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The Lake County Mission Statement

The Mission of the UF/IFAS Mater Gardener Volunteers is to assist extension agents by providing horticultural education programs and current research-based information to the public through plant clinics, community outreach and through Discovery Gardens.

Garden Scoop

Lawn Bugs

BY K. S. Kennen, MGV

“Upon approaching perfection in turfgrass, the more evident the imperfections become, the more difficult and costly they are to correct. There lies the intrigue.” DR. JAMES B. BEARD

There are over 50 million acres in the U.S. planted in turf. One area of concern and challenge to correct is the damage caused by bugs. The best fight against infestation is to have a healthy lawn by practicing effective lawn care. Correct mowing height, efficient watering, and appropriate fertilization are a few practices that can help assure a healthy lawn and one that is not under stress and thereby open to damage from bugs.

One dreaded pest in both St. Augustine and zoysia lawns is the chinch bug. Proper identification of this bug is important because big-eyed bugs look similar to chinch bugs except for their big eyes and they eat chinch bugs! Chinch bugs will hide between grass blades while feeding on the turf. They are only the size of a grain of rice and are most active in warm weather. Yellow to brown patches of grass may be signs of the presence of these bugs. Check the edges of the dying grass areas and the bottom of the grass blade for their presence. If you look closely with a magnifying glass, you might be able to see them. Another way to find them is to vacuum the same area with a hand vac and empty the contents on a white sheet of paper to see if there are any chinch bugs.

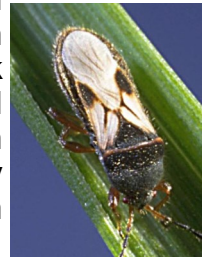


Photo by Casey Reynolds, Ph.D.

The first line of defense is, as mentioned earlier, having a healthy lawn, reducing thatch, and minimizing fertilizer. Since the insects like to hide in thatch during dormancy, keeping it out of your lawn is helpful for control. Secondly, you can try chemical control. There are many kinds available but be sure that if you have to resort to this, that you rotate the kind that you use since this bug does develop immunity if you use only one kind of chemical.

Another lawn pest you may have seen is the white grub which is actually the larvae of the June beetle or Chafer beetle. It is also the term used for any of the scarab beetles. But the one causing lawn damage in Florida is the June beetle’s white grub. Since the grub feeds on grass roots you may have yellow, thin and

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unhealthy grass or even dead areas of grass. The surest way to determine if you have the white grub is to dig down 2 inches at the edge of the dying grassy area and cut an area with your shovel about one square foot. Lift up one flap of the square. If it lifts easily, that means there are no or few roots and grubs have been feeding on them. It is helpful to know that healthy grass can tolerate 5 to 7 grubs per square foot. If there are more, several options exist to control this pest.

First, there is biological control in the form of bacteria. It is known as milky spore disease and can be purchased. Just follow directions and this bacteria will be introduced into the soil. It is host specific and should sicken and kill only the grubs. There are also beneficial nematodes that can be introduced into the grass and be used as a biological control. Second there is chemical control. The chemical used to control the white grub worm are imidacloprid, chorantraniliprole, clothianidin, and triclofon. If applying preventive chemicals follow all directions and apply in spring (April - May) and if using as curative apply in summer (June—August).



Another lawn pest you may encounter is the tropical sod webworm which can affect St. Augustine, bermudagrass, bahia grass, and zoysia grass. This gray-green caterpillar is only 3/4 to 1 inch long and is active from spring to fall. Early signs of damage can be seen when the worm feeds on the grass blade and leaves only clear tissue and removes the green. This is called “window feeding.” You might also find bright green droppings in the thatch along with a thinning of the lawn and brown patches. It would be helpful to use a soap flush to find army worms and even other lawn pests. Mix 2 parts of water to 1 part of soap and apply to your lawn. The soap will irritate the pest and it should come to the top of the grass blade allowing it to be seen.

Your first line of defense, as mentioned before, is to have a healthy lawn. Then, if you still find tropical sod webworm infestation, consider organic, chemical, or biological control. Nematodes, fungi, and bacteria based insecticides are successful in maintaining control of this pest. Also of interest are the over 10 chemical compounds that can be used to eliminate tropical sod webworm larvae.



Larva and pupa. Photo: S. Arthurs

Another sign of this pest is the presence of a brown moth. It is very small and only has a wing span of 3/3 of an inch. Keep in mind the larvae feed at night and like to hide in thatch.

