The weather is crazy, the ground anything but hard, and people are getting anxious. This time of year I get a lot of calls from around the county about soil. How much lime do I use? How much fertilizer should I put out? What can I do to get ready for spring? People are trying to take advantage of the beautiful weather that keeps popping up, but they are not quite sure what to do.

I would estimate that at least ten percent of my phone calls are about how much lime to put out on a garden or lawn. The problem I usually run into with this question is that many people do not understand what lime does in the soil. When added to soil, lime raises the pH. The pH is a measure of the soil’s acidity. A pH of 7.0 is considered neutral, while in this area the pH is typically much lower. A small change in the pH, indicates a big change in the soil’s acidity. Most plants prefer a pH of somewhere close to 6.5. This is not true for all plants. For example, centipede grass prefers a pH of about 5.0 to 5.5. Next time you get the idea to lime your centipede grass, STOP and take a soil test first.

pH can cause all kinds of problems in soil. High pH (over 7.0) can cause magnesium toxicity and iron deficiency. The biggest problem in our area is low pH, which can cause nitrogen, calcium, and zinc deficiency among many others. But the answer to these deficiencies is not always adding the nutrients. Many times the nutrient is already there in the soil, but the pH acidity causes it to be unavailable for the plant to take up. One example of this is calcium deficiency in tomatoes. Calcium deficiency in tomatoes causes blossom end rot, but the answer to this problem is to fix the pH, NOT to add calcium. If you add calcium without fixing the pH, the plant will still be unable to take the calcium up, and you will have wasted time and money. Complete a soil test to identify the pH first, and then add material to alter it.

Fertilizer application is also a question that reoccurs often. Store bought fertilizers are composed of three main nutrients N-P-K, or Nitrogen-Phosphorus-Potassium. Many times gardeners will stick to an application that has seemed to work in years past. My question to you is, how much of these nutrients were in the soil before you started? Without a soil test, you may never know. A bag of 10-10-10 fertilizer cannot fix all your gardening problems. So, test first and add second!

Soil tests are FREE in the state of North Carolina. The North Carolina Department of Agriculture and Consumer Services conducts soil testing as a FREE service to the citizens of this state. Information,
soil boxes, and the paperwork can be obtained here at North Carolina Cooperative Extension, Robeson County Center, on Highway 72. In order to save yourself a trip, stop by on March 15 from 6-8 p.m. to participate in the Pecan Management workshop. We will be talking about everything from A to Z when it comes to caring for your pecan trees and you can grab your soil boxes then!

Soil testing gives you a baseline to work from. Just like you go to the doctor’s office for a yearly checkup, you should do the same for your soil. The results will give you your pH and nutrient content of the soil. They will also give you recommendations for lime and fertilizer applications based on what you plan to grow. If you have a soil test completed and feel like the results came back in German, do not be afraid to give your local Extension Agent a call. We are fluent in soil testing-ese!

If you have any question, comments, or ideas please contact me, Kerrie Roach, horticultural Extension agent, at North Carolina Cooperative Extension, Robeson County Center, at 910-671-3276 or by E-mail at Kerrie_Roach@ncsu.edu or visit North Carolina Cooperative Extension, Robeson County Center’s website at Robeson.ces.ncsu.edu.