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Master Gardener | Johnston County

The Gardener's Dirt Newsletter

April 2018

Photo Courtesy of Pixabay

Feature Article

Controlling Fire Ants!

By Silvia Caracciolo, Extension Master Gardener Volunteer

As spring slowly makes its way into North Carolina, we see the first sights of green foliage and pops of color across the landscape. The landscape holds all the beauty and some danger as we find ourselves faced with a notorious ant. These feisty little creatures, Fire Ants (Solenopsis invicta) are reddish brown in color with a darker tail. Their mound is defended aggressively with up to 100,000 workers, several hundred winged adults and a queen and maybe more depending on the mound size. Their mounds can be easily located near warm areas (concrete). A few of their favorite places to live are in compost bins, around pavement and plumbing. Electricity attracts them so they may also be located near electrical wires (phone lines, cables). Mounds may be found in the middle of your lawn. As you begin to attend to your lawn needs, their places of habitat can easily be missed.

Fire ants are very aggressive and you can be bitten in multiple places before you know they have made contact. Their stings form a pustule-like sore and itch intensively.

We have all heard the "old wives' tales" or home remedies... grits, gasoline, or mixing ants, to rid your property of these invaders. Okay, so those don't work. So, what will?

Drenches and granules give the quickest results, but baits provide the most effective control over the long run and sometimes a combination of the two will give the best results. It is recommended that you use baits first. Broadcasting bait is recommended when there are more than five mounds visible per quarter acre or over 20 mounds per acre. When applied as fire ants are actively foraging for food and in the cool of the evening, broadcasted baits only need to be put out once or twice a year to provide excellent control of fire ants. The baits full effectiveness will not be realized for several weeks.

Look for baits with active ingredients such as hydramethylnon, methoprene, spinosad, or indoxacarb. Do not place baits on wet grass or on the mounds. Make sure rain is not

indoxacarb. Do not place baits on wet grass or on the mounds. Make sure rain is not expected within twenty-four hours. Baits are slower acting because they require the ants to take the food back to the colony. The bait food contains poison or insect growth regulators. Baits that contain insect growth regulators, which include (S)-methoprene and abamectin, are extremely safe and are one of the few types of ant control products that can be used in agricultural lands, including vegetable gardens and pastures. Insect growth regulators are very effective in the long term, but take three to four months to reduce ant populations.Read the label on all fire ant control products before use to make sure the product you plan to use can be applied where you need it and for safety information regarding people, pets, and wildlife.

Three to 4 weeks after broadcasting bait, the follow-up process is to spot treat any active individual mounds. There are three formulation choices - spray, granule and liquid concentrate. If you want to spray a mound with a hose look for the active ingredient - z-cypermethrin. There are many granule formulas but the be sure to get one with one of these active ingredients - deltamethrin, cyfluthrin, bifenthrin, permethrin, or lambda-cyahothrin. D-limonene is a mound treatment that can be used and is acceptable to organic growers and may be used around fruit and vegetable gardens. Read all labels. For best results treat when the temperature is around seventy degrees and do not disturb the mound and be sure to use adequate volumes of water when applying insecticides as a drench. Drenches are mixed with water and poured onto a mound. They provide quick knock down of the mound but rarely kill all of the ants and new mounds usually pop up in the treated area within a few days. Drenches are useful when a mound needs to be quickly neutralized, but not for treating a large area.

See helpful video about controlling fire ants. https://www.youtube.com/watch?v=yKYu5QG8N10


Photo Courtesy of Margy Pearl

Grow Native

Golden Alexander

Zizia aurea

By Margy Pearl, Extension Master Gardener Volunteer

Have you heard about the NC Wildflower of the Year Program at the NC Botanical Garden in Durham? Since 1982, a native plant has been chosen and free seed packets given out at the Garden Gift Shop during that year. You can also send for a free packet at http://ncbg.unc.edu/north-carolina-wildflower-of-the-year/. In 2012, the Golden Alexander was given that honor! I planted the free seeds that fall and soon had plenty to share. Be at the Clayton Community Center on Saturday, April 14th to get one of the ones I'm bringing to the Johnston County EMGV Plant Sale! It starts at 8am!

It's not only a beautiful plant but it has important insect value, as well. Attracting large numbers of butterflies, native bees and the predatory or parasitoid insects that prey upon pest insects, Zizia is very important plant to those short-tongued insects able to easily reach the nectar in the small yellow flowers. As a larval host plant, Black Swallowtail caterpillars will feed on its leaves!

