

N Fertilization - are optical sensors worth it

This is Ag Outlook on 1420 KJCK, I'm Chuck Otte, Geary County, K-State Research and Extension Ag & Natural Resources Agent. I'm sure just about everyone has at least heard a little bit about using optical sensors to scan a growing crop to determine nitrogen fertilization need. Much of this has been done in wheat with products like greenseeker, Cropspecs, OptRX or RedEdge. The price range can vary from \$500 for a handheld device clear up to \$20,000 for a tractor mounted device applicable for variable rate on the go nitrogen applications. The question everyone wants to know is, do they work? Well, the short answer is yes they do, but I wouldn't rush out and buy one just yet. K-State and colleges in several other states have performed studies where traditional soil tests were done with recommendations made from them and then they just relied on the optical sensors to determine topdress nitrogen rates. What the studies have shown over and over is that the sensor based nitrogen application consistently applied less total nitrogen than the soil test based fertilization and the yield between the two tests was not significantly different. Nitrogen savings in the tests ranged from 24 to 54 pounds per acre. Converting that to cost savings with liquid nitrogen it amounts to a savings of \$8 to \$19 per acre. So if you wanted to justify the expense of a unit hooked to a variable rate fertilizer applicator, you'd need anywhere from 1000 to 2500 acres of wheat. Then there's issues of size of wheat, is the weather cloudy or clear, what are the growing conditions after application and yield potential. Okay, we're not there yet! This has been Ag Outlook on the Talk of JC, 1420 KJCK, I'm Chuck Otte.

Dealing with marestail in beans

This is Ag Outlook on 1420 KJCK, I'm Chuck Otte, Geary County, K-State Research and Extension Ag & Natural Resources Agent. A reminder of our Dealing with Herbicide Resistant Weeds meeting on February 23rd starting at 4:30 in the afternoon at the 4-H/Sr. Citizens Building. You need to pre-register by calling the office at 785-238-4161 so we know we will have enough food. If you don't pre-register, I can't guarantee you a meal! With all of the talk about glyphosate resistant pigweeds we also need to talk about marestail. Marestail never was well controlled by glyphosate for whatever reason. Because of the height differential it seems to be more of a problem in soybeans than in corn. Marestail is both a winter annual as well as an early spring emerging weed. It is very important to get it controlled before it starts to bolt and sends up that flower stalk. 2,4-D and dicamba, alone or in combination applied in early spring will do a good job of controlling it. It is important to get these products on early though so we have a safe window before planting. Getting applications done in mid to late March will accomplish this and also get the marestail before it starts to bolt. You also need to control weeds germinating between the time of the application and soybean planting. Products that would be good for marestail and other broadleaf weeds, though weak on grasses, include Canopy EX, Autumn Super, Classic, First Rate, Sharpen, metribuzin or Valor. If you're getting closer to planting and still need to control marestail consider herbicides like FirstRate, Classic, Sharpen, Optill and possibly 2,4-D depending on how close you are to planting. Depending on rate and products you need 7 to 30 days after 2,4-D app. This has been Ag Outlook on the Talk of JC, 1420 KJCK, I'm Chuck Otte.

Planning Ahead for Burning Season

This is Ag Outlook on 1420 KJCK, I'm Chuck Otte, Geary County, K-State Research and Extension Ag & Natural Resources Agent. Well we're already to the middle of February. That means that if we blink about once more we're going to be into burning season and based on how pastures look after last year, we're probably going to be seeing a lot of burning this spring. The more burning we can do earlier in the season, as in March and especially on cooler days when ozone is less likely to develop, the better off we all will be. Reasons to burn we'll discuss in a few weeks. But for right now I want you to start considering doing some advance planning. There's no reason why you can't start working on firebreaks in February or even early March. Normally, barring overly warm and windy days, it's a lot easier to deal with burning firebreaks then. This is a great opportunity to mow the perimeter of the pastures you want to burn. Mow a 10 to 20 foot strip around the pasture and then follow up burning that area. Take your time when you are working on this. Have plenty of water along. Rake the mowed grass to the center of the firebreak so when it burns it isn't going right into tall grass. If the wind starts to pick up or starts to move against you, put everything out and shut it down for the day. Remember that even burning firebreaks you need to call into the Emergency Management office and get permission to burn. Let them know what you're doing and call when you are done. Burning a firebreak is a slow, time consuming process. If it takes you a day or two this time of year to get it done it's no big deal. Because then, when you get that day when the conditions are perfect, you are ready to go. This has been Ag Outlook on the Talk of JC, 1420 KJCK, I'm Chuck Otte.

Negotiation of Leases

This is Ag Outlook on 1420 KJCK, I'm Chuck Otte, Geary County, K-State Research and Extension Ag & Natural Resources Agent. One of the points of confusion that often comes with leases, especially new leases, comes down to when they need to be negotiated. Many landlords and tenants get that 30 days prior to March 1 in their head and think that they have to have the new lease in place by then. But that isn't the case. If you want a new lease with your existing tenant, and you are afraid that they may not accept it, then yes, get those negotiations in place in December or early January because if the existing tenant won't accept them, then you still have time to terminate. If it is February or later and you try to negotiate with the tenant, and they don't accept the terms of the new lease, you are both stuck with the terms of last year's lease and it's too late to terminate them for this year. But in all honesty, if you have no tenant at this time, you still have time to work things out. If you create a new lease and it is oral, it will go until next March 1 and continue unless you give proper notice of termination. If you have a written lease, you can set the termination date for any date! When you give termination can be an important consideration also. If you are a landlord and you give termination now for March 1 of 2018, the tenants lease essentially ends when the last crop is taken off. You have already notified them that they won't have the lease next year so for them to plant wheat in the fall is foolish as you've already said that they won't have the land. If they have wheat on now, they can still double crop it after wheat harvest or if they have corn, they can even graze the stalks unless prohibited in a written lease. This has been Ag Outlook on the Talk of JC, 1420 KJCK, I'm Chuck Otte.

What's the penalty for guessing wrong?

This is Ag Outlook on 1420 KJCK, I'm Chuck Otte, Geary County, K-State Research and Extension Ag & Natural Resources Agent. So, you're going to go out and apply your fertilizer this spring just like you always do. Are you basing that decision on a recent soil test or simply from tradition? If you aren't apply enough fertilizer, what kind of yield hit will your crop suffer? Or, if you are applying way too much, what kind of profitability loss will you have. In essence, if you are fertilizing without a soil test, what's the penalty of guessing wrong? Earlier this week I talked about optical scanner technology for nitrogen fertilization. While that is a great way to fine tune nitrogen application, at least in wheat, it doesn't do much for the other nutrients or even soil pH. Soil testing, other than a little bit of time and sweat, isn't very expensive. Two very big issues that I see on a regular basis are phosphorus levels and soil pH. Soil pH is critical when you are establishing a new stand of alfalfa or bromegrass. I've seen so many issues with low soil pH really stunting new alfalfa. And once the alfalfa is up, you can't very easily fix it. Test before you plant. Phosphorus is so critical for plant growth. Not enough and plants and ultimately yield, will suffer, too much and you are wasting money if you apply more. In tight times it really pays to take advantage of existing high phosphorus levels or even high nitrogen levels. The problem is, that if you don't soil test you don't know what's there. Any decision you make is likely to be wrong and cost you money or yield if you don't know where you are to begin with. So over the next few months take some time, pull some soil samples and let's get a starting point for soil fertility! This has been Ag Outlook on the Talk of JC, 1420 KJCK, I'm Chuck Otte.