

## Fertilizer Calculations Just Got Easier

The old story goes something like this. A farmer tells the county agent that he has been having trouble growing chickens. The agent asks for more information. So the farmer proceeds to say “I have tried twice but I think I must be planting them too deep or something because they all died”. The county agent replies “Hmmm, I think we need to do a soil test”. Yes, I know it’s a corny joke, but the concept of taking a soil test is very important.

Every year, many dollars are wasted by putting out too much fertilizer or planting an area with inadequate levels of fertilizer. Depending on the particular site, you may only need nitrogen or you may only need phosphorus or potassium. It all depends on the soil and what is being grown. Also an incorrect pH level can cause a lot of fertilizer to be wasted because the plants simply cannot take up the nutrients they need because the soil is too acid or, rarely in our area, too alkaline.

The practice of using a complete fertilizer such as 13-13-13, year after year can present some problems in the long run. Primarily the problem comes from the fact that phosphorus, represented by the middle number, tends to build up over time. This is due to the fact that phosphorus does not leach from the soil as fast as nitrogen and potassium, represented by the first and third number respectively. You can usually get a good idea of how long a home garden site has been in use by looking at the level of phosphorus in a soil test report. Excessively high phosphorus can cause micro nutrient deficiencies and cause plants to struggle, not to mention that phosphorus can be a source of pollution in the environment.

I could go on about the importance of doing a soil test, but I hope the point has been made that although it takes a little extra time and expense, it is usually well worth it to soil test. It is about the best \$7 investment you could make considering the price of fertilizer, tractor fuel, seeds, pesticides and so forth. Soil sample boxes are available at the County Extension Office.

Taking the soil test is the first step, but the next step is probably even more important. That is, interpreting the results and then making an application of the correct amount and kind of fertilizer. For small gardens and lawns this has sometimes been challenging since the recommendations are usually given in pounds per acre and requires some math conversions.

Well the task just got easier. The Auburn Soils Lab has developed an on-line fertilizer calculator that can be used to determine how many pounds of almost any kind of fertilizer is needed on any particular size area. You simply type in the soil test recommendations, indicate the type fertilizer you plan to use, the size of the area and then hit the word calculate. It’s just that simple, well, almost. Sometimes to correctly match the soil test recommendations, it requires using two different kinds of fertilizer such as 10-10-10 plus a little 34-0-0. So it may take running the calculations twice - first matching the phosphorus or potassium needs with 10-10-10 and then running the calculator again to get the additional needed nitrogen needed with 34-0-0.

The fertilizer calculator has been added to our Coosa County Extension Webpage. You can find it by typing in the following address <http://www.aces.edu//Coosa/> Try it out, I think you will find it very useful. You will also find a convenient lime calculator.