



## ***Don't Put the Sprayer Away Yet!!***

*7/27/2016*

Most areas of the Corn Belt have good-to-excellent crop prospects at this time and will probably have a good harvest without further crop inputs. **What could possibly entice a grower to make another trip through his fields at this point in the growing season?** How about the fact that half of corn and soybean grain dry matter accumulation occurs in the last 30 days before physiological maturity? Stated another way, **half of your final yield is made in the last 30 days before crop dry down begins.**

**Plant health and nutrient status determine how your crop finishes in the last 30 days.** You certainly don't want the crop to die prematurely or run out of nutrients during grain fill. We have all witnessed many times that the biggest yields come from crops that "stay green" through maturity. There are a lot of factors that influence that and some are beyond the growers control late in the season. Adverse rainfall, either too much or too little, affects soil biology and soil nutrient status. Excessive rainfall causing nitrogen leaching and stalk rot in corn would be an example of this.

**Growers still can influence final yields late in the season.** Many fields will soon be past the time to change the number of seeds per plant, but seed size and density play huge roles in final yields, and those factors can still be influenced.

We want to make sure that plants have enough nutrients and energy to keep directing starches and proteins to the seed. Many nutrients come into play here. We need:

- **Magnesium** for chlorophyll formation to make sure we are making the most of photosynthetic potential
- **Boron** to help move sugars within the plant
- **Nitrogen** and **sulfur** for protein formation
- **Potassium** to help with sizing the seed
- And, a constant supply of **phosphorus** to keep the energy cycling in the plant

All these nutrients affect the hormone balance of the plant and therefore how the plant uses energy. Some of our biggest foliar responses have come in the last 30 days before maturity as a result of providing the plant with some of these vital nutrients at a critical time.

AgriEnergy Resources products like **Pillar™ 15**, **Corn Foliar**, and **AgriBoost PK** provide all of the above nutrients, and more. Specific deficiencies can be addressed with AgriEnergy products such as **Magnesium L**, **Boron O**, **BIOMIN® Cal-Boro**, **Bio-N LQ**, **Potassium Sulfate Solution**, and with **Drammatic fish** products.

**Late season foliars are not just for row crops.** Perennial crops benefit greatly also. The nutrient status of the plants going into winter largely determines what shape they will be in coming out of winter. For pasture and hay growers, the late season foliars can make a big impact on the first cutting or first grazing next spring. Fruit growers can prepare the plant for a larger fruit set next spring.

You may not be worried about the first frost in the midst of summer heat, but we never know when it may become a threat later in the growing season. We have seen that **late season foliars provide a double benefit when crops are threatened by frost.**

1. Foliar applications can speed crop maturity helping them to make maturity ahead of a damaging frost.
2. Nutrient dense plants will withstand temperatures 2-3 degrees colder without sustaining damage than plants with lesser nutrient content.

**Don't forget to add SP-1™ to your foliar tank mix.** It is beneficial for plant leaf surfaces to host the diverse biology found in **SP-1™** to help with plant health and nutrient cycling. Many growers will substitute a **Residue®** program for SP-1™ in their perennial crops to help with residue and thatch decomposition and to assist in bio sanitation.

**It doesn't matter if you are growing organically or biologically, you don't want to leave yield on the table. Consult your *AgriEnergy Resources* representative to help design a foliar program that makes sense for your crops!**