

August '25 Monthly Crop Report

Don't Sweat It

High humidity is nothing new in our geographical area, but this year has almost felt more humid than in years past, hasn't it? In a meteorologic year much different than the prior two, the inclination of moisture has played a role. However, is it the only contributing factor? Corn fields line road sides all throughout our 4-state area, and could be pumping more moisture into the air than we realize. Known as "Corn Sweat," it is the process where corn plants release water vapor into the atmosphere. As the plant absorbs water from the soil and into the roots, it releases that moisture through its stomatal openings in the leaves cooling down the plant itself while also transporting nutrients through the vascular bundle of xylem vessels. This released moisture combines with other water molecules in the atmosphere and in change humidifies the air even more. In laments term, evapotranspiration is what is occurring at heightened levels. In fact, one acre of corn can evaporate as much as 4,000 gallons of water into the atmosphere. If we precipitate that back into the same acre, we're talking about roughly 0.15" deep of moisture, which doesn't equvalate to as much as we may think. These corn fields are adding roughly 20-25 degrees on top of what the temperature gauge says due to the increase in humidity. With over 90 million acres of corn planted this year, adding in the numerous spring and summer rains, it helps explain why the humidity and dew point have been so high this summer.



A common sight the last couple years, corn leaves roll on the ends to help preserve moisture. Whole fields can almost appear as "pineapples"

Saturated Soils and Early Planted Soybean Response

Considering another way to maximize yield potential, foliar feeding is an option that many producers may not consider. Studies around foliar feeding has shown that when applied at the correct time and growth stage it can dramatically improve yield to those who are micronutrient deficient. These nutrients are boron, zinc, manganese, molybdenum, iron, copper, chlorine, and nickel. Foliar feeding, however, is not as effective as applying macronutrients such as nitrogen, phosphorous, potassium, sulfur, calcium, magnesium. Macronutrients are not transported through the plant like micronutrients can be, as they tend to have a more local effect when applied via foliar feed then when applied to the soil. Foliar feeding can be very effective when paired with soil sampling. Foliar applications are not a way of fertilizing the soil, but feeding the plant the nutrients it might be deficient in. Soil management is critical when it comes utilizing nutrient intake and consumption. Foliar feeds are only a supplement to the nutrients in the soil, therefore if there is a known deficiency it is important that it is addressed the next time you fertilize.



Micronutrient deficiency or possible disease? Correct identification is key!

In a world full of small minds and loud mouths, be the reason someone still believes in kind hearts, beautiful souls, and good energy. Never stop being a good person.

Paul Avellino