



Shades of Green

Athens-Clarke County Agriculture and Natural Resources E-Newsletter

June 2021



A note from Athens-Clarke County Agriculture & Natural Resources

Hello readers and happy June! We hope this month's issue finds you looking forward to a lovely summer season up ahead. We have multiple timely articles and events available to you in the newsletter this month.

The <u>local farmers markets</u> are in full swing as well. We are looking forward to another one of our monthly Green Thumb Lectures. This month, one of our Master Gardener Volunteers will be lecturing on <u>Drought Tolerant Gardening</u>. You won't want to miss the great information provided! Make sure to check out the <u>flyer</u> later in this issue.

We hope you enjoy this month's issue of "Shades of Green".

Take care,
Athens-Clarke County Agriculture and Natural Resources



Avoidance and Management Tips for Summer Turfgrass Diseases by Alfredo Martinez



Gray leaf spot on St. Augustinegrass

Gray leaf spot is active and causing epidemics St. Augustinegrass. The fungus *Pyricularia grisea* also affects perennial ryegrass and tall fescue in Georgia. However, the disease is particularly aggressive in St Augustinegrass. Hot humid summer weather and high nitrogen levels can make turf susceptible to this disease.

On St. Augustinegrass, gray leaf spot first appears as small, brown spots on the leaves and stems. The spots quickly enlarge to approximately ¼ inch in length and become bluish-gray and oval or elongated in shape. The mature lesions are tan to gray and have depressed centers with irregular margins that are purple to brown. A yellow border on the lesions can also occur. In cool-season turfgrass, the symptoms are similar to those of melting out.

Gray leaf spot is favored by daytime temperatures between 80°F to 90°F and night temperatures above 65°F. It is also found in areas with high nitrogen levels and that are stressed by various factors, including drought and soil compaction. This disease is most severe during extended hot, rainy and humid periods.

St. Augustinegrass is especially sensitive to some herbicides. If possible, manage weeds using cultural management techniques and minimal amounts of herbicides. The timing of any atrazine application should be chosen carefully, as this herbicide can stress the grass, especially when temperatures may climb above 85 degrees F. Atrazine applications made before or during disease-favorable conditions increase the likelihood of severe gray leaf spot symptom development. Spot-treating trouble areas with the herbicide may also be considered. Herbicides should always be applied according to the label instructions.

For more information or photos of gray leaf spot, https://extension.uga.edu/publications/
detail.html?number=C1116

Brown patch (Rhizoctonia solani) and Pythium blight (Pythium spp) on Tall Fescue

Brown patch can cause a foliar blight, which results in necrotic leaves and circular brown patches up to 4-5 ft in diameter. High soil and leaf canopy humidity, and high temperatures increase disease severity. Higher than recommended rates of nitrogen in the spring promotes disease. Symptoms are more severe when night time temperatures are above 62-65°F that coincides with 10 h of leaf wetness. Management options includes: avoid nitrogen application when the disease is active, avoid infrequent irrigation and allow the foliage to dry, mow when grass is dry, ensure proper soil pH, thatch reduction, and improve soil drainage.

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Avoidance and Management Tips for Summer Turfgrass Diseases (continued)

Pythium blight has the potential to quickly cause significant damage to tall fescue. The disease starts as small spots, which initially appear dark and water-soaked. Affected turfgrass dies rapidly, collapses, and appears oily and matted. White, cottony mycelia may be evident early in the morning. The disease is driven by hot-wet weather, which correlates with an increased stress on the turf. Similar environmental and cultural factors that encourage brown patch also promote *Pythium*. Therefore, cultural practices for control of brown patch will also help to minimize *Pythium* blight development. A correct diagnosis is important because *Pythium* control requires specific fungicides.

For more information on Brown patch and Pythium visit https://extension.uga.edu/publications/ detail.html?number=B1233#BrownPatch

Several fungicides are available for each of the diseases described above. Consult the Georgia Pest Management Handbook (https://ent.uga.edu/extension/pest-management-handbook.html) or the Turfgrass Pest Control Recommendations for Professionals (www.georgiaturf.com) for proper fungicide selection and usage. Read the label and follow proper guidelines.

(Alfredo Martinez is a professor in the Department of Plant Pathology at University of Georgia's College of Agricultural and Environmental Sciences, and he is an Extension Plant Pathologist for Turfgrass, Small Grains, and Non-Legume Forages)



Irrigation benefits both newly planted and established peach trees in UGA study By Ashley N Biles

hile peach orchards are a common sight throughout middle and south Georgia — helping the Peach State live up to its name — peach producers need more than just the title to ensure that both long-established groves and newly planted fields are successful.

