AL 102 / SOIL TESTING PRACTICE STANDARD

PURPOSE - Soil testing is a crucial process used for assessing the physical, chemical, and biological properties of soil. It assists in land use planning by providing insights into the suitability of soil for different purposes. Soil testing is a soil-management tool used to determine the fertility of soil as well as the optimum lime and fertilizer requirements for crops.

The goal of soil testing is to determine the nutrient content, pH level and other chemical properties of soil. This information provides an accurate assessment to farmers to make informed decisions about fertilization and soil amendment strategies, ensuring optimal crop growth and yield.

Overall, soil testing plays a critical role in understanding soil properties, ensuring environmental sustainability, promoting agricultural productivity, and supporting safe and sustainable development across the landscape.

RESOURCE CONCERN - To improve soil health by applying required nutrients per soil test results.

APPLICABLE LAND USES - Crop, Forest, Range, Pasture, Farmstead, Associated Agriculture Lands, Other Rural Land, and Developed Land.

BASIC SOIL TESTING REQUIREMENTS - Basic soil testing involves collecting soil samples and analyzing them to determine important soil properties. Please reference the Alabama Cooperative Extension System website (https://aaes.auburn.edu/soil-forage-water-testing-lab/) for information on how to soil test for the desired crop or forage. It is recommended that soil tests are submitted to accredited soil testing laboratories.

WHAT DOES A SOIL TEST PROVIDE? - A soil test provides valuable information about the physical, chemical, and sometimes biological properties of the soil. This is crucial in providing a comprehensive understanding of the soil's characteristics, thereby allowing individuals, farmers, researchers, and land planners to make well-informed decisions that promote productivity, sustainability, and environmental stewardship.

Laboratory tests often check for three major plant nutrients: nitrogen (N), phosphorus (P), and potassium (K). Soil samples may be taken any time of the year. Soil tests can provide pH level, nutrient content, organic matter content, cation exchange capacity, texture, electrical conductivity, soil fertility, microbial activity, toxic elements and contaminants, recommendations, land use stability, and environmental insights.

RECOMMENDATIONS - Review results for each parameter tested. Compare the results based on your intended land use, crop, or purpose. Follow the recommended practices to optimize your soil conditions.