

The Carolina Sandhills Gardener

June–August 2023

IMPORTANT INFORMATION

Spotted Lanternfly

Spotted lanternfly, *Lycorma delicatula*, is a piercing-sucking insect that produces large amounts of honeydew while feeding. This buildup of honeydew attracts stinging insects like wasps and ants and can cause black sooty mold to grow on infested plants, as well as homes and businesses, reducing property values. The first live population of spotted lanternfly in North Carolina was found in Forsyth County, near the border with Guilford County in June 2022.



If you think you have seen a Spotted Lanternfly, please take a photo (try to include a size reference such as a quarter or pen) and upload it on the NC Department of Agriculture and Consumer Services website (<http://ncagr.gov/>), or directly at this link:

<https://apps.ncagr.gov/AgRSysPortalV2/plantprotection/Spottedfly-Lantern-Report>

When submitting a report please include the location of the sighting, the date, and your contact information. If the insect got away, please take a picture of the location where you saw it.

Find more information at <http://ncagr.gov/plantindustry/Plant/entomology/SLF.htm>

Take Advantage of Soil Testing

Soil testing is a service provided by the North Carolina Department of Agriculture and Consumer Services (NCDA&CS) at their Agronomic Division in Raleigh that will assess the present levels of major plant nutrients, soil pH, and micronutrients. You can pick up free kits at your local Extension Center. Samples are currently \$4 per sample through the end of March. For more info, visit <https://www.ncagr.gov/agronomi/>.

If you are interested in learning more about any information in this newsletter, contact the Extension Center at 910-671-3276 or visit our website at roberson.ces.ncsu.edu. For accommodations for persons with disabilities, contact Cooperative Extension no later than ten (10) business days before the event.

Mack Johnson
Extension Agent
Agriculture – Horticulture
Email: Mack_Johnson@ncsu.edu

Inside This Issue

- Important Information.....1
- Lawn and Turfgrass
Weed Management in Lawns.....2
- Plant Spotlight: ‘*Lantana camara*’3
- An Unsung Hero: The Blackberry4
- Seasonal Tips and Tasks: Summer...5
- Pest Alert: Garden Problems Caused by What You Can’t See.....6
- Sustainable Feature: More Than One Way to Control Pests7

Robeson County Center
O. P. Owens Agriculture Center
P. O. Box 2280
455 Caton Road
Lumberton, NC 28359

Phone - 910-671-3276
Fax - 910-671-6278
Website - roberson.ces.ncsu.edu

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Lawns and Turfgrass: Weed Management in Lawns

Jacob Barber Horticulture Agent N.C. Cooperative Extension, Bladen County Center



A weed can be defined as a plant out of place. Your yard is a very common environment for weeds to emerge, or in some cases, take over. Weeds can even be other types of grasses that are more competitive than the grass you would like to have in your yard. For example, Bermuda grass can emerge as a weed in a stand of centipede. Weeds can also be considered as broadleaves. Some common examples of broadleaf weeds are dandelions, Florida betony, and lawn burweed.

As we consider weeds as a nuisance in our lawn, we must also realize that they are not the cause of a weakened lawn. Weeds are symptoms of a weakened lawn. Reasons for a weak or bare lawn include: improper selection of turf species not adapted to the conditions of the local environment, damage from pests, environmental stresses, improper turf management, and physical damage. If proper actions are not taken to correct the issues listed above the population of weeds will continue to grow.

Developing a weed management program is a great way to implement good cultural practices to encourage healthy growth of the desired turfgrass and to properly select herbicides, which are to be used wisely. Four steps to take to create an effective management plan is to properly identify weeds, prevent the introduction of weeds, properly manage the turfgrass using cultural practices, and if necessary, properly select and use herbicides. For assistance in developing this plan for your lawn, please reach out to your local N.C. Cooperative Extension Office in your county.

Below are a few pointers for management in your lawns this summer:

- Establish warm-season grasses these next few months by seed, but you must watch for too-high temperatures. Irrigation is key for establishing lawns and even for mature lawns. Recommendations call for 1 inch a week in the early morning for established lawns. You can establish lawns with sod throughout the year.
- Monitor your lawn for diseases such as large patch, brown patch, leaf spot, and fairy rings. These can be managed through proper irrigation, thatch control, and fungicides if needed. This summer is a great time to start annually aerating your soil.
- Fertilize your soil based off recommendations given to you by a NCDA soil report. If you have centipede grass, be cautious when fertilizing because it is more susceptible to overfertilization.

