to put your plant in.
- Remove plant from smaller pot and drop in hole.
- Add a small amount of soil to the entire pot.

PHOTO

Repotting, stock photo

NEW PEST ALERT! GARDEN THRIPS

By Mary Ellen Setting, MGV

A new invasive thrips species is invading Florida and causing crop damage in South Florida. *Thrips parvispinus*, commonly referred to as pepper thrips or preferably, Parvispinus, was first discovered in Florida greenhouses in 2020. It has now spread to agricultural crops and residential landscapes, damaging a wide range of plants. Parvispinus has no known natural enemies.



Thrips are small, slender insects typically about 1-4 mm long and range in color from yellow to brown or black. They have distinctive wings that are long and narrow, with fringe-like edges and fly short distances and jump from plant to plant. Thrips have piercing/sucking mouthparts. They cause damage to plants by piercing the cells of surface tissue and sucking out the contents, causing surrounding tissue to die. Silver gray patches, or scars, on both sides of the leaves and dots of black excreta (droppings) indicate their presence. Infested plants have distorted or deformed growth, premature leaf drop, and scarring on fruits. Florida has 23 thrip species found on ornamental plants.

Thrips parvispinus is native to the Asian tropics. Because it is one of the smallest thrips species found in Florida (about the size of a pencil tip), it is difficult to identify with the naked eye.

PHOTOS

LEFT: *Thrips parvispinus*, UF IFAS TOP RIGHT: Leaf damage, UF BOTTOM RIGHT: Life cycle, UF

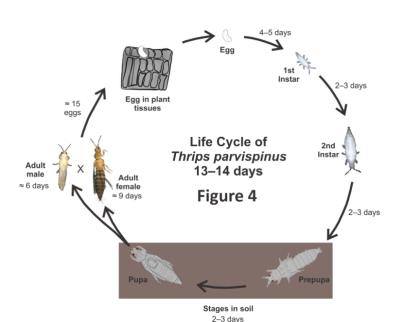
RESOURCE

Thrips: https://tinyurl.com/3j99tms2



It is best to identify it under magnification by the adult female characteristics: dark abdomen (rear) with light tan thorax (front). They can be found hiding in newly blooming flowers and new leaf growth. *Thrips parvispinus* feed on a wide variety of host plants ranging from vegetable and fruit crops like strawberry, eggplant, peppers, and cucumbers to ornamental plants including gardenia, hibiscus, mandevilla, and anthurium.

This new pest has become established in several counties in southern Florida but is not yet established in Flagler and neighboring counties. If you have suspicion of a *Thrips parvispinus* infestation on your property, contact us at the UF/IFAS Extension Flagler County office.



WHAT THE HECK IS THAT IN MY GARDEN?

By Mary Ellen Setting, MGV

Have you ever found something strange looking in your garden and wondered, "What the heck is THAT?" Sometimes you do not even know what manner of plant or animal this new find is, so identifying it is difficult. Deciding what, if anything, to do about it is even harder. To give you some guidance, we are presenting a series of oddities you might encounter to help solve the mystery.





Pale, squiggly lines that look like writing on plant leaves

The snakelike leaf damage is caused by a leafminer, a larval stage of certain flies, moths, beetles, or sawflies. Females insert eggs on the lower side of mature leaves just below the surface of the epidermis. The hatched larvae bore through the leaf to feed, producing winding tunnels of dead tissue. Blotches may also occur at the puncture sites. Larvae and fecal droppings can usually be seen in the mines.

Florida is home to several leafminer species that can impact various crops and ornamental plants. Injuries are often cosmetic. Their impact varies depending on the specific species and the host plants they infest.

Yellow, mushroom-like growths suddenly appear in flower pots

These yellow growths are called yellow houseplant mushrooms (*Leucocprinus birnbaumii*). They grow 1 to 3 inches tall, have a bell shaped cap, and are common in potted plants and greenhouses. They grow singly or in clusters. Their spores infect mulch and potting soil.

