

November 2015
Volume 6, Issue 11



Coming Events

Mon., Nov. 23rd

Deadline to order Fraser Fir and Boxwood wreaths from Alamance County 4-H



We're working on our slate of classes for Think Green Thursdays in 2016. Classes will begin in late January.

Let us know if there's a topic you would like to see covered. We'll work on it!

Meanwhile, for all your garden questions

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Alamance Gardener

Alamance County Cooperative Extension Horticulture Department

Don't Guess —



I think gardeners are somewhat of a mystery to people who don't garden. Gardening can be hard work and not everybody enjoys that kind of labor. It can be dirty and tiring, but you can see what you have accomplished when you have finished a task. It doesn't matter whether the job is planting a tree, spreading some mulch, or weeding the flower bed. Completing any garden task no matter how tedious is a very satisfying feeling. One important and slightly tedious garden task that occasionally gets overlooked is soil testing.

Taking soil samples is not as much fun as planting new plants, but the information you get from the soil report will be very helpful in getting your plants to grow well. The goal is to maximize plant growth and minimize inputs like lime and fertilizer. You can guess how much lime and fertilizer to use, but you most likely would be wrong. Either you don't use enough to get the growth you desire or you use too much and waste your money. Using too much fertilizer also is an environmental problem. If there are more nutrients in the soil than the plants can use, they can end up polluting our water.

A soil test is the only reliable method to determine soil pH. Most of Alamance County soils are naturally acidic and need to be limed to neutralize the acidity.

—Soil Test!

You may be wondering why we are concerned about soil acidity. Soil pH affects the availability of nutrients in the soil as well as those applied as fertilizer. Low pH (acid soils) can cause some nutrients to be bound to soil particles and are then unavailable to plants. It doesn't matter what kind or how much fertilizer you use, low soil pH can lead to nutrient deficiencies. Lime applications can neutralize the soil acidity and make existing nutrients like phosphorus and potassium more available to plants. In some cases lime and a little nitrogen may be all that is required for good plant growth.

So if a little lime is good then a lot of lime is better? Not necessarily. It is possible to apply too much lime and make the soil pH too high (alkaline soil). Just like low pH, high pH can also lead to nutrient deficiencies. While compost is great for the soil some compost materials are high in liming value and can make the soil pH too high. High soil phosphorus levels are also possible if you use too much of certain types of compost.

The goal is to match the soil pH to the plants you are growing. The availability of most plant nutrients is greatest at pH 6.5 which is good for a vegetable garden. If you are growing blueberries or azaleas then the optimum pH is closer to 5.5. Some people use azalea fertilizers thinking acid fertilizers are required for these acid-loving plants. In fact there are many cases where the soil pH is already acidic enough and applying an azalea fertilizer may be harmful. The soil test may show that the azalea bed actually needs to be limed.

Now that we have covered soil pH, let's move on to the fertilizer recommendation. Our main concern here is with the phosphorus and potassium indexes. An index number over 50 means there is a sufficient amount of this nutrient in the soil and there is no need to add more. I have seen many cases where the soil report only recommended a nitrogen application. This saves you money and reduces excess nutrients added to the environment.

You can purchase soil test kits from many sources, but they are rarely accurate in their readings. I prefer to use the NC Department of Agriculture soil testing services. They provide an accurate soil pH/fertility report and will give you lime and fertilizer recommendations to correct any deficiency. Even better is the fact that this service is free most of the year. I don't know how you can beat a free service. Since NCDA does charge \$4 per sample from Nov. 25 – March 31 I recommend taking your soil samples now. We have the sample boxes at our office and are glad to explain the process of taking soil samples. For further information on soil testing you can check out the following publication.:

A Gardener's Guide to Soil Testing
<http://content.ces.ncsu.edu/a-gardeners-guide-to-soil-testing.pdf>

To make a long story short, don't guess; soil test. Your plants will thank you for it. If you have any problems accessing your report or interpreting the report recommendations, Chris and I are always glad to help.



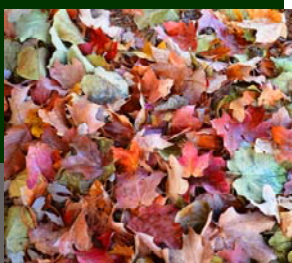
NCDA Soils Lab in Raleigh tests between 350,000 and 400,000 samples a year using the most current state-of-the-art methods and equipment available



