

April

- **Check your crop's sulfur needs.**

Before planting, study your soil report carefully. Throughout North Carolina, soil levels of sulfur can be critically low. This plant nutrient moves easily out of the root zone in sandy coastal plain soils or sandy bottom lands in the western part of the state. In the piedmont, heavy clay soils may restrict root growth and limit access to sulfur reserves. Your NCDA&CS soil report indicates whether application of additional sulfur is necessary. If heavy rains occur early in the season, it is advisable to check sulfur levels again.

- **Use plant tissue and solution analyses to manage fertility of greenhouse tomatoes.**

Tomatoes and other greenhouse crops benefit from intensive management. Have source water samples tested before nutrient solutions are mixed so you can identify and correct any potential problems. After mixing nutrient solutions, submit samples to make sure injectors are working properly and target concentrations are being achieved. Finally, collect plant tissue samples weekly to monitor the crop's nutrient status and adjust fertilizer rates accordingly.

- **Fertilize Christmas trees.**

Each spring, apply 1/2 ounce of nitrogen uniformly over a 5×5-ft area around each tree. If trees were transplanted the previous fall and the potassium recommendation was 100 lb/acre or more, apply the remainder of the recommended potassium.

- **For effective bermudagrass sprayfield maintenance, remove winter annuals.**

Harvest on time, even if weather is less than ideal. Remove the overseed at the "boot" stage of growth-prior to emergence of seed heads from the sheath. For rye, this is usually early April but varies with species and weather. In some years, follow-up harvests of the winter annual may be needed.

Early April is seldom a good time to dry hay in the field, so plan to remove the winter annual as chopped or baled silage. Timely harvest of the winter annual permits bermuda to emerge from dormancy and develop leaf area before summer annual grasses and weeds germinate. If annual ryegrass was sown, plan on multiple harvests. A herbicide may be warranted for heavy regrowth.

- **Submit soil samples for lawns and gardens (and some crops) now.**

Now is a good time for horticulturists and homeowners to prepare for their spring gardening and landscape projects by taking soil samples. Warm-season grasses and many landscape plants will benefit from lime and fertilizer applied in the coming months. If you haven't already done so, there is still time to take samples from fields where you

intend to plant late spring crops like burley tobacco, cotton, and bermudagrass pastures. In April, the lab can normally process samples within two weeks. When you receive your report, pay particular attention to lime recommendations and make application as soon as possible for maximum effectiveness.

- **Use these tips when submitting soil samples.**

Processing of soil samples at the NCDA&CS lab goes more efficiently when growers take care to: 1) place sample information forms in plastic, zip-lock bags to prevent moisture problems; 2) use the soil lab's specially designed shipping carton when sending large numbers of samples; and 3) address and label shipping cartons completely and correctly. Visit this www.ncagr.gov/agronomi/pdf/packsoil.pdf for specific information.

- **Use waste analysis to manage land application of farm by-products (crop residues, manure, lagoon liquid and sludge, poultry litter, and composts).**

Organic wastes provide essential plant nutrients and improve soil physical properties, such as water infiltration, aeration and nutrient-holding capacity. Before application, samples of the waste should be submitted to the NCDA&CS Agronomic Division for testing. Analysis of a standard, in-state waste sample costs \$8 and measures concentrations of essential plant nutrients. Additional specialized tests are available for an extra \$10 per test per sample.

The waste report estimates the rates at which nutrients will be available during the first growing season. With this information, you can apply wastes to meet the specific nutritional needs of a crop. Supplemental applications of commercial fertilizer may be necessary, depending on rate of nutrient availability or other factors.