

Careful with herbicides on wheat

This is Ag Outlook on 1420 KJCK, I'm Chuck Otte, Geary County, K-State Research and Extension Ag & Natural Resources Agent. With the growing desire to either double crop soybeans after wheat or to plant cover crops after wheat, we have wheat producers tending to move back to some of the long standing products like 2,4-D, MCPA or dicamba. All of which can have serious damage to the wheat crop if applied at the wrong time. But newer generation herbicides can also have issues when applied at the wrong growth stage of wheat. It's important to know what you are using and what stage your wheat is in. In general, there are three critical growth stages you need to know. Tillering, jointing and boot. 2,4-D shouldn't be applied until spring after wheat is well tillered. We aren't there yet! It is probably best used between full tiller and jointing, which is when the heads start to move above ground. Dicamba can be used earlier in wheat - from the 2 leaf stage up to jointing. Applying dicamba after jointing can lay your wheat flat and greatly reduce yield. Dicamba is good for buckwheat control but isn't that effective on the mustards - you need 2,4-D to do that. MCPA, while not as well known as D or dicamba is pretty effective and may be a little safer than 2,4-D. Bottom line, you really need to know what weeds you have out there, you need to pay close attention to the growth stage of your wheat. All of this means one very simple thing, it's getting to be that time of year when you need to put boots on the ground in your wheat field, and maybe even down on your hands and knees to see where we are! This has been Ag Outlook on the Talk of JC, 1420 KJCK, I'm Chuck Otte.

## 2018 Stripe Rust Outlook

This is Ag Outlook on 1420 KJCK, I'm Chuck Otte, Geary County, K-State Research and Extension Ag & Natural Resources Agent. We all know that spring weather is a big factor in determining how much disease problems we have in wheat and which diseases we will have problems with. High temperatures favor leaf rust and cooler temperatures favor stripe rust. Mild winters and snow cover allow more diseases to overwinter further north allowing for earlier infestation. Colder temperatures and no snow cover freezes everything to the ground so rust diseases can't overwinter this far north. With stripe rust there is growing evidence that regional soil moisture conditions in the southern great plains in February are strongly associated with outbreaks of stripe rust. Wheat in Texas, right now is well past jointing and growing rapidly. So where are we right now? Surprisingly the pathologists are indicating that right now Kansas has a low to moderate severe stripe rust risk. Now we can couple this with current reports out of Texas and Oklahoma. Right now, rust incidence is quite low to non-existent. Stripe rust has been reported from one research location west of San Antonio so there is some risk, but the disease is not exploding yet. Oklahoma has found no evidence of stripe rust this season and only trace levels of leaf rust from near Stillwater. Leaf rust is not uncommon to find at this time of year. But the good news is that the longer it takes for problems to develop to our south, the better things are for us. Leaf disease can be a very fluid situation and monitoring is necessary, but so far, so good! This has been Ag Outlook on the Talk of JC, 1420 KJCK, I'm Chuck Otte.

Let's avoid the glyphosate mistake

This is Ag Outlook on 1420 KJCK, I'm Chuck Otte, Geary County, K-State Research and Extension Ag & Natural Resources Agent. There's something that every producer needs to start being aware of when it comes to weed control and that is the phrase, mode of action. Herbicide mode of action, or MOA, refers to how herbicides work on plants and involves all the interactions from herbicide absorption by the plant down to the final effect. For example, the plant auxin MOA group includes dicamba, 2,4-D, Tordon, and Pramound. Very different herbicides and their effectiveness on different plants, but they all have the same basic mode of action. The problem is that when weeds in a field are continually treated with herbicides with the same MOA, even though it's a different herbicide, we can eventually see herbicide resistance develop. That was the mistake made with glyphosate. We used the same exact herbicide year after year after year. Sure enough, we selected, not developed, but selected, the few pigweed plants that were resistant. So what we need to do is to make sure that we are, for example using burndown or residual herbicides from two different MOA groups. When we double up, we greatly decrease the likelihood of developing, or selecting, for resistance. How do you know what MOAs you are using? We've got posters that you can tell quickly what you're working with. The chemical weed control bulletin also has MOAs denoted. Additionally, when you rotate crops, you also need to rotate your herbicides so we keep switching up MOAs. We need to work together to make things work. This has been Ag Outlook on the Talk of JC, 1420 KJCK, I'm Chuck Otte.

Is Fertilizing Soybeans necessary?

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 reasons that producers like soybeans is that most producers don't fertilize them. They don't fertilize, they don't soil test, they just plant and go. Fortunately, because soybeans are such great scavengers of any nutrients left over from previous crops, we often get by with no fertilization. But here's some things to keep in mind. Our soil chemistry is changing because we are growing far more corn and soybeans. We are also using far more nitrogen fertilizer in our crops which serves as an acidifying agent. Soil pH levels are dropping as are potassium levels simply because we are using up more nutrients with higher crop yields. In many fields phosphorus levels are dropping. We always used to put on 100 pounds of starter fertilizer in wheat and this allowed us to build up some healthy phosphorus levels in many fields. But now we grow much less wheat and our fertility applications have been changing. PH, phosphorus and potassium are all easily tested for with a basic soil test. In fact, if you are no-till, we probably only need to sample the top three inches of the field. If we have a pH below 5.8, we probably need to lime it - not for the soybean plant per se, but for the rhizobium bacteria that do the nitrogen fixation. They are very sensitive to acidic soil. As long as we have phosphorus soil test levels of at least 20 ppm we don't need to worry. But once we get below 20, we need to fertilize. Potassium doesn't become critical until we get below about 125, but that day is coming. This has been Ag Outlook on the Talk of JC, 1420 KJCK, I'm Chuck Otte.

## Soybean insect and disease outlook

This is Ag Outlook on 1420 KJCK, I'm Chuck Otte, Geary County, K-State Research and Extension Ag & Natural Resources Agent. We had a good discussion last week at our soybean meeting regarding potential insect and disease issues with soybeans for 2018. Soybean rust, while still lingering around in the deep south has so far pretty much been a non-issue for those this far north. We will continue to monitor the situation further south but it doesn't concern me too much for the coming year. Fungicidal seed treatments should be used on all soybean seed planted in May. It may be less of an issue for later planted or double crop beans, but as we've said before, it's pretty cheap insurance. One other foliar disease that we need to be aware of because it is increasing noticeably is frog-eye leaf spot. This one is somewhat concerning because it can cause yield loss but an even bigger concern is how rapidly this disease has built up resistance to fungicides in the past. Then of course we have the ongoing concerns about soybean cyst nematode. It has been found in Geary County fields. We will have more of it as the years go on. The more soybeans we plant and the more often we have soybeans in the same fields year after year, the bigger of an issue it will be. When it comes to insects of concern and controlling them, it was very clear that there were way more fields sprayed for insects last year than was needed. We have concerns with podworm and stink bugs but most of the time mother nature will take care of the other problems. Dectes stem borer is building up in frequency and could be a real problem in some fields some years. We have no chemical controls so this one is kind of tricky - stay tuned! This has been Ag Outlook on the Talk of JC, 1420 KJCK, I'm Chuck Otte.