

Test Before You Invest: Making Every Fertilizer Dollar Count

LONNIE MENGARELLI – AGRICULTURE & NATURAL RESOURCES AGENT

With fertilizer prices continuing to put pressure on farm budgets, making informed nutrient decisions is more important than ever. When inputs like urea (46-0-0) are pushing \$900 per ton, DAP (18-46-0) is near \$900 per ton, and potash (0-0-60) is around \$450 per ton, every application represents a significant investment. In this environment, one of the most practical tools available to both crop and forage producers is soil testing—a relatively low-cost practice that can deliver substantial returns in efficiency, productivity, and long-term sustainability.

Crop production depends heavily on the availability of nutrients for plant uptake. Nitrogen, phosphorus, potassium, and other essential nutrients must be present in the right balance to support healthy plant growth and maximize yields. However, nutrient availability varies widely depending on soil type, past management, and environmental conditions. Without soil testing, fertilizer decisions become guesswork—often resulting in unnecessary expense or unrealized yield potential.

Management of all nutrient sources, including commercial fertilizer, compost, and manure, within the constraints of farm production systems and operational goals, is a prerequisite for both profitable crop production and environmental sustainability. Soil testing provides the foundation for managing these inputs effectively, allowing producers to properly credit nutrients already present and apply only what is truly needed.

Inappropriate management of these nutrient sources can lead to reduced economic returns and environmental degradation of both surface and groundwater. Matching nutrient applications to actual soil needs helps protect water quality and reduces the risk of nutrient losses, all while maintaining strong levels of production. Overapplication wastes dollars—especially costly at today's fertilizer prices—and increases the risk of nutrient runoff or leaching. Underapplication, on the other hand, can limit crop performance and reduce profitability. It is imperative that nutrient management planning activities are recognized and carried out, and soil testing is the critical first step in that process.

The value of soil testing extends well beyond row crop production and is equally important in forage and rangeland systems. Healthy soil is the foundation of every successful operation—whether you're raising corn and soybeans or managing grass pastures and hay meadows.

Soil testing remains one of the simplest, most cost-effective tools available to improve productivity across both row crop acres and grazing land. Removing uncertainty from fertility decisions and ensuring nutrients are applied where they are needed most. This

precision improves yields, boosts input efficiency, and strengthens return on investment. In pasture and rangeland systems, proper fertility supports healthy forage growth, stand persistence, and grazing potential. Whether managing row crops or grasses like brome or fescue and native range, understanding soil nutrient levels helps keep production systems efficient, resilient, and productive—especially when fertilizer costs are high.

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To support producers in making data-driven decisions, the Southwind Extension District is offering a Soil Testing Initiative. A total of 200 soil tests are available with a \$15 discount per test, with a limit of two tests per producer. This cost-share opportunity is made possible through the Bill House Grant from the Community Foundation of Southeast Kansas. Producers must request the discount at the time of submission to receive the cost-share, so be sure to ask when turning in samples.

Bottom line: soil testing is not an added expense—it's an investment. Especially with today's fertilizer prices, it is one of the smartest decisions a producer can make. It equips you with the information needed to optimize inputs, improve profitability, and sustain your land for the long term. Whether you're managing row crops or rangeland, it all starts from the ground up.

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