For more information visit your local extension office in your county or visit <https://www.turffiles.ncsu.edu/>.

Plant Spotlight: Lantana ‘*Lantana camara*’

Abigail Nealy, N.C. Cooperative Extension, Bladen County Center, Summer Intern

Lantana is a flowering shrub that is native to the West Indies, Mexico, and tropical America. Its showy flowers attract pollinators and come in a wide variety of colors. Lantana can be an annual or perennial in your garden depending on temperature. Since Lantana is a tropical plant, it prefers warmer temperatures and cannot tolerate the cold. It will die back like an annual if cold temperatures arise. It has a tendency to grow as a perennial in the sunny coastal regions of North Carolina. Lantana is in the Verbenae family and has woody stems that have a sprawling habit.



Lantana prefers full sun in moist, well-drained soil, but can tolerate salt in the soil, as well as poorly-drained soils and drought. They also prefer a neutral pH which is 6.0-8.0. The hardiness zone of the plant is anywhere from 7a to 11b, and it grows in the coastal and piedmont regions of North Carolina. It is a broadleaf evergreen whose leaf arrangement can be opposite or whorled. They usually grow 1-6 feet high and 3-5 feet wide but can even be invasive in parts of the Western United States, as it grows rapidly. Lantana is a great plant to grow in a container garden or hanging basket.

There are over 150 species in the Lantana genus, but it has many different varieties. Some popular varieties of lantana include Button Sage ‘*Lantana involucrata*’ and Popcorn Lantana ‘*lantana trifolia*’. Though Lantana is mostly used as a shrub, it can also be used as a groundcover. During the winter months, white flies and spider mites can affect the plants.



Its tubular-shaped flowers come in clusters on a large stalk.

Although these flowers are charming, they can be poisonous to animals and humans. The unripe green fruit that grows on the shrub can cause minor skin irritation. The flowers, leaves, and sap are also poisonous. Lantana is toxic to livestock animals and can cause symptoms such as vomiting with dogs and cats as well. It has medium severity in humans, but can cause symptoms such as vomiting, dilated pupils, labored respiration, and others if consumed. It is important to be mindful of the location of your plant so that it cannot cause any issues.

For more information about this flower and more follow this link: <https://plants.ccs.ncsu.edu/plants/lamyana->

An Unsung Hero: The Blackberry

Mack Johnson, Horticulture Agent, N.C. Cooperative Extension, Robeson County Center

The definition of an unsung hero is “one that has earned great achievements yet goes unnoticed.” There are many unsung hero plants in our garden that would fit that description, but the one I would like to focus on is the blackberry – fruit often overlooked, but shows great promise in joining our group of superfruits. Studies show the blackberry can help fight cancer, decrease cardiovascular disease, and slow down brain aging. Best of all, one plant can provide up to 10 to 20 pounds of delicious fruit.

Blackberries can be divided by their growth habit, such as trailing, semi-trailing, or erect. They can be further divided by having thorns or being thornless, although most newer releases are thornless. Recent development now offers another division: whether it can flower and fruit on the primocane, as well as the floricanes. Blackberries grow the primocane the first year, and that cane will produce fruit the second year as the floricanes. Newer varieties are able to produce fruit the fall of the first year on the primocane, and the same cane produces fruit the summer of the second year as the floricanes. This production method is successful in our mountains but the heat in the piedmont and coast prevents much production on the floricanes' second year. So in our area we rely on the traditional floricanes to produce this super fruit.

Blackberry plants thrive in full sun and well-drained soil. If the soil is not well drained, establish the plants in a raised bed. Our area is fortunate that we can plant in the spring or fall. Choose different varieties to extend the harvest season. Dig the planting hole wider than the roots, or pot to enable easy root expansion. After growth starts, fertilize with a complete fertilizer such as 10-10-10 at 5 pounds per 100 linear feet (or about 3 to 4 ounces around the base of each plant). In established plantings, apply the fertilizer in March, well before the plant starts to produce flowers and fruit. Mulching the plants reduces



weed competition and conserves moisture. Pine straw and wood chips are great options for mulching. Water 1 inch per week during the growing season. Prune back the tip of primocanes on erect and semi-erect types to 5 feet to encourage lateral branch growth for more fruit production next year. During winter, prune those laterals to 12 to 16 inches in length. During fruit development the plants can use 2 gallons per day. They will need trellising to keep all the canes upright and somewhat contained. The berry is ripe for harvest when the shine on the fruit becomes dull. You may decide to harvest earlier for longer-holding intervals post-harvest.

