ROCK RIVER LABORATORY, INC.
AGRICULTURAL ANALYSIS

Five ways cash crop growers can cash-in on soil sampling

The decision to soil sample is not always an easy one. And sometimes it's considered an unimportant decision that can be easily pushed off. Spending a moderate amount of money on a service that isn't required to grow a crop can seem like throwing money in a hole. However, this might be the year to start giving it a second thought.

Without having a soil test to aid the fertilizer and crop decision-making process, you could literally be throwing your money in a hole with every pound of fertilizer applied. In 2022 especially, growers and their agronomists want to stretch fertilizer dollars as far as possible.

Establish fertility needs
The fundamental goal of soil testing is to determine a field's likelihood of response to added fertilizer. Without establishing a soil test value, the typical fertility plan involves spreading a moderate amount of fertilizer on a field with an assumption of response. At the very minimum, fertilizer is spread to supplement the removal of the following years crop.

But what if the soil already has enough fertility? What if the soil only has 50 percent of the optimal fertility? This over or under application of fertilizer can expend far more in wasted fertilizer or lost yield than a premium 2.5-acre grid soil sampling and analysis package.

pH is fundamental
Fertilizer is just one piece of the soil fertility puzzle. Another major, and often ignored, component is the soil pH. Soil pH is the measure of acidity, or possibly alkalinity, in the soil. Parent material, fertilizer sources, and fertilizer rates have the greatest effect on soil pH, which is arguably the most important value on a soil test. It dictates the availability of all nutrients in a soil as well as what plant species can be grown and how well those species will grow. Establishing and amending soil pH is a fundamental principal in raising a crop.

Sustainability equals profitability
An often-overlooked result of soil testing is how it can help aid in long term profitability and sustainability. With phosphorus and potassium fertilizer prices soaring to over $800 per ton it is easy to look at the short-term profitability. Growers will say, 'we can't apply potash because it's $800 a ton', but what happens when potash is up to $850 a ton next year?

Farming is not a single-year process. Farming is a cumulative way of life for generations and generations. Farm after farm has been in a family for over a century. Many rented farms are farmed by the same tenant for decades. Soil sampling is an easy way to set your farm and your family up for short- and long-term success. This simple practice will aid in tracking of short- and long-term trends in soil fertility. In turn, these practices maintain and extend the land's profitability for many years to come.

Landowner Relations
Rented land is an important part of many farming operations. The relationships involved in this setup are built on years of trust and investment in caring for the land. Soil sampling can be a great check-in with landlords to show you are taking care of their farm the way they would. Pulling a baseline fertility test should be step number one when adding a new farm to your operation - whether that land is owned or rented.

Document Fertilizer Effectiveness
Rechecking soil fertility two to four years after fertilizer and lime application is a great review to ensure things are headed in the right direction. Documenting lime and fertilizer applications and having soil test results to back up these applications can go a long way towards building the grower-landlord relationship or fine tuning a fertility plan.

Soil sampling can appear as a substantial expense if only focusing on that one line on the budget. But at the end of the day, you can gain an incredible amount of knowledge for less than the price of two bushels of corn. Don't forget - a soil sample is good for four years. By spending just a few bucks per acre, per year, growers will know they are applying the correct amount of fertilizer in the correct location every time they hit the field. That kind of peace of mind is worth its weight in potash.

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