



ADAIR COUNTY EXTENSION

Understanding Your Soil Test Results

Nitrogen- is required in soils to promote top growth in plants (the green part). Between 40 and 60 lbs./acre is ideal. Nitrogen is used by plants anytime they are actively growing. If you have an excess of Nitrogen in your soil your plants will need time to use it up. After time passes for Nutrients to be used up, a regular fertilization schedule can be followed.

If your soil is deficient, or at an acceptable level of Nitrogen, it will need to be applied as recommended for plants to grow well. Keep in mind plants are using this nutrient up if they are growing.

Phosphorus and Potassium- need to only be applied according to soil test results because many soils already have adequate amounts of these nutrients for plant growth. Phosphorous needs to be about 65 lbs/acre and Potassium needs to be about 250 lbs/acre.

Phosphorous and potassium are rarely deficient in lawns and gardens. Once they reach a sufficient level, they stay in the soil for a long period of time. For this reason, a super high amount of either is usually caused by the repetitive application of a *complete fertilizer. If this is the case you would want to apply a Nitrogen only fertilizer such as 34-0-0, or 46-0-0. These will be available at your local greenhouse or garden center.

General Information - When purchasing fertilizer, you will notice, there are three numbers that identify the concentration, for example 10-20-10. These three numbers represent **percent** Nitrogen, Phosphoric Acid, and Potash in that order. *Phosphoric acid is the source of Phosphorus, and Potash is the source of Potassium.* So a bag of fertilizer that is labeled 10-20-10 is 10% Nitrogen, 20% Phosphoric Acid, and 10% Potash.

The reason they make so many different kinds of fertilizer is because it should be applied on a need only basis. An excess of any of these nutrients in your soil could cause you problems. Other than time, there is no way to reduce amounts in your soil. The Nutrients can only be "used up" by the plants. There is no magical remedy for reducing excess fertilizer in soil.

Be sure to follow product labels when applying fertilizer. Excess Nitrogen application will make your lawn greener this year, but next year you may be lucky to have grass at all. Too much Nitrogen on vegetables will make you have really large plants, but your yield will suffer.

You should have your soil tested every three years.

If you have any other questions feel free to call the Extension Office at 918-696-2253

*A complete fertilizer consists of all three Nutrients, Nitrogen, Phosphorous and Potassium, and will be expressed in a ratio such as 10-20-10, or 17-18-19.