Resource: Featured Creatures

https://entnemdept.ufl.edu/creatures/ORN/TURF/Tropical_sod_webworm.htm

Master Gardener Volunteer Plant Clinic

Bring your plant, insect, and soil problems to our Plant Clinic for advice Monday or Wednesday from 10:00 am to 2:00 pm. This Plant Clinic is staffed by volunteers. Please call ahead at 352-343-4101 to be sure someone is in the clinic to assist you with your questions. You may also send photos of your local problems to the plant clinic at lakemg@ifas.ufl.edu.

Fertilizing

BY: K. S. Kennen, MGV

The caveat, “too much of a good thing is bad,” is definitely true when fertilizing. So much damage can be done to not only plants but the environment from overfertilization. We have long been aware that excess nutrients from fertilizers are washed off and can pollute the natural environment. But, did you know that excess use of fertilizer results in succulent growth and will attract such pests as sucking insects, aphids, white flies, and spider mites. The young, tender growing plants are rich in nitrogen and a treat to these pests. Elevated nitrogen causes the plants to focus on growth, putting out lush, green leaves rather than focus on defense. This attracts insects and gives them the nitrogen they need to produce lots of babies. Pest populations explode as a result, increasing the rate of damage.

As the plants produce excessive growth from overfertilization, the plants will have shallower roots. Having shallow roots leave them with inadequate water and nutrient supply. This might be evidenced in yellow and wilting lower leaves or browning of the tips and margins of leaves. The plants could also have very slow growth, defoliation, and even death of seedlings. All these are signs of too much fertilizer.

An easy sign to recognize when there has been too much fertilizer used is “fertilization burn.” This can easily be seen sometimes when a homeowner applies fertilizer to their lawn incorrectly as evidenced in the picture to the right.



Some categorization that might be helpful to understand when using fertilizers are organic versus inorganic and slow release versus water soluble. Organic fertilizers are of animal origin and can include manure, composted material, and plant or animal residue. A simple example of plant residue is the use of corn husks which when used as mulch, benefits the garden in terms of returning nutrients to the soil when they break down because they are rich in organic matter. They contain valuable nutrients such as nitrogen, phosphorus, and potassium. Inorganic fertilizers are prepared from rock and minerals and are formed by physical and chemical processes. Probably the largest group is nitrogen fertilizer that is made from a process of mixing nitrogen from the air with hydrogen from natural gas at high temperature and pressure to create ammonia. Either can be used, but the most important thing to remember is to use the correct amount whether it is organic or inorganic.

Slow release fertilizers are created to do just what the name suggests, be released over a period of 3 to 6 months so there is no danger of over fertilizing or damaging a plant. Water soluble fertilizers are mixed with water so they can be absorbed into the ground and by the plant's roots for a quick boost of nutrients and immediate plant growth. Again this can be overdone and cause yellowing of leaves from using too often or too much at once. So even with this follow the directions.

Rehttps://edis.ifas.ufl.edu/publication/SS479

Tree Talk: Sweet Acacia

BY Karen S. Kennen, MGV

If there was a tree that could be nicknamed “beauty and the beast”, it would be the sweet acacia (*Vachellia farnesiana*). This nickname is appropriate because beauty is found in the aromatic, yellow, year-long, puff blossoms. The “beast” is from the two inch long pairs of thorns that are found at the base of the leaf stems.



This multi-trunked, small tree can grow 15 to 35 feet tall and wide with an irregular, rounded, spreading crown. In Florida, it grows in zones 9a to II. It will grow in a variety of well-drained soils from sandy to rocky but does prefer sandy. If your soil is low in organic content, the sweet acacia should do well since its pH range is from 6.1 to 8.5. This tree is semi-evergreen, meaning it keeps some of its leaves throughout a mild winter. The seed pod is a dark brown, tubular bean pod. The seeds are non-toxic to humans but toxic to dogs. Deer eat the seed pods, and game birds such as quail and doves eat the seeds once the pods open and fall to the ground.



