

## N Fertilization of Wheat and Bromegrass

This is Ag Outlook on 1420 KJCK, I'm Chuck Otte, Geary County, K-State Research and Extension Ag & Natural Resources Agent. It's February, already almost a week in. With the weather we've had, wheat is breaking dormancy and slowly starting to grow. One of the problems that we have with wheat, and bromegrass for that matter, is nitrogen fertilizer being applied too late in the growth cycle. I can understand the desire to get by with making just one application to apply fertilizer and herbicide, but if that application goes on too late, the amount of yield loss may well be way more than the cost of a second application. So how late is too late? For bromegrass anything after about mid February is probably costing you tonnage. In all honesty, I'd like to see the brome fertilizer applied by the end of December. Think about this year - get that fertilizer applied in mid December, then get that nice rain on top of it in mid January and all of that nitrogen is now down in the root zone. Brome roots are active in January and February if the ground isn't frozen and the sun is shining. Wheat is similar. By the time that wheat plant really comes out of dormancy, that nitrogen needs to be applied and into the ground. If you haven't got your wheat fertilized and you're into March, you are losing yield. As for application rates I would want a total of 75 to 80 pounds of actual nitrogen as a minimum. If you are shooting for yields over 60 bushels, then up that to around 100 pounds. With bromegrass if you apply 50 pounds of actual nitrogen figure 2 tons per acre. Push that up to 90 pounds and you can get 3 tons. This has been Ag Outlook on the Talk of JC, 1420 KJCK, I'm Chuck Otte.

## New Corn Herbicides

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 23<sup>rd</sup> 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! One of the things that I know Dallas and Curtis will talk about are some of the new corn herbicides that have been labeled over the past 24 months or so. What I will tell you up front is that there is no new chemistry in the near term pipeline. Most of the "new" stuff is new mixes of herbicides that have been around a long time. Many of these, not surprisingly, are attempts to better deal with herbicide resistance in pigweeds including some of the new formulations of dicamba and 2,4-D that I will talk about tomorrow. I'm not going to go into many details this morning other than the names and if they are pre or post formulations. If you want more information, come to the meeting on the 23<sup>rd</sup>. Acuron contains atrazine and several others and is for pre and post use: Accuron Flexi does not have atrazine it's pre and post also. Armezon Pro is Armezon plus Outlook and is pre and post. Instigate is pre-emerge through early post and is a mix of Resolve and Callisto. Kochiavore, gotta love the name is aimed at controlling small kochia pre-emerge to early post emerge. This one can damage small corn so watch size restrictions. Finally Resicore is a 3 product mix that is aimed at controlling pigweeds but is going to be pretty good on most broadleaf weeds and grasses, except shattercane. This has been Ag Outlook on the Talk of JC, 1420 KJCK, I'm Chuck Otte.

## New 2,4-D and Dicamba products

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 new, if you will, technologies coming out for weed control are the new formulations of 2,4-D and dicamba and the matching resistance in corn and especially in soybeans. A lot of this has to do with the emerging glyphosate resistance issue in pigweeds (that means Palmer amaranth and tall waterhemp - they're both pigweeds!) New formulations of 2,4-D and dicamba are designed to be much lower in volatility so vapor drift is going to be less of an issue. Anyone who has ever worked with dicamba or 2,4-D in the past is very well aware of how far those vapors can travel and still do damage. I tell people that if you can smell the herbicide, there's enough vapor to cause problems to sensitive crops. These new products are different formulations - the 2,4-D is a choline salt base. I've used older lithium salt based 2,4-D products and I can tell you that you don't have drift and you don't have the classic 2,4-D smell when you use them. I hope they get these into lawn herbicides soon which would make my life much easier. A couple of things to keep in mind. There are strict label restriction on some of these including very specific buffer zones around sensitive crops and homesteads. Some of the labels even have specific nozzle and pressure requirements. You want to be very careful NOT to use any spray adjuvants not on the label because the wrong additive can make them even more volatile than older products. Finally, weed size is crucial for good control. Most of the time you need to spraying when weeds are 2 or 3 inches tall if you want good control. This has been Ag Outlook on the Talk of JC, 1420 KJCK, I'm Chuck Otte.

## One Pigweed is One Too Many

This is Ag Outlook on 1420 KJCK, I'm Chuck Otte, Geary County, K-State Research and Extension Ag & Natural Resources Agent. As a kid growing up on a farm in Nebraska, I knew that a fair amount of my summer would be spent pulling weeds in soybean fields. It was a fact of life. Sometimes the herbicides didn't work that great and other times the weather just turned against us - remember, this was in the early days of soybean herbicides! But we spent a lot of time pulling weeds in soybeans. When the Roundup Ready technology came along, it became very easy to have literally weed free fields. Now those days are gone, but I think it's important to remember something that my father knew, but I didn't appreciate at the time. Glyphosate resistant pigweeds are a growing issue. The resistance can be spread by the pollen. A susceptible female pigweed pollinated by a resistant male pigweed is likely going to produce offspring that is at least partially resistant. A single female Palmer amaranth plant can produce over one half million seeds. If even one half of one percent of those seeds aren't controlled by a preplant herbicide, you have 3,000 plants out there causing you problems. You probably would have thought that 99.5% control was pretty good! So after your herbicide applications, if you still see scattered weeds out there, go out and pull them. The whole idea is to stop these plants from going to seed. Pigweed seeds are fairly short lived, especially compared to others. Keep the weeds controlled, don't let them go to seed and you can quickly reduce the weed pressure in fields. But let that one half of one percent Palmer amaranth plants survive, and you've got 900 million seeds being produced! This has been Ag Outlook on the Talk of JC, 1420 KJCK, I'm Chuck Otte.

## Non-traditional Products

This is Ag Outlook on 1420 KJCK, I'm Chuck Otte, Geary County, K-State Research and Extension Ag & Natural Resources Agent. During periods of time when profit margins are tight to non-existent, we seem to see a proliferation of non-traditional products that are hyped to improve yield in crops. I've seen these products come around time after time after time. The problem is that most of them, quite bluntly, don't work. The companies promoting them will find one instance where the product appeared to work, likely due to poor design, and they will hype that to the moon in all their advertising. Now I'm not going to say that none of these products work or that any will never work, but you've got to look at his stuff with skeptical eyes! A few years ago there was a "growth regulator" touted and sold to improve yields. It was applied as a seed treatment, generally, and was supposed to significantly improve production. University trials were less than impressive. But several farmers from different parts of Kansas did large plot yield trials over a couple of years, because you know whole field trials are different than small plot trials - and there is some truth to that. I had the opportunity to listen to these three sharp young producers talk about their trials and the results. Every single one of them basically said that there was either no yield difference or not enough to pay for the cost of the material. You're going to be hearing about numerous such products in the months ahead. Be skeptical. If you want to try some of these products, don't go all in. Talk with me and let's set up an on farm trial so we have something to compare the results to. Someday we may find that magic elixir. But so far, we're still looking! This has been Ag Outlook on the Talk of JC, 1420 KJCK, I'm Chuck Otte.