

COMMONLY ASKED QUESTIONS AFTER OUR MEETING:

QUESTION: “Why has micronutrients been so overlooked in the past?”

ANSWER: Over the years we in agriculture have been expecting more of our soils every year to provide our plants with the proper nutrition to feed the yields we expect. Outrageous yields have been seen more and more lately but in order to get those yields growers have not been able to completely rely on the soils supply and their basic beginning season fertilizer applications. Growers have had to improvise and manage their crops more and more in order to keep pushing the yield along. The 300 bushel yield goal for 2050 is very attainable. The genetics for that yield are already here today. However, just like a high performance athlete, the potential is there but management, massively intense nutrition and commitment to excruciating training and exercise is a necessity to attain that potential. Corn from day 30-day 80 needs 29# of N-P-K per acre per day to obtain a 300 bushel yield. However, nutrition is only one component in the formula. Genetic Potential – Stresses (Nutrition, physiology, management, environmental, diseases, & pests) = Yield at Harvest Other countries have been utilizing and practicing the idea that soil scientists and plant pathologists work together to solve problems and help to create higher yields for producers. Here in the U.S. soil scientists and plant pathologists do not work so well together, thus deterring producers from being able to maximize their yield potential. It is kind of like doctors and chiropractors, you seldom find any that would recommend you go see the ‘other guy’, but if more of them worked together on a patient, the results would be greater.

QUESTION: “Why don’t we just sample the crop when we see visual problems?”

ANSWER: When a person sees any visual problems, the problem has already done damage to yield. By the time you would sample and see a recommendation back, the critical stage has already passed and damage has already been done. This is why the Nutrisolutions tool points out critical stages of plant growth and recommends to tissue sample before those critical stages. We understand that to sample all of your fields is not very realistic, so that is why we recommend you select a few of your fields that commonly cause problems or selecting fields you don’t see quite the yield like you do on others.

QUESTION: “If we already know that glyphosate can cause manganese deficiencies, why don’t we just always add Maxin Mn to all our glyphosate applications?”

ANSWER: In some cases, higher rates and more applications of glyphosate can cause manganese deficiencies. This occurs when the glyphosate succeeds at knocking off the Mn molecule from the carbohydrate or sugar making process in the plant. The manganese is needed to split the water molecule to start the carbohydrate process to create sugar, which is energy to the plant. Whichever plant creates the most sugar at the end of each day, wins in yield at the end of the season. We would like to tissue test before the critical stages of growth for every plant so that we can determine exactly ‘what’ and ‘how much’ is deficient in the plant. This way, instead of spending, let’s say \$4 an acre thinking that you might need the manganese, you will spend that money knowing that your crop needs it.

QUESTION: “I didn’t quite understand what problems could occur with Zinc 10% versus Zinc 9% EDTA with my 9-18-9 starter, could you explain what problems I may have?”

ANSWER: Zinc 9% EDTA is a chelated formulation that when mixed with and stored longer term with 9-18-9 or a 6-24-6 there will be no separation or nasty slurries created. With 10% Zinc, this could and has happened before when mixed and stored longer term with a 9-18-9 and 6-24-6. However when using 10-34-0, Zinc 10% does not cause mixing or storing issues. The advantage with the Zinc 9% EDTA over the Zinc 10% is that the EDTA means chelated (or claw) which acts as a protector in preventing the bonds from breaking on the zinc molecules. This means that the Zinc is already in plant available form and will not break down as fast as the Zinc 10% will later in the season.