Hot weather and overwatering plants can trigger its growth. They feed on decaying matter in potting soil. These mushrooms are not poisonous to touch and will not hurt your plants, but they may be harmful to ingest. It is best to remove them if you have children or pets.

RESOURCES

Leafminer: https://tinyurl.com/yfa6x5me

Mushrooms in houseplant pots: https://tinyurl.com/2n52bzmc



PHOTOS:

Leafminer on schefflera: Mary Ellen Setting Leafminer on tomato: Mary Ellen Setting Houseplant mushroom, Iowa State University

HOT WEATHER EDIBLES TO PLANT

By Kathi Wright, MGV

You likely know you can be successful with edible plants in our Florida fall, winter, and spring seasons. But the summer too? Yes!

Here are some ideas for your hot-weather garden: lima beans, eggplant, okra, peppers, sweet potatoes, and watermelon. Check out the resource link for specific varieties that do better here.

RESOURCE

Summer vegetables in Florida: https://tinyurl.com/4xkruc76
PHOTOS

Misc. summer edibles, stock photos



CICADAS

By Mary Ellen Setting, MGV

That loud buzzing noise you hear coming from trees during the day in the spring and summer comes from cicadas. Male cicadas produce their unique calls with drum-like structures called timbals, located on the sides of their abdomens, to attract a mate. There are two types of cicadas that are common in the Eastern United States: annual and periodical cicadas.

Annual cicadas produce adults every year while periodical cicadas emerge every 13 or 17 years in large broods. In 2024, we are having a once in a lifetime situation with both the 13-and 17-year cicadas emerging by the billions in the Southeast and Midwest, an event that hasn't happened since 1803! Unfortunately, Florida does not experience the exciting drama of having large masses of periodical cicadas emerge, but it is home to 19 species that emerge every year from late spring through the fall.

Adult cicadas spend most of their time in trees, eating tree sap, singing, and mating and live only a few weeks. Females lay eggs in tree twigs. When the eggs hatch, the immature cicadas (nymphs) fall and burrow into the soil. Nymphs live underground in burrows from 2 to 17 years, depending on the species. Here they feed on sap from roots of trees, shrubs, and grasses. When mature nymphs are ready to molt, they emerge from the soil and crawl up along tree trunks or other vertical objects. Then their nymphal skins split open to release the mature, winged adults. Their cast nymphal skins, or exoskeletons, are often seen still attached to tree trunks.





PHOTOS

TOP RIGHT: Cicada skin and adult, Mary Ellen Setting LOWER LEFT: Cicada killer, Steve Krichten for UF

Cicadas are not harmful to humans, pets, or plants. They do not bite or sting and do not require treatment. They provide a valuable food source for birds and other predators, aerate lawns, improve water filtration, and add nutrients into the soil as they decompose.

You may have seen large, scary-looking wasps called "cicada killers" carrying a cicada. A female cicada killer will catch a live cicada, paralyze it with a sting and then carry it to her burrow. She deposits an egg on the cicada then buries it underground (alive) as food for her young. When the egg hatches it has the cicada as a ready-made food source.

Mother Nature at work!

RESOURCE

Cicada natural history: https://tinyurl.com/sd2et6t6

POPCORN CASSIA

By Sharon Smith, MGV

In the butterfly garden at the UF/IFAS Extension Flagler County Office are several popcorn cassia plants. Their Latin name is *Senna didymobotrya*, and they are a member of the pea family. They are tropical, originate from Africa, and do well in zone 9 to 11. They are fast growers, prefer full sun, and are salt tolerant. They have a showy yellow flower and bloom year round. They can be propagated from seed or cuttings. After flowering, cassia produce seed pods that start out green, turn brown, and contain up to 16 seeds. All parts of the plant are considered poisonous.

I collected the brown pods and started the seeds indoors. Starting seeds indoors ensures consistent temperature and lighting. It also gives you the opportunity to examine them daily and keep the soil moist. The plants will vary in size. Select the best, most vigorous plants to transplant to larger pots.