Dario Chavez and his research team in the Department of Horticulture on the University of Georgia Griffin campus are working to answer that question. Beginning in 2014, Chavez, along with thengraduate student Bruno Casamali,

began working on improving Irrigation and fertilization management practices for young peach trees in the Southeastern U.S. after finding there was no up-to-date information available. Traditionally, irrigation management relied solely on rainfall, which is not always predictable.

"People always think the Southeast gets a lot of rain, but the rain we do get is very variable," said Chavez. "Sometimes you have a lot of rain and other times you go for long periods without it."

Peach trees are fast-growing, and without rain they will be under stress, which can affect growth, fruit production and fruit quality. Chavez and his team began looking into irrigation versus the industry standard of no irrigation from the time of orchard establishment. The researchers studied two main types of irrigation delivery systems used in fruit production — micro-sprinklers and drip irrigation. Using a supplementary irrigation system from the time of establishment proved beneficial for tree growth,



yield and plant-nutrient uptake compared with trees grown without supplemental irrigation. **Drip irrigation was found to be more efficient than sprinkler irrigation.**

"Plants are like babies — early growth and care serves them for many years to come," said Chavez. "We looked at the difference it makes for starting with a new method compared to traditional methods. We found good results in production and yield, plant growth parameters and nutritional uptake. There are myriad differences across parameters between the two."

Because Chavez and his team began the research project during a severe drought in 2016, it was easy to visually pick out the drought-stricken trees versus the irrigated trees. The team recommends that growers begin irrigating as early as possible, as it benefits the entire orchard. Chavez noted that because periods of drought are becoming more common in Georgia,

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Irrigation benefits both newly planted and established peach trees in UGA study (continued)

and not only happening every few years as they did in the past, he recommends that growers have a system in place to supplement watering as needed.

Water is not the only factor when it comes to the early success of establishing new peach trees. Fertilization is also required to give trees a boost in survival. Because fertilizer is one of the higher costs of running an orchard, knowing the exact amount to use can help a grower keep overall costs down. For this portion of the project, Chavez's team used different ages of fertilizer based on the recommended rate — 200%, 100%, 50% and 25% — over several years to see the impact it had on the nutrients available in the soil, plant and fruit. Their overall goal was to estimate how trees responded to different rates of fertilization.

Research showed that the nutrient concentration, especially nitrogen, for all plant parts (leaves, stems and fruit) did not change significantly based on the amount of fertilizer used.

"Once the plant fulfills the amount of nutrients it needs, it stops taking them in," said Chavez, adding that he recommends that growers use half of the previously recommended amount of fertilizer and monitoring plant nutrients yearly to help growers to be more costeffective. He noted that a 50% savings in fertilizer can make a big difference for growers trying to keep orchard operating costs down.

Currently, Chavez and his team are working on long-term studies in the same areas to estimate whether an overall reduction of 50% in fertilizer will affect the orchard growth and production in the long-term compared with standard fertilization. They are also collaborating with Professor George Vellidis at the UGA Tifton campus to design a **peach irrigation app**, which Chavez

hopes to make available to growers by the end of this year. The app was created with funding from the Georgia Specialty Block Grant, the Georgia Agricultural Commission of Peaches and the Georgia Peach Council. It has been tested for the last two years in mature and new orchards, and it is currently being tested with a grower collaborator prior to release.

Beyond irrigation and fertilization studies, Chavez and his research team are working on breeding a new peach cultivar for Georgia. The team is installing greenhouses on the UGA Griffin campus, which will allow the trees to grow normally while they control the growing conditions regardless of weather. This is especially important when cross breeding peach cultivars, as a freeze can destroy the crop, which can be devastating to a breeding program. The greenhouses will allow Chavez's program to secure breeding populations year after year.

For more information about Chavez's research program, visit <u>site.caes.uga.edu/chavezlab</u>.

(Ashley N Biles is a contributor/author for CAES news.)



Busy carpenter bees can cause damage but are more nuisance than threat By Stephanie Butcher

Carpenter bees are a common sight this time of year and can cause aggravation for homeowners. The large, black and yellow bees begin emerging in March, April and May and can cause unsightly damage — and in some cases significant damage — to wooden structures like the eaves of houses, porches and decks.