Golden Alexander is a perennial native that every garden should have and is one of the TOP 25 NATIVE POLLINATOR PLANTS FOR NORTH CAROLINA

https://growingsmallfarms.ces.ncsu.edu/wp-content/uploads/2012/08/Top-25-Plants-and-Suppliers-2.pdf?fwd=no

Height: 1-3 ft. **Spread:** up to 2 ft.
Sun Exposure: Full Sun to Light Shade
Soil Conditions: Well-drained, Medium-Wet to Medium-Dry. Some drought resistant once established.
Bloom: The yellow flat-topped clusters (compound umbels) of tiny yellow flowers are a good cut flower. Dry seedheads, resembling dill, fennel and parsley seedheads, will turn purple, adding more summer interest to the fern-like foliage.
Bloom Time: The long heavy spring bloom is April to June with sporadic bloom in July and August.
Maintenance: Easy to grow with no serious pest or disease problems.
Deadhead as needed since Zizia can reseed heavily in ideal conditions.
Garden Uses: Can be naturalized in open woodland, native plant, or rain gardens.
Propagation: Division. Collect seeds and plant in the fall.

Resources:
https://www.nrcs.usda.gov/Internet/FSE_PLANTMATERIALS/publications/mdpmcfs7726.pdf
http://www.missouribotanicalgarden.org/PlantFinder/PlantFinderDetails.aspx?kempercode=g710


Photo Courtesy of Pixabay

Quick Tip

Aphids

By Chris Alberti, Extension Master Gardener Volunteer

Aphids are small, soft bodied insects with a tear-drop shape, ranging in color from green to blue-green, yellow, orange, red, black and grayish white. Aphids lay their eggs in the fall, overwinter and hatch in the spring. They have long slender mouthparts to suck plant sap and excrete sticky honeydew. They feed on plant leaves, stems or roots, depending on the species, and can transmit plant diseases. Ants frequently harvest honeydew from aphids, so their presence may be a sign of aphid infestation. Aphids can be controlled with a robust spray of water. If damage is obvious and predators and parasitoids few, use insecticidal soap.

Resource: https://extension.umd.edu/hgic/aphids-vegetables

Make you own high pressure water spray device for insect and mite control.

Use of high-pressure water spray to dislodge aphids, spider mites, caterpillars and other pests from host plants has long been suggested as a "non-chemical" or "organic" method of pest control. See link: https://agrilife.org/extensionento/publications/water-wands-high-pressure-water-spray-devices-for-insect-and-mite-control/

Ask An Expert

Tackling Fertilizer Problems

Photo Courtesy of
NC State University

By Marshall Warren, County Extension Horticulture Agent

From April 1st and through Thanksgiving, soil samples are free. So, this month you should go ahead and take a soil sample of the different areas in your yard, such as the vegetable garden, landscape garden areas as well as your lawn. Collect soil samples one to two months ahead of time before initiating any new landscaping or before fertilizing your lawn. To learn how to correctly take a soil sample, follow this link for instructions. http://www.ncagr.gov/agronomi/pdffiles/samhome.pdf

Once you get your soil sample results, you will need to calculate how much fertilizer you will need to apply. Fertilizer calculations scare most people and there are a variety of valid reasons but mainly the fear is caused by the widely ranging way that nutrient rates are given.
Reviewing the basics should help. Fertilizers are carriers of plant nutrients. The three numbers on the fertilizer bag are the guaranteed analysis. They tell you the amount (% of weight) of Nitrogen - N, Phosphorus - P205, and Potassium - K20 in that order as shown on the bag. The N, P205, and K20 can be supplied by different fertilizer sources, either inorganic or organic. Some fertilizers supply all three of these nutrients and are called a complete fertilizer, while some only supply specific nutrients and are called an incomplete fertilizer. The fertilizer you choose should be based on what nutrients are needed. Your soil test results will usually tell you the type of fertilizer needed, but you will need to calculate the amount to purchase and apply.

An easy way to calculate the amount of granular fertilizer you will need to apply is to understand the equation: **Want ÷ Have** - where **Want** is the rate per area, and **Have** is the % nutrient in the fertilizer.

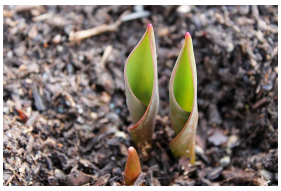
Here is an example:

First you will need to measure and calculate the square footage (ft2) of the area you want to fertilize. Let's say you measured and have a 3200 ft2 Bermuda grass lawn. The recommended rate of nitrogen for Bermuda is 4 lbs. N /1000 ft2 per year. The soil test indicates that nitrogen is the only nutrient needed. So, you will apply a fertilizer that contains only nitrogen. Urea would be a good choice since it has 46% N and will be released slowly. Do not apply the total amount of nitrogen all at once. Apply a split application of 1 lb. N/1000 ft2 every 4 - 6 weeks over the growing season beginning in May until all 4 lbs. are applied.

So, we **Want** 4 lbs. N/1000 ft2 and we **Have** Urea **46**-0-0 fertilizer. (46 % N = 0.46 N)

Want ÷ Have = 4 lbs. N/1000 ft2 ÷ 0.46= 8.7 lbs. urea/1000 ft2

8.7 lbs. urea/1000 ft2 = ? lbs. urea/3200ft2 = (8.7 lbs. x 3.2 = 27.84 lbs. urea) spread evenly over the lawn per year. Divide 27.84 lbs. by 4 split applications and you will apply 6.96 lbs. or rounded off, about 7 lbs. of urea fertilizer with each application.



