Drought Stressed Weed Control

This is Ag Outlook on 1420 KJCK, I'm Chuck Otte, Geary County, K-State Research and Extension Ag & Natural Resources Agent. I was talking to a small acreage property owner recently who was trying, unsuccessfully to control some weeds on their property. They were frustrated because they felt that they had done everything right and the plants weren't dying. One of the first considerations for effective weed, or brush, control is to spray when the plant is actively growing. There's a lot of plants that are very drought and heat stressed at this time. They are not actively growing. A drought stressed plant is not carrying on normal biochemical processes like photosynthesis. If it isn't actively growing, it's not likely to absorb the herbicide through the leaves like it should and what it does absorb is not going to be moved around like it normally should. Even just having dusty leaves can greatly reduce effectiveness of herbicides, especially glyphosate based herbicides. We need to pay very close attention to this issue right now. It doesn't matter whether it's weeds in a crop field or brush in a pasture. If it isn't growing well it isn't going to be controlled very effectively. Which means that until we get a decent rain you may want to wait on brush treatment. It also means that post emerge herbicide treatments may be very limited in their success. If we get some decent rains and weeds start looking less stressed or if shrubs put out new leaves, then likelihood of control is going to be greatly improved. But for now, you just may want to sit tight and wait and see what happens with the weather! This has been Ag Outlook on the Talk of JC, 1420 KJCK, I'm Chuck Otte.

Marestail

This is Ag Outlook on 1420 KJCK, I'm Chuck Otte, Geary County, K-State Research and Extension Ag & Natural Resources Agent. Yesterday I talked about the challenges of controlling drought stressed weeds. Today I'm going to talk about the challenges of simply controlling some weeds, period, even if they aren't drought stressed. Marestail is one of those weeds. Back in the days before no-till, it was easily controlled with pre-plant tillage. Marestail generally starts growing in the fall, although we are seeing more spring germinating marestail all the time. But it would start growing and we'd take care of it with our preplant tillage. The weed was literally a novelty. But once we started moving towards no-till and using herbicides for burndown before planting we started to realize what a problem it can be. Glyphosate never did control it very well. Even when it is small, before it starts to bolt and send up that flower stalk, it is not easy to kill. I saw a field last week that was full of two foot tall marestail. There's basically no herbicide that is going to control that. To be right honest, other than tillage, there's no way to control it right now. What you need to do is remember to control it in the fall. Get out there after harvest this fall and treat with glyphosate AND something else like FirstRate, Classic and Synchrony. These would also work as an early spring treatment. Other considerations in the fall would be glyphosate plus dicamba or 2,4-D. Use full rates of glyphosate and if not using dicamba, be sure to add ammonium sulfate. But the key consideration for optimal control is to make sure the marestail is less than 2 inches tall. This has been Ag Outlook on the Talk of JC, 1420 KJCK, I'm Chuck Otte.

Soil Testing

This is Ag Outlook on 1420 KJCK, I'm Chuck Otte, Geary County, K-State Research and Extension Ag & Natural Resources Agent. I had a producer call earlier this month wanting to know if they needed to apply starter fertilizer with their soybeans. I asked what their soil test levels were and the response was, I don't know. So I responded that if you don't know, yes, put on 20 pounds of phosphorus as starter fertilizer which then led to the expected response of, have you seen how expensive starter fertilizer is? And my response to that, yeah, I was ready, was, well, ya know a soil test is going to cost you less than \$15. Yes, phosphorus fertilizer is expensive, 25 pounds per acre is going to cost you about 12 to 16 dollars PER ACRE depending on source. All of a sudden that \$15 bucks and a little sweat equity look a whole lot better. We know that if your soil phosphorus levels over 20 ppm you are very unlikely to see any response to additional added fertilizer. But once you get under 20 ppm, you are highly likely to see a yield bump from added fertilizer. The past couple years have shown very tight profit margins in crop production. These are the years that you go ahead and start to use up some of that residual phosphorus in the soil and unless it turns off wet, we may have a fair amount of residual nitrogen for future crops as well. Take the time to get a soil test done. Get out in those wheat fields now or this fall after fall harvest. Pull samples. In no-till going to beans, we only need to sample the top couple of inches because we won't run N. In other fields, work those muscles and let's pull a profile sample for N. This has been Ag Outlook on the Talk of JC, 1420 KJCK, I'm Chuck Otte.

Nitrates - follow up

This is Ag Outlook on 1420 KJCK, I'm Chuck Otte, Geary County, K-State Research and Extension Ag & Natural Resources Agent. I talked about nitrates last week and the importance of testing. We've started to get results back from some corn that likely will become forage before the summer is over. This corn was three and a half feet tall and by mid morning was starting to show drought stress. The nitrate sample came back at 6800 ppm. Now, part of the problem is that not all labs report nitrate the same way. Most use nitrate, some use nitrate nitrogen, others use potassium nitrate and some may report it as % nitrate. For samples reported as nitrate here is the scale. Under 3000 is considered virtually safe. 3000 to 6000 is moderately safe. 6000 to 9000 is potentially toxic and shouldn't be the only forage source. Over 9000 is considered dangerous. My advice to the owner of this corn was that it could be harvested and used now or, since it wasn't starting to die yet, don't do anything and wait to see if we get some rain to let the plant grow a little more. Just a word of warning though. Nitrate can change from day to day. A cloudy day can elevate nitrate levels. After a good rain you often see a