When you start plants from seeds, you will need to increase the pot size several times before planting in the ground. After mature leaves appear, you can move the cassia outdoors to a sunny location. They need to be kept moist. Then select the best, most vigorous plants and transplant into 4" pots. After a few weeks, the size of the new leaves will dramatically increase, and they will need a 6" pot or gallon pot.

Expected Cassia growth is 6-10 feet tall, with a spread of 3-6 feet. They prefer a neutral soil of 6.6 to 7.5. They are moderately drought tolerant. They have no significant pests or diseases. Butterflies, insects, and nectar feeding birds are attracted to their flowers. They add year round color to your landscape and also do well in containers.



PHOTO
Popcorn cassia, UF/IFAS Extension, Orange County

ANGELONIA

By Kathi Wright, MGV



The "summer snapdragon," or the Angelonia, is a terrific summer plant for our area. The Latin name is *Angelonia angustifolia*. It produces snapdragon like flowers and makes a good cut flower. Once established, it is drought tolerant, especially if you plant it in rich, organic material and mulch around it.

It wants full sun and moist, well-drained soil. Fertilize the plants monthly with a 10-5-10 fertilizer, but be sure not to overfertilize or you'll get more leaves than flowers. Angelonia will reach 18-24" tall.

PHOTO

Angelonia angustifolia 'AngelMist pink', Forest and Kim Starr

RESOURCE

Angelonia: https://tinyurl.com/3vy3yjsf

YOUR MASTER GARDENER VOLUNTEERS

TWO SPRING PLANT SALES!

Thank you SO much to everyone who came out to our TWO plant sales. We held one in May and another in June and both featured free presentations on everything from landscaping with edible plants to starting seedlings using soil blocks.

We love pulling these together for you and always try to grow plants that we know you'll love to purchase. If you have ideas for plants or presentations, let us know!

Proceeds from the plant sales support all the educational activities we do throughout Flagler County.





LIBRARY AND WASHINGTON OAKS PLANT CLINICS

Our presentations at the Palm Coast Community Center will start up again in the fall. Be sure to follow our Facebook page so you don't miss a chance to learn tips and tricks that can help you be more successful in the garden.

In the meantime, we're going to continue our plant clinic tables at the library and have added one at Washington Oaks Gardens State Park. Check page 2 of this newsletter for specific dates and times.

Plant clinics are your chance to bring photos of plant problems and ask us your landscape questions.

BUY A BRICK!

We're now giving you the opportunity to purchase a brick that will be placed in our Demonstration Gardens. You can choose the Memorial Garden or Herb Garden for your custom-made brick.

You choose what is written on the brick as well as the icon you'd like to include. Please consider recognizing your company or a loved one. Email us for more information.

FOLLOW US ON FACEBOOK!

Stay up to date with Master Gardener events and read educational information to help you have success with your landscape and garden. Follow UF/IFAS Flagler County Master Gardeners on Facebook! https://tinyurl.com/2p8srfaw

PHOTOS

RIGHT: May Plant Sale, George Carfagno

LEFT: May Plant Sales Presentation, George Carfagno

If you have any plant-related questions or need gardening advice, do not hesitate to reach out to us. Flagler County Master Gardener Volunteers are a great resource for home gardeners and can provide valuable info and guidance on topics such as soil health, pest management, plant selection, and more. We are trained volunteers who have a passion for gardening and can provide advice on a wide range of topics. If you need help, stop by or reach out to your local Master Gardeners (email: mgardener@flaglercounty.gov).

Helpful Links

Flagler County Extension: https://sfyl.ifas.ufl.edu/flagler/
UF Solutions for Your Life: https://sfyl.ifas.ufl.edu/
Florida-Friendly Landscaping: https://ffl.ifas.ufl.edu/

UF/IFAS Gardening Solutions: https://gardeningsolutions.ifas.ufl.edu/

UF Master Gardener: https://tinyurl.com/nhk2z2eh

Know, Sow, Grow Past Issues: https://tinyurl.com/yc67dfwk