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Grid Sampling

When people start talking about Precision agriculture they wonder where is the starting point. Well Precision agriculture is about precisely measuring what you have in inventory and then reallocating your input costs to obtain the highest rate of return on your investment. The first step is to measure what you currently have in inventory and where it is located. This is accomplished by Grid Sampling. You think of the saying, “a chain is only as strong as the weakest link” and that is very true in a plant. That is the purpose of grid sampling is to try and find that limiting factor.

With elevated input costs it is becoming even more important to properly place inputs where the chance for success is greater. When thinking of fertilizer you can do a conventional spread but you are probably over fertilizing in some places but under fertilizing in other spots. When soil test levels move from high to medium to low levels the risk of yield loss and reduced profits escalates quickly. Thus, with a large amount of land being rented it is important for producers to accurately know the soil test levels when developing a fertilizer plan to maximize profitability of your fertilizer dollar.

When a farm is grid sampled these are the test that are standard:

pH	Organic Matter
Buffer pH	CEC
Phosphorus Bray 1	Base Saturation (Ca, H, K, Mg)
Phosphorus Bray 2	Calcium
Potassium	Magnesium