Besides being an accent tree in your landscape, sweet acacia will attract birds that like to use it as a safe place to build nests because the thorns protect them from predators. In Europe and Egypt the flowers are distilled to create an essence called *cassie*. This scent is said to have warm, honey, iris-like, powdery, and balsamic qualities. Many expensive perfumes use this essence. The resin or gum from the sweet acacia is used many ways in industry from glue for stamps and envelopes to binder in paints, cosmetics, drugs, etc.. Even broken pottery can be mended with the acacia resin based glue. Woodworkers treasure sweet acacia wood for the unique and interesting grain pattern and orange-red color. The tree is small so much of the products are smaller and are such things as cutting boards, utensils, and other small objects.



Photo: Dr. Sandra Wilson



Resource: <https://gardeningsolutions.ifas.ufl.edu/plants/trees-and-shrubs/trees/sweet-acacia.html>

Thrips parvispinus

BY: Sandra M. Bryan, MGV

On April 2nd, Dr. Lance Osborne, professor, Entomology and Nematology and associate center director, UF/IFAS Mid-Florida Research and Education Center in Apopka came to the Bob Norris Auditorium at the Agricultural Center to introduce a new species of thrip to the Master Gardener Volunteers. The turn out was disappointing. This was not a lecture to miss.

Actually, this thrip is not a new species to the world but, a new species to Lake County. Detected in Orange County in 2020, *Thrips parvispinus* is now in Lake County. We are the northern most county in Florida to harbor this destructive thrip.

Of the 280 species of thrips in Florida, *thrips parvispinus* is one of the smallest. From the Asian tropics, this thrip has a twenty-one day lifecycle. Adult females lay eggs on leaves where they feed between the tissues of the leaf for four to five days. As larvae, they molt into the 1st stage instar which lasts two to three days. The second molt, or 2nd instar lasts for another two to three days then enters a prepupa and pupa stage of life. At this point some may fall to the soil where they remain until they emerge as adults in the spring.

Adult females live about nine days. They appear two-toned in color with a light-colored head and thorax; the abdomen is brown. Adult males live approximately six days and are uniformly light in color. Both have wings equal in length along the length of their bodies. They are extremely small and require a quality loop or microscope to be seen.

Thrips parvispinus feed on fruits, vegetables and twenty-three species of ornamental plants in Central Florida including gardenias and hoyas. Commercial growers must quarantine greenhouses upon detection. Residential landscapes obviously cannot quarantine but, residents should take mitigating action to prevent perpetuating or spreading these thrips.

Damage appears on leaves as streaks or silvery speckling with white patches. They retard the growth of the host and may eventually become fatal.

Remove infected plants and avoid fertilizers with excessive nitrogen. Spinosads, with the exception of acetamiprid, may control the thrip population. Be sure to rotate insecticides with different active ingredients to prevent developing resistance. For biological control, use Ladybird Beetles, and predatory mites like the Minute Pirate insect. Planting Catnip, Garlic, Marigold and Sweet Basil may help to repel thrips.

Get in the know. For more information go to edis.ifas.ufl.edu and read publication EENY-805. Also go the internet search engine of your choice and look for T. Parvispinus. Find Dr. Osborne's article. It has some fantastic portraits of both the male and female *thrips parvispinus*.



L.S. Osborne, UF/IFAS-MREC

LIBRARY CLASSES

May presentations are about container gardening, a way to enjoy gardening even if you do not have a lot of space. Learn about how and what to plant in containers. These presentations are free but it is recommended that you sign up at the library by phone or in person.

May 20, 2024, 2-3 pm

Container Gardening

Umatilla Public Library

May 21, 2024, 12—1 pm

Container Gardening

Eustis Public Library

May 21, 2024, 4—5 pm

Container Gardening

Leesburg Public Library

May 22, 2024, 2—3 pm

Container Gardening

Tavares Public Library

May 22, 2024, 6—7 pm

Container Gardening

Marion Baysinger Library



Mt. Dora Public Library Presentation

May 18, 2024, 2—3 pm

Hydrangeas, Roses, and Azaleas

Free and no registration

Discovery Gardens

Please plan a visit to over twenty different gardens located at 1951 Woodlea Road in Tavares. The hours are Monday through Friday and the third Saturday of the month from 9 a.m. until 4 p.m. Just like your yard, Discovery Garden changes with the seasons and will reveal something new with each visit. Come see the changes in the garden.

An Equal Opportunity Institution. UF/IFAS Extension, University of Florida, Institute of Food and Agricultural Sciences, Andra Johnson, Dean. Single copies of UF/IFAS Extension publications (excluding 4-H and youth publications) are available free to Florida residents from county UF/IFAS Extension offices.