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Monthly Gardening Tasks

April Gardening Tasks

LAWN CARE

- Grass clippings are a great source of nitrogen. Practice grasscycling, a recycling

practice where you leave the grass clippings on the lawn to return nutrients to the soil. This could reduce the amount of nitrogen needed in fertilizer for the year by 25%. Clippings may also be composted or sprinkled onto flowerbeds as long as they're not allowed to mat together.
- Warm season lawn seed may be planted toward the end of the month. Call us for a copy of 'Carolina Lawns' which tells you exactly when and how much seed to plant.

TREES, SHRUBS AND ORNAMENTALS

- Renew mulch around trees, shrubs, and in garden beds. Make sure mulch does not touch the bark of trees or shrubs and extends to the drip line of young trees.
- If rambunctious perennials have reproduced too freely, pot up the excess plants and pass them along to friends and family. New gardeners will be thrilled to receive free plants.
- Don't overfeed azaleas and camellias. These shallow-rooted plants are not heavy feeders and can be damaged by over-fertilizing. Submit a soil sample to determine if fertilizer is needed. Use a slow-release, balanced fertilizer immediately after blooming. Apply it around the drip line of the shrub according to label directions.
- Special fertilizers for 'acid-loving plants' are not necessary as our soils are sufficiently acid naturally.
- Watch for black spot and powdery mildew on roses - common problems in our humid climate. Although these diseases make the foliage look bad, the plants generally do well anyway.
- Watch for lace bugs, the most common pest for azaleas. Look for whitish, stippled leaves with shiny dark flecks on the undersides. If found, treat with horticultural oil (an insecticide). Be sure the spray reaches all parts of the leaves and stems, including the undersides of leaves.
- Annual flowers such as zinnas, moonflowers, cleome, gloriosa daisies and sunflowers can be seeded in mid-April.
- Let spring bulbs die down naturally. Remove flower heads after the petals fade, but do not cut down the foliage. Do not fold, twist or braid foliage. Once the foliage falls over, it can be removed. Leafy companion plants can hide yellowing bulb foliage.
- Tender bulbs such as ranunculus and anemone can be dug and stored when their foliage begins to yellow.
- At the end of the month, plant summer bulbs like caladiums, lilies, gladioli, dahlias, and elephant ears.
- Prepare new flower beds by loosening and amending the soil. All plants perform better when their roots can spread in loose, organic soil. Till the soil and incorporate organic matter, lime and fertilizer - according to soil test results. Plant perennials now so they can become established before hot weather sets in.

VEGETABLES & FRUITS

- Check tender shoots of vegetables and emerging perennials for aphids. If found, spray off with water.
- Watch out for and control fireblight on apple, blackberries and pear trees (including ornamental varieties). Affected branches look like they've been burned with a blowtorch. Control this bacterial disease by pruning diseased limbs back to 1 foot beyond the diseased area. Be careful not to let infected foliage touch healthy foliage (yes, it's that contagious), and disinfect tools between cuts to avoid spreading the disease. Discard rather than compost the infected limbs.
- Plant turnips before April 15. Plant pole beans, carrots, and winter squash after April 15. Cucumbers, corn, pumpkins, snap beans, watermelon, and cantaloupe may be safely planted at the end of the month.
- Thin cool weather crops that were seeded last month.

- Pick off blossoms of strawberries planted this season. Let plants mature a year before they bear fruit.
- Keep tomatoes well-watered to avoid blossom end rot.


Photo Courtesy of Pixabay

Cool Connections

Helpful Links

Read more»

Upcoming Events

Johnston County Extension Master Gardeners Plant Sale
April 14, 2018 from 8AM to 1PM at Clayton Community Center
715 Amelia Church Road, Clayton, NC
Plants grown by master gardeners and local nurseries. Mini classes. Garden art crafts also will be available.

Pesticide & Household Hazardous Waste Disposal Day
Need to clean out the barn, the chemical storage building, pantry, or underneath the sink? On Saturday, April 28, 2018, North Carolina Cooperative Extension in Partnership with Johnston County Solid
Waste and the NC Department of Agriculture & Consumer Services will hold a Pesticide and Household Hazardous Waste Disposal Day. The event will take place at the Johnston County Livestock Arena at 520 County Home Road in Smithfield from 8:00AM to 1:00 PM. Acceptable items include old and unused pesticides, household
cleaners, fluorescent (high TCLP mercury) lamps and bulbs from homeowners, and all types of household batteries i.e. NickelCadmium,
Lithium, Alkaline and Metal Hydride. In addition, we will be accepting
oil base paint only from the public, but not latex. Oil base paint has a volatile organic odor and can only be washed-off with solvent, such as mineral spirits or kerosene. Latex paint, however, will wash-off with
water. If the label is still attached, it will indicate oil base vs. latex. Again, we will only be accepting oil base paint and aerosol paints. The latex paint is a non-hazardous household liquid that can be solidified with sand, soil or kitty litter and disposed of in the landfill.

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