The carpenter bee got its name because of its ability to tunnel in wood with its jaws. The female bees create half-inch, round holes in wood to lay their eggs. Some signs of carpenter bees are sawdust that can be found on the ground or on the surface of an object beneath the hole. The holes lead to short tunnels into the wood and run horizontally with the grain.

Trusses, overhangs, wooden decks and other exposed wood on houses attract the bees. Female carpenter bees looking to nest typically prefer bare, unpainted or weathered softwoods, but bees will still nest in wood that is treated or painted.

Unlike termites, carpenter bees do not consume wood as food. Instead, they gnaw tunnels to create nesting sites and overwinter in the tunnels.

Female bees lay eggs in the tunnels until the tunnels are full. Male bees do not drill tunnels, but they are protective of their territory. The male is distinguished from the female by a white spot on the front of the face. Although bumble bees and carpenter bees are often mistaken for one another, bumble bees have a hairy abdomen while carpenter bees have a bare, shiny black abdomen.



Along with their difference in appearance, carpenter bees can be seen darting and diving around as well as "chasing" each other. Female carpenter bees seldom sting but will if disturbed or handled. Male carpenter bees cannot sting, but they often become aggressive and frighten people by flying around their heads. Carpenter bees are also primarily solitary bees, whereas bumble bees are social bees that nest together.

Carpenter bee larvae are large and noisy. The noise they make may attract woodpeckers, which can do further damage to wood as they hunt for the larvae.

Control methods

If carpenter bees are not causing major damage around your home, consider leaving them alone. Although they are not primary pollinators for many plants, they are effective at pollinating many vegetable plants like eggplants, tomatoes and more. In case of severe damage, the

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Busy carpenter bees can cause damage but are more nuisance than threat (continued)

following are three methods that can be used to control carpenter bees:

Prevention is key. Treat wood with thick coats of oil-based or latex paint or stain. It won't make the wood "bee-proof," but it does discourage the bees by making it less desirable to them.

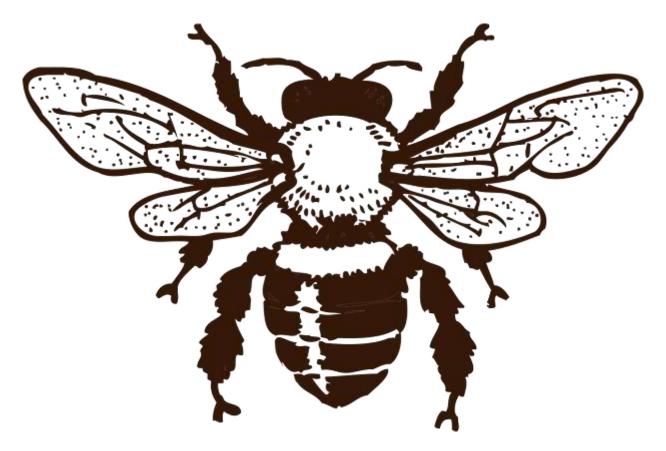
Treat the tunnels. Carpenter bees are most likely to be in their tunnels in the late evening. Just before sunset, apply an aerosol insecticide inside the hole that the carpenter bee has drilled, wait 24 hours, then plug the hole with dowel rods, plastic wood, caulk or other suitable material. Do not plug the holes without treating the inside first because the bees will simply drill their way out and all of your time and energy will have been wasted.

Use traps. Carpenter bee traps are available at most lawn and garden centers, but results vary regarding their effectiveness.

For more information about carpenter and other pollinating bees,

visit <u>bees.caes.uga.edu</u>. To choose an appropriate insecticide or determine the best control method for your property, contact your local University of Georgia Cooperative Extension office or visit <u>extension.uga.edu</u>.

(Stephanie Butcher is a contributor/author for CAESews)



Athens-Clarke County Extension Virtual Green Thumb Lectures 2021 Free Monthly Gardening Class Series





June: Drought Tolerant Gardening

Please join us online for an informative presentation on topics including:

- How to conserve water in the garden
- Drought tolerant gardening strategies
- Recommendations for drought tolerant plants

Gardeners of all experience levels are welcome.

WHEN:

Wednesday, June 9 · 6:00-7:30 pm

WHERE:

ONLINE via Zoom.com
Specific link to join Zoom meeting will be sent to the email you register with.