NCDA/ACS Agronomic Division		Phone: (919) 733-2655	Website: www.ncagr.gov/agronomi/		Report No. FY13-SL025168																					
Predictive Home & Garden Soil Report		Client: Mark Danilley 209-C N Graham-Hopdale Rd Burlington, NC 27217		Advisor:																						
		Mehlich-3 Extraction		County: Alamance																						
Sampled: 12/14/2012		Received: 02/08/2013		Completed: 02/13/2013																						
Agronomist's Comments:		This report provides Test Results and Recommendations for each sample submitted for testing. Look for Lime Recommendations and N-P-K Fertilizer Recommendations. If time is needed, application at the indicated rate will raise soil pH to the optimal level for the plant you specified. Common target pH values are as follows: 5.0 for azalea, camellia, rhododendron and mt. laurel; 5.5 for centipedegrass; 6.0 for other lawn grasses, shrubbery, and flowering plants; and 6.5 for vegetable gardens. N-P-K Recommendations are based on the nitrogen (N) needs of the plants being grown and the soil test results for phosphorus (P) and potassium (K). A 50 to 70 index for either is optimum. If the exact fertilizer cannot be found, find the closest match and adjust the rate accordingly. Refer to "Understanding the Soil Report" (last page of this report) for additional explanation and links to helpful information. Soil pH is high for centipede lawns. The ideal pH is 5.5. It is possible to overlime, resulting in high pH. High soil pH can also occur due naturally occurring shell fragments in soil of coastal counties. In these coastal soils, irrigation with high pH (alkaline) water can be a concern too. In these situations, it may be best to select another grass type such as St. Augustine. In non-coastal regions or where soil pH is no higher than 6.5, lowering pH by use of elemental sulfur (90% S) is a possibility. For sandy soils, the rate of application for elemental S is 5 lb per 1,000 sq ft to drop the pH 1 unit (pH 6.5 to 5.5 for example). For clay soils, double the rate. Keeping the soil moist will speed its reactivity. Keep S off plant leaves to prevent burn, wash off leaves if necessary. If centipede has not been seeded, thoroughly mixing S with soil is recommended, ideally resample in 4 to 6 months to check pH prior to planting. Read health precautions before using S, avoid breathing dust and eye contact.																								
Sample ID: 4044		Lime Recommendations 0.0 lb per 1,000 sq ft		N-P-K Fertilizer Recommendations * 10 lbs per 1,000 sq ft 10-10-10																						
Lime History: Crop 1: Tree, Shade Crop 2:		Test Results: pH = 6.2 Optimum pH range: 5.0 to 6.5		Phosphorus Index (P-I) = 33 Potassium Index (K-I) = 44																						
Mark Danilley Additional Test Results:		<table border="1"> <thead> <tr> <th>IMV</th> <th>WV</th> <th>CEC</th> <th>Mn</th> <th>Zn</th> <th>Cu</th> <th>S</th> </tr> </thead> <tbody> <tr> <td>0.56</td> <td>0.74</td> <td>16.0</td> <td>316</td> <td>265</td> <td>123</td> <td>51</td> </tr> <tr> <td>gib</td> <td>gib</td> <td>meq/100 cm³</td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>				IMV	WV	CEC	Mn	Zn	Cu	S	0.56	0.74	16.0	316	265	123	51	gib	gib	meq/100 cm ³				
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* If you cannot find the fertilizer recommended here, choose one from the same Group (A, B, C or D) listed on the last page of this report. Note: This soil test does not measure nitrogen (N) levels. N fertilizer recommendations are based only on needs of the designated crop.																										



November Garden Tips



Fall leaves make a fine mulch for natural areas, but if left alone may smother young grass plants. Keep them raked off the lawn, but don't throw them away! Add those fallen leaves to the compost pile. Shred them to speed the composting process. Contact Extension for the how-to on making your own compost pile. Call 336.570.6740.



Plant new trees and shrubs in November so the roots will have a chance to grow and better establish before spring. Plant containerized as well as ball-and-burlap plants so that the root ball is a couple of inches higher than the surrounding soil to allow for settling. Back-fill and water in, tamping the soil lightly to ensure good root-to-soil contact. Finish with a two- to four-inch layer of mulch, but keep the mulch a few inches away from the trunk.



Continue to plant spring-flowering bulbs this month. If voles have been a problem in the past for you, stick to members of the carefree Narcissus genus.



Rejuvenate last year's potted amaryllis by removing and replacing the top inch of soil with fresh potting soil. Trim away any withered leaves and resume watering. Place in a sunny window. Amaryllis bulbs may not bloom if they are in a pot that is too large. There should be no more than one inch of space between each side of the bulb and the pot. At least 1/3 of the bulb should be above the soil line.

Encourage African violets to bloom by giving them plenty of light. Place them in a south-facing window during winter's darkest months. Plants grown entirely under fluorescent lights should be placed 6 to 12 inches below two 40-watt tubes for 15 to 18 hours a day.

While you have the rake out, use it to rake up and discard old mulch and fallen leaves from rose beds. Replace the mulch with a fresh layer. This should help reduce insect and disease problems next year.

Remove spent plants and debris from the vegetable garden. Cut and remove asparagus ferns. Add a layer of compost or shredded leaves to the soil to guard against erosion from harsh winter weather.

After a hard freeze, leave the tops of hardy tropicals intact (bananas, Angel Trumpet, Elephant Ears, etc.) and add a deep mulch of leaves over the root area. Cold, wet winters are often the undoing of these marginally hardy plants and keeping winter rains off the root zone may help them survive.

Clean and service garden tools this month for winter storage. Oil blades of shovels and other tools to keep them from rusting. A bucket of sand moistened with motor oil is a good way to keep shovels, trowels, hoes and other bladed tools in shape. Plunge the blade into the oily sand to sharpen, clean and protect. Drain gas tanks of garden equipment to prevent water buildup.

Arbor Gate Plant of the Month



Camellia Sasanqua
'Fuji No Yuki'

Fall-Blooming Camellia

Camellia sasanqua

Throughout the year, count on *Camellia sasanqua* to lend a glossy, deep green presence to the garden. In late October the flower show begins in shades of pink, red and white, hitting its stride in November and continuing until *Camellia japonica* takes over in mid-winter.

Slightly smaller and more refined in flower and in stature than its winter-spring blooming cousin, you can expect *Camellia sasanqua* to slowly grow to a height of six to ten feet, depending on cultivar.

Give this great plant moist, acidic, well-drained soil high in organic matter and site in partial shade. Hard freezes may brown the flowers, so site *Camellia sasanqua* in a protected area for maximum enjoyment of the bloom. The shallow root system will benefit from a layer of mulch, but Camellias are remarkably drought tolerant once established. Even better news is that they are remarkable deer tolerant as well.

Read more here:

<https://plants.ces.ncsu.edu/plants/all/camellia-sasanqua/>



Camellia Sasanqua
'Cleopatra'