

Summer 2008, No. 2

THIRD-PARTY SOIL SAMPLING: IS THIS THE WAY OF THE FUTURE?

Soil sampling and testing is one of the best tools we have to assess field nutrient availability. In the small grains growing area of the Northern Great Plains, only 10 to 15% of fields are soil tested annually, and only 25% are soil tested every few years. The exceptions are areas of specialized crop production, like sugar beet or potato fields where soil testing is a mandated part of the grower contract with the processing company. Because of increasing grain and fertilizer prices, there is a growing demand for more soil samples to be taken in order to fine tune fertilizer recommendations and assist in maximizing net returns.

Why are more fields not soil tested? Farmers usually don't have time to do their own soil sampling, especially as the size of farms continues to increase. Also fertilizer retail locations have reduced their services because of insufficient staff. In some cases, soil samples are taken by consulting agronomists who have them analyzed by a soil test laboratory, and provide the fertilizer recommendation. The challenge for these agronomists is that soil sampling is time consuming and there is a limitation on how many fields they can realistically sample during the fall and spring seasons.

Who has the capability to do more soil testing? A growing trend is to have the sampling done by independent "third-party" soil sampling companies. These businesses specialize in soil sampling and are separate from the fertilizer retailer and the consulting agronomist. Their clients consist of a mix of direct farm customers, retail fertilizer companies, and even consulting agronomists. They are usually a one-person business operating within a limited geographic area such as a few adjacent counties or rural municipalities.

What is the advantage of using a third-party soil sampler? They are specialized and know how to efficiently sample fields and they invest in good soil sampling equipment and associated location fixing global positioning systems (GPS) and they take the required number of soil cores (i.e. 15 to 20 cores per composite sample) to achieve a statistically representative sample, because soil sample quality or accuracy is important in order to maintain client trust and continued business.

How expensive is it to have soil sampling done? Fertilizer retailers used to offer soil sampling as a "free service" as long as the customer purchased the fertilizer from that specific retailer. In reality, the service was never free, but was paid through an increased margin between wholesale and retail prices. Today, most retailers charge for soil sampling and testing as separate services. The exact price varies from one area to another and depends on sampling methods. With rising fuel costs the cost of having soil sampling done by a third-party soil sampler is expected to increase. The prices charged are usually quite reasonable when you consider the time it takes, the cost of equipment and travel distances...a good investment.

How many fields can a one-person soil sampling business sample in a year? Field time is the main limitation for soil sampling in the Northern Great Plains, with about two-thirds of the sampling being done in the fall after harvest and before freeze-up and one-third in the spring before planting. In an average fall and spring period there are about 40 suitable field days to take soil samples. In a 10 to 12-hour day about 20 fields can be sampled, consisting of 15 cores per field for a total of 300 soil cores. This is if the fields are within a relatively close proximity, e.g. 20 miles (30 km).

Consider hiring the services of a third-party soil sampling business. Having accurate soil test results can help formulate adequate while not excessive rates of fertilizer to be applied to individual fields. This allows growers to maximize their net income and minimize addition of excess nutrients.

—TLJ—

For more information, contact Dr. Thomas L. Jensen, Northern Great Plains Director, IPNI, 102-411 Downey Road, Saskatoon, SK S7N 4L8. Phone: (306) 652-3535. E-mail: tjensen@ipni.net.