TO REGISTER:

Registration is required. Please register by June 8 by visiting

www.accgov.com/gardening

For questions:

Contact Laura Ney, Extension Agent at 706-613-3640 or Iney@uga.edu

The University of Georgia is committed to principles of equal opportunity and affirmative action.



Stay in the loop! (local or online activities and events)

Georgia Green Landscape Stewards -Native Plants and Low Maintenance Landscapes (Virtual Class)

- Wednesday, June 8th from 12pm-1pm online
- Learn about some sustainable landscaping practices for your home!
 - Register for free by emailing uge3039@uga.edu

Lunch & Learn: Overwatering - The Signs and Symptoms (Virtual Class)

- Friday, June 11th from 12pm-1pm online
- You must register for the class, and you can do this by emailing uge3039@uga.edu.
 Once you register, you will receive an email with the link to attend the session on the day prior to the class.
 - Free!

Homeowner Planting Basics: Composting (Virtual Class)

- Tuesday, June 15th from 6pm-7pm online
- FREE class where you can learn how to compost!
 - Register online at this link: https://tinyurl.com/plantbasics-2021

The State Botanical Garden of Georgia is open for the public, but make sure to check out their website for updates and hours. Contact the State Botanical Garden of Georgia by emailing garden@uga.edu or calling 706-542-1244.

- <u>Discover education activities for home.</u>
- Check out their <u>event calendar</u> for more offerings.

Georgia Farm Bureau® Farm Passport

- The Farm Passport is your guide to finding and visiting farms throughout Georgia. You and your family can explore the state, support local farms, and eat fresh food while learning where it comes from!
- With over 80 participating farms, there are plenty of places to choose from, so you can travel far or stay closer to home. You can complete the Farm Passport anytime through the end of the year, and complete however much of it you want to.
 - Collect a stamp in your passport at each farm you visit, and you can win prizes for collecting stamps!
- You can download a printable copy of the passport or find a location to pick one up, as well as find out more information here: https://www.gfb.org/education-and-outreach/passport.cms



UGA Extension offices around the state are working hard at developing quality online presentations on various topics.

Visit the UGA Extension <u>event calendar</u> to see events happening local to our county as well as virtual opportunities.

Local Farmers Markets



The **Athens Farmers Market** is taking place on Saturdays from 8am-12pm at Bishop Park. Make sure to visit **their website** for updates and details.

Find them on Facebook: @AthensFarmersMarket
@athensfarmersmarket



West Broad Farmers Market

Online ordering with pick-up and delivery options are available on Saturdays.

Visit their website to find out how to order online.

Find them on Facebook:

@WestBroadMarketGarden



The Winterville Farmers Market is taking place on Saturdays from 10am-2pm at Pittard Park. Visit their website for more information.

Find out more on Facebook:

@marigoldmarketwinterville

Instagram: omarigoldmarketwinterville

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Join Athens-Clarke County 4-H!



Students in 5th - 12th grades in Athens-Clarke County can sign up for 4-H now. The mission of Georgia 4-H is to assist youth in acquiring knowledge, developing life skills, and forming attitudes that will enable them to become self-directing, productive and contributing members of society. 4-H meetings will look different this year and are online. There is no charge to be a member or participate in a competition.

To start your 4-H Adventure e-mail the ACC 4-H Agent, Elizabeth Conway, at ebarber@uga.edu today!



The University of Georgia is committed to the principals of equal opportunity and affirmative action. Virtual 4-H Programs can be viewed on the ACC 4-H website:

https://tinyurl.com/acc4hvirtual





Follow @gardenwithclarke on Instagram and learn how to battle pests, identify weeds, build your soil and so much more as you garden alongside Clarke,

Athens-Clarke County's super gardener!





Helpful resources online:

Find My Local
Extension Office

Bugwood— Pest Images <u>Landscape Alerts</u> Online

<u>Pest Management</u> Handbook Georgia Turf

Free Online
Webinars

SE Ornamental

Horticulture

Production & IPM

Blog

Pesticide Applicator Info

Georgia Certified

Plant Professional

UGA Center for Urban Agriculture

Extension Publications

Athens-Clarke County Extension Agriculture and Natural Resources

Mission Statement

The UGA Athens-Clarke County Extension's mission is to respond to the people's needs and interest in Agriculture, the Environment, Families, and 4-H/youth in Athens-Clarke County with unbiased, research-based education and information.

Visit us online:



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