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### Plant Analysis for Corn

One of the more useful 'quality control' tools for corn growers is the use of plant analysis for testing nutrient levels. It is especially valuable for managing secondary and micronutrients that don't have high quality, reliable soil tests available, and for providing insight into how efficiently you are using applied nutrients. This year, it may be a good diagnostic tool for growers to consider.

Variation within a field is sometimes a nutrient deficiency and sometimes a function of growing conditions. When using plant analysis to diagnose field problems, take comparison samples from both good/normal areas of the field, as well as problem spots. Don't wait for a specific time frame, either. Do it as when you note the differences not 'correcting' when weather straightens up! Don't fret about what plant part to use either, as long as you are making sure to get samples from both good areas and bad areas to compare.

As a general rule, if plants are less than 12 inches tall, collect the whole plant from ground level up. With plants more than 12 inches tall and until reproductive growth begins, collect the top fully developed leaves (those which show leaf collars). If you reach reproductive stages, you'll have to collect 15-20 ear leaves, or the first leaf below and opposite the ear. Along with taking plant tissue samples, it is also helpful to collect a soil sample from both good and bad areas when doing diagnostics. This will help define whether it is truly a soil nutrient deficiency, or something induced by weather or production practices.

Handling and shipping instructions will vary by lab. Contact your lab for specific instructions or your local Extension Office for samples sent to our KSU lab. Results can be compared to 'sufficiency' levels so that you can determine whether you are deficient or not.

### Do Not Over-Fertilize Tomatoes

It's a balancing act. Fertilizing tomatoes that is. They need fertilizer to yield well, but too much only results in large plants – and no fruit!

I hope that you have your tomatoes planted, but if not, the first fertilizer application should occur before planting. They are then side dressed with nitrogen fertilizer three times during the season.

The first should occur one to two weeks prior to the first tomato ripening. The second should be applied two weeks after the first tomato ripens and the third application needs to be made one month after the second.

How much should you apply? Depends on the product! Try the following (use only one of these per application): Nitrate of soda (16-0-0): Apply 2/3 pound (1.5 cups) fertilizer per 30 feet of row. Blood Meal (12-1.5-.6): Apply 14 ounces (1.75 cups) fertilizer per 30 feet of row. Urea (46-0-0): Apply 4 ounces (½ cup) fertilizer per 30 feet of row. Ammonium Sulfate (21-0-0): Apply 0.5 pounds (1 cup) fertilizer per 30 feet of row. Can't find one of these? You can try a lawn fertilizer at an equivalent rate so long as it doesn't contain a weed killer or weed preventer!!