As soon as all the fruit is harvested, prune out all the old fruiting canes and remove them from the garden, as they no longer produce fruit. Fertilize the second time after harvest, but well before fall, with 5 pounds of 10-10-10 per 100 linear feet of row. Continue to tie, tip, or train the new canes that have not produced fruit to the trellis until growth stops in the fall. Leave only 4 to 8 canes per square yard for fruit production in the following year.

Some excerpts from NCSU Blackberries in the Home Garden.

Seasonal Tips and Tasks: Summer 2023

Mack Johnson

June

- Remember to provide 1 inch of water a week to keep your lawn healthy.
- Chinch bugs are a serious pest of St. Augustine, scout for them in early June.
- Check North Carolina State University Turf Files online for a digital copy of our lawn-maintenance calendar for your specific lawn type, or visit your local Extension office for a copy. (<https://www.turffiles.ncsu.edu/>)
- Fertilize bermudagrass lawns with 1 pound of nitrogen per 1000 square feet every 4-6 weeks from June through August.
- Remember to keep your lawnmower blades sharp so your turf will receive a clean cut and not look tattered or shredded.
- June is a great month to propagate softwood cuttings such as azaleas, butterfly bush, abelia, and roses.
- Newly planted trees and shrubs should receive 1 inch of water a week for the first year.
- Cut back fall flowering perennials to encourage branching and more flowers.
- Most spring blooming perennials can be deadheaded after the blooms fade.
- Ensure vegetable gardens receive 1 inch of water per week.
- Once fruit starts developing, side dress your tomato plants about 6 inches from main stem with 2 pounds of calcium nitrate or 2.5 pounds of blood meal per 100-foot row.
- Ensure soil moisture consistency to prevent or minimize blossom end rot on your tomatoes, squash, and zucchini.

July

- Fertilize St. Augustine lawns at a rate of 1 pound of nitrogen per 1000 square feet.
- Ensure 1 inch of water per week for a healthy lawn.
- Stunted or thin areas of turf may indicate nematodes. Testing for nematodes costs 3 dollars. Contact your local Extension office for boxes, forms, and the correct sampling method.
- Japanese beetles are ferocious eaters and short lived, but only treat if defoliation is severe (more than 40 percent of plant's canopy.) Remember, Japanese beetle traps lure more beetles to your property.
- Warm summer nights will reduce tomato production.
- Scout for powdery and downy mildew in your vegetable garden and discard plants once infected. Remember, fungicide application prevents infection, it does not cure plants once infected.
- Now is the time to consider starting a second crop of cucumbers, squash, zucchini, winter squash, and tomatoes for early fall production.
- Apply fungicides and insecticides early morning or late afternoon to reduce harm to beneficial insects.

August

- Apply 1 pound of nitrogen per 1,000 square feet to centipede lawns in mid-August.
- Do not fertilize trees or shrubs after August 15; new growth will not be able to harden off before our first expected frost.
- Fall webworms will soon develop; ripping the webs open with a long cane or strong stream of water allows birds access for predation.
- Sow lettuce, spinach, arugula, and other salad greens in the garden or containers.
- Direct seed carrots, beets, and kohlrabi.
- Start broccoli, kale, collards, cabbage, and cauliflower seeds for your own transplants.
- Start perusing seed catalogs for other fall and spring options.

Pest Alert: Garden Problems Caused by What You Can't See

Allen West, Consumer Horticulture Agent, N.C. Cooperative Extension,
Cumberland County Center

The phone in my office rang and on the other end was a very nice gentleman sharing his frustration over his home vegetable garden. For decades he has been able to grow vegetables successfully in his garden but for the last few years it had been a real struggle. During our conversation, he said something that caught my attention. He noted that even though his garden was well watered, the plants still seem to be somewhat wilted. My suspicion was that possibly he was experiencing a problem with nematodes.

