

David G. Hallauer
Meadowlark Extension District Agent
Crops & Soils/Horticulture

'Proper' Soil Sampling

What exactly does 'proper' soil sampling mean? Is there an 'improper' way to soil sample?! Isn't sampling in some way superior to not sampling at all?! Fair questions – and ones that we'll take the next couple of weeks to discuss as we head in to harvest and the shortly thereafter post-harvest soil sampling window.

For starters, try to maintain some consistency in the depth of your samples. Some soil tests – P, K, pH, Organic Matter, and Zn, for example – need to be pulled at shallower depths since they tend not to move much in the soil profile. Samples for mobile nutrients like Nitrogen or Sulfur need to be pulled to deeper depths. For the former, a zero to four or six inch – or even split depth samples – will be your best bet. For the latter, you need to do more of a profile sample to a 24 inch depth.

Why the differences? The depth you choose for the immobile nutrient sampling may depend on what information you are trying to capture and what type of application system you are using. For example, surface applied fertilizer in a no-till system may require a shallower sampling depth than banded nutrients in a tillage system might to accurately capture the 'true picture' of nutrients available.

Once you settle on a depth – stick with it! If nutrients are stratified in any way, and you pull some samples three inches deep and some five, you may end up comparing apples to oranges or at the very least add a great deal of variability to the results based solely on sampling depth. A consistent depth from year to year is also helpful if you are trying to get an idea of how well your soils are responding to application rates.

Next week: what is the appropriate number of samples?

Cool-Season Fertilization Time!

If there was one time of year that I would encourage you to fertilize your cool season turf grass – September would be it! As days shorten and temperatures cool, cool season grasses start to tiller, or thicken up, by forming new shoots at the base of existing plants. To help them in that process, a little fertilizer is never a bad idea. For best results, apply one to one and a half pounds of actual nitrogen per 1,000 square feet using a quick-release nitrogen source.

The second most important fertilization window is coming up soon as well! November fertilizer applications help grass green up earlier next spring and provide the nutrients needed until summer. It, too, should be quick-release formulation, applied at the rate of 1-pound actual nitrogen per 1,000 square feet.

Take a little time now and start figuring up how much square footage you have to cover so you can begin looking for product the next time you visit your favorite horticulture supply outlet. It would also be a good time to familiarize yourself with your lawn spreader again, to make sure it is in good working order and delivering the right amount of product in an even manner.