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Plant Nutrient Analysis in Corn – What To Test For

In last week's column, I shared some information from KSU Soil Fertility Specialists about how to use plant analysis as a management tool in corn. Once you have the plants collected according to those instructions, what do you test for?!

In Kansas nitrogen (N), phosphorus (P), potassium (K), sulfur (S), zinc (Zn), chloride (Cl), and iron (Fe) are the nutrients most likely to be deficient. You can probably get many of those in a 'bundle' of tests for a lower cost than individual tests. K-State offers a package which includes N, P, K, Ca, Mg, S, Fe, Cu, Zn, and Mn for \$23.75.

From the testing lab, you'll receive a report of concentration of the elements tested for as either a percent or in parts per million. At that point, you can compare plant nutrient concentrations to published sufficiency ranges (concentration ranges found in healthy, productive plants) based on varying growth stages. Knowing where your crop's levels are, can help you evaluate what the issue at hand may be. Sometimes there truly is a deficiency that needs to be addressed. Sometimes, the deficiency is a function of things like potential yield or stress factors. Sometimes, you have very high levels, indicating over fertilization or a nutrient imbalance.

Making sure you have the correct nutrient balance in your corn crop makes good economic and environmental sense. For more information about tissue testing through the KSU Soil Testing Lab, contact a Meadowlark District Office.

Time to Treat Bagworms?

In short, the answer to that question at this date is no!

While bagworm hatches have begun, holding off on bagworm treatments now can result in better control later on.

Since we want to give time for emergence of even later emerging larvae to occur, our target date for bagworm treatment is actually the latter portion of June. Further, make sure to check trees before you spray to make sure they are present. Sometimes, natural predators and parasites provide good levels of control.

To check your trees, look for a miniature version of the mature bagworm. They will be about the size of a pencil lead.

Numerous insecticides can be used for bagworm control. Some active ingredients include: spinosad, *Bacillus thuringiensis*, acephate, cyfluthrin, and permethrin. Be sure that the tree species you intend to spray is on the label. Always read and follow label directions!

When you do get ready to spray, remember: thorough coverage is vital for good control. Most control failures are due to the spray not penetrating deep enough in the tree rather than the insecticide not working. Spend a little time now getting equipment ready to reach those tough to reach tree tops and the dense foliage these trees often exhibit.