Nematodes are microscopic round worms that often are found in sandy type soils. Though there are many kinds of nematodes, the most noticeable nematode the home gardener may recognize is the root knot nematode. It gets its name for the galls and knots that it forms when it lays its eggs in the roots of susceptible plants. Though nematodes can affect most summer garden vegetables, tomatoes, peppers, cucumbers, squash, eggplant, and okra are very susceptible. Symptoms of damage can include a stunted appearance to the whole plant or wilting of the plants even when plenty of moisture is available.



Root knot nematode damage



Solarization of garden plot

If you suspect that your garden possibly has nematodes, then you may consider having your soil tested. The North Carolina Department of Agriculture and Consumer Services offers nematode testing services for a small fee. It is a relatively simple process that can take the guess work out of diagnosing this particular garden problem.

If your report reveals that high level of harmful nematodes are found, there are no chemical treatment options for the home garden.. However, there are some best practices that can help control the effects nematodes have on your vegetables. It is a good idea to rotate your crops in your garden or raised beds with plant types that are not as susceptible to nematodes. Purchase certain vegetable varieties that are more resistant to root knot nematodes. It is also helpful to remove roots from your garden area once harvest is complete for that crop. Tilling the soil 2-3 times, exposes nematodes to the drying effects of the sun, helping to reduce their populations. Finally, one technique that can help reduce nematode populations in your home garden is a process called solarization. In this process, spread clear plastic tightly over the soil surface of your garden or raised beds for several weeks. Doing this can raise the soil temperatures between to as high as 130-140, thereby reducing nematode levels,

Nematodes can be a bothersome pest in the home garden. If you suspect you have nematodes, contact your local Cooperative Extension Agent for details on proper testing methods. Knowing these strategies for nematode control can help you keep your garden going strong! Happy gardening!

Sustainable Feature: More Than One Way to Control Pests

Allen West

For many of us, when we see a problem, our immediate reaction is to try and solve that problem as quickly as possible. With that said, when it comes to pests in our home landscapes and gardens, oftentimes we want them gone and we want them gone quickly. One may see a weed in their lawn, an insect on the tomatoes, or a disease on their tree and feel the best thing they can do is run to the local garden center and buy whatever bottled solution that says it will kill that pest. But what if that could be doing more harm than good?

Here at Cooperative Extension, we encourage our clients to use an approach called Integrated Pest Management or “IPM.” Integrated Pest Management is a more wholistic approach to controlling pests. It includes using all methods of control, such as mechanical, biological, cultural, and chemical. IPM does not completely forego chemical options but tries to reduce their need through non-chemical means.

It’s important to realize that most pests are members of our local ecosystem, therefore it is impossible to rid your home landscapes and gardens of all pests. The key is to have a plan that will control the pests to a level that does not harm your crop, but at the same time does not cause unintended harmful consequences. For example, overusing or misusing chemical insecticides as a first resort can cause pests to become resistant, harm beneficial organisms, and contaminate food crops.



So, what does an example of the IPM approach look like? Let’s say that you are working in your flower garden and notice that you have a large number of aphids on one of your rose shrub stems. Aphids tend to congregate in large numbers in small spaces often times near the end of stems. The first management approach could be to mechanically prune that particular stem where the largest number of aphids are gathered. Already you have greatly reduced the aphid population on that rose plant. Next, instead of spraying a chemical insecticide, wait to see if beneficial insects such as Lady Beetles and Green Lacewings will take care of the remaining aphids. Ironically having certain pests in your gardens attracts beneficial insects to your garden. After these steps if you see that the aphid levels are low enough to not harm the plant, then our mission is accomplished without chemical insecticides. However, if after all the other options have been used and we find the population of aphids is now large enough to cause harm, chemical options can be used.

Implementing an Integrate Pest Management strategy can improve the overall health of your landscapes and gardens. Choose plants that will thrive in their locations. Keep plants healthy through proper nutrition, watering and pruning. Mechanically remove insects, weeds, and diseases when you can. Encourage biological control of pests by learning to identify beneficial insects and plants. And if needed, use chemical pesticides sparingly and safely as directed by the label instructions. For more information on Integrated Pest Management, contact your local Cooperative Extension Office.