



## Maximizing Every Dollar with Fall Soil Sampling

One of the services that Legend Seeds offers our customers through our Farmacology program is access to soil and tissue sampling services through Frontier Labs in Minnesota. A soil sample can help save money on inputs for next year and maximize the money that's already invested. Fertilizer can be one of the most expensive inputs a grower will have (next to land costs) and a soil sample can help efficiently and intelligently manage that decision process.

**When to sample:** One of the best ways to plan ahead for fall soil samples is to simply schedule the soil sampling as soon as harvest is completed in the field. It's important to take soil samples *before* completing any fall tillage. As you might expect, fall tillage changes the soil profile and can skew the results of the soil test. So it is best to take the test just after harvest.

**Composite Sampling:** As a general rule, composite sampling is cheap, quick and easy. It doesn't require fancy equipment beyond a probe and a clean plastic bucket. Numerous farmers that I work with hire their local coop to complete this task, but you can also do this yourself and we can work with you to submit the test to Frontier Labs for a small lab fee. Frontier Labs can also take the samples if you don't have the time to do it yourself. This means taking 15-20 random soil samples throughout the field and then combining them into one "composite" for testing. If you aren't taking any soil samples currently, this is a great place to start. It also works well for fields that are flat and have little variability in soil types. If you don't have the capability to variable rate fertilizer application, then I would recommend simply doing a composite sample in order to get the best value.

**Production Management Zone Sampling:** Zone sampling can be effective in a field that has a wide range of management zones or soil types. This requires the ability to variable rate spread. The zones are based on numerous data factors: soil type, harvest data, climate data and ground truthing. Based on the available information, zones are created and managed separately as if they were individual fields. Work with your Legend Seeds Agronomist or Account Manager to determine the appropriate management zones for your field.

**Grid Sampling:** Grid sampling takes your soil nutrition management program to the next level with increased accuracy and improved results by breaking the field down in numerous small sections on a grid and managing each one individually. This requires the ability to variable rate spread. It helps pinpoint any areas where there are specific shortages or problems. Grids can be completed at 2.5, 4.4, and 10 acres depending on the situation. Work with your Legend Seeds Agronomist or Account Manager to determine the appropriate grid size for your field.

**Pre-Side Dressing Nitrogen Tests:** In the spring with corn fields a follow up soil and tissue test may be taken to confirm the nitrogen levels in the soil. Nitrogen is a mobile nutrient the N levels may have changed depending on the soil microbe activity in the fall, snow amounts, or leeching. The tests should be taken between V3 and V5 to allow time for application by the V6 to V8 stages.

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