

# Helpful Tips to Improve Your Fertilizer Program

As growers struggle to make ends meet in this difficult Ag economy they are looking to decrease input costs, maximize efficiency, and get as much yield as possible. One large expense in a grower's corn program is their fertilizer bill each year, and oftentimes it is tempting to rely on what fertilizer program has been used in the past. In many instances there are many ways we can help streamline your fertilizer program to help make it more cost-effective, better environmentally, and better at maximizing your yield at the end of the year.

## Step 1: Adjust Your Starter Blend

If you are in a situation where you really need to cut down on your fertilizer bill, a good place to start looking is at your starter blend. A good number of people still use 9-23-30 dry starter, which is a great blend, but it is also one of the most expensive blends out there due to the high amount of phosphorus in it. If you have decent phosphorus levels try switching your starter blend to a different option, like 9-11-30-6s or a 20-10-10-11s that still gives you some phosphorus, along with some sulfur. This saves you roughly \$40-\$50 per ton and you are getting a bump in sulfur and/or nitrogen as well. This should not really be done to ground that has very low phosphorus levels, but for the majority of ground in our area it is a valid option.

## Step 2: Split Up Your Nitrogen and Sulfur

Many people are familiar with the benefits of splitting up your urea N applications (more N availability later in the season, less N leached through the soil, better flexibility with N rates, more efficient nutrient use), but what many people do not realize is that your sulfur should be treated in a similar way. Nitrogen and sulfur both are leachable nutrients, which means that those nutrients can pass through the soil profile to the point where they are not useable to the plant. Sulfur is extremely important to the health of a corn plant, but is often overlooked. In the past our atmosphere was so rich in sulfur due to air pollution our crops could get the sulfur they needed through the air. But since we have cleaned-up our atmosphere, which is an extremely good thing, those plants are now unable to get the sulfur they need through the air. We recommend split applying both your Sulfur and Nitrogen- that way less of the sulfur and nitrogen is wasted by being leached through the soil profile and more is used by the plant. You are paying for those nutrients and need them to be turned into yield at the end of the year, let's manage it in a way where you get the most return on your investment.

## Step 3: Fall Apply P, K, and Elemental Sulfur if Possible

One thing to consider is applying your phosphorus and potassium (potash) in the fall after the crops are harvested. Since potassium and phosphorus generally don't leach or move through the soil profile, those nutrients should still be available to the plants the following year (unless they are eroded with the soil). This not only saves you a lot of time and expense in the spring, but generally fertilizer prices tend to be cheaper in the fall, spreaders are more available than in the spring, and application costs tend to be lower. Along with your potassium and phosphorus, think about using elemental sulfur in the fall as well – it takes time for it to convert to sulfate in the soil, and it becomes available to the plant during the spring and summer growing season. Just think, you are able to spread all of your soybean ground in the fall, most-likely for a lower price, which gains you valuable time in the spring and often saves you money

on your fertilizer bill for the year. That's less waiting on fertilizer in the spring time and then you can plant beans when you want to. That sounds like a win-win to me!

#### Step 4: Think Profit per Bushel NOT Cost per Acre

When you are planning out your inputs for the year it is important to look at how you are making those decisions: are you looking primarily at your cost per acre or are you thinking about cost per bushel? For example, if you could choose to either spend a dollar to get two dollars back, or to spend three dollars and get six dollars back, which one would you choose? I would choose the second option every time because I just increased my overall profit. That is how we need to think about our inputs for the year: what is the best return on my investment and what gives me the best chance to maximize profits come harvest time? Don't get me wrong, looking at your cost per acre is important, but don't let it keep you from maximizing your profit per bushel at the end of the year.

#### Step 5: Plan Ahead

As Benjamin Franklin once said, "By failing to prepare, you are preparing to fail." Farming is your livelihood and try to use the time after harvest to meet with your agronomist and get a solid plan for the next year. Acres, crop rotations, and fields may change by spring-time, but do your homework early so you can take last-minute spring changes in stride. In the late fall / early winter try to plan out fertilizer, pick out your seed, come up with a chemical program, update your maps, and self-evaluate your operation. Take the time to sit down and see what can be improved, and what should stay the same. Pick your agronomist's brain and ask questions, we all have things we can learn.

Many times growers are expecting more and more yield every year, but are reluctant to change how they feed that corn plant to get that yield. Either we can do the same fertilizer program year after year and run the risk of wasting product and money, or we can re-evaluate how we feed our crops and maximize the return on your investment. Corn genetics are changing constantly and the way they need nutrients is changing too. Are you willing to change along with it?

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