Diagnostic and Laboratory Services

North Carolina Forest Service – Forest Health Branch

The North Carolina Forest Service – Forest Health Branch provides diagnostic assistance when forest health problems are encountered. Homeowners, landowners, and consulting foresters are encouraged to first contact their county forestry staff for assistance with tree health issues. Cases may then be forwarded to NCFS Forest Health staff, who are specially trained in forest health issues, when necessary. Forest Health personnel provide assistance throughout the state; offices are located in Raleigh, Clayton, Goldsboro, and Morganton. On-site visits, inspections, and consultations can usually be conducted within one week. Pictures can also be emailed to the Forest Health Branch, and assistance for minor problems can often be provided over the phone/email. If a non-native invasive insect, disease, or weed of concern is suspected, the Forest Health Branch should be contacted immediately.

North Carolina State University – Plant Disease and Insect Clinic

The Plant Disease and Insect Clinic at North Carolina State University provides disease diagnostic and insect identification services to help grow healthy plants and crops. Extension specialists from Plant Pathology, Entomology, Horticulture, Crop Science and Soil Science diagnose problems on the samples received. Samples can be dropped off or mailed/shipped to the diagnostic lab with the proper submission form and documentation. In addition, pictures of plant problems can be submitted online. The Plant Disease and Insect Clinic's website is a good source of information on common plant diseases and insect problems, and has all of the instructions and sample submission forms for its diagnostic services. Samples can be submitted to the clinic by landowners/homeowners directly for around $30. Samples can also be submitted by NCFS or NCSU extension personnel at a reduced rate ($20). Digital pictures can be submitted through an electronic database and will be assessed free of charge. For more information, see the Plant Disease and Insect Clinic's website at: http://www.cals.ncsu.edu/plantpath/extension/clinic/

North Carolina Department of Agriculture and Consumer Services – Plant Tissue Analysis

Plant tissue analysis is conducted to determine if plants contain the concentrations of essential nutrients necessary for optimum growth. Results help growers monitor nutrient uptake and correct imbalances or deficiencies before they negatively impact plant health. In some cases, plant tissue analysis may indicate nutrient deficiency issues that soil analyses alone cannot reveal. Therefore, when nutrient imbalances are suspected, it is recommended that both soil samples and plant tissue samples be submitted to the North Carolina Department of Agriculture –Agronomic Division. Plant tissue analysis along with interpretations of results and recommendations are available for a small fee. Instructions for sample collection and submission, in addition to information on nutrient imbalances, nutrient analyses, and report interpretation guides are available at: http://www.agr.state.nc.us/agronomi/uyrplant.htm

North Carolina Department of Agriculture and Consumer Services – Soil Analysis

Soil analyses are useful for determining the right tree species for a site and prescribing soil amendments, fertilizers, or management activities for a stand. Use of soil analyses can lead to improvements in tree survival and stand productivity, reduce costs and improve the effectiveness of management practices, and protect the environment. Soil tests can also provide valuable information on what types of forest health problems may occur on a site, and what pests should be monitored for. When tree health declines, diagnostic soil analyses can determine if an imbalance in the level of nutrients, salts, or heavy metals is present. Soil samples can be submitted to the North Carolina Department of Agriculture – Agronomic Division either by mail or in person. Normal soil analyses are free; diagnostic analyses or special testing may be conducted for a small fee. Information on soil testing, instructions for sample collection and submission, and guides for interpreting soil test results are available at: http://www.ncagr.gov/agronomi/sthome.htm

NOTE: all charges and rates are correct on the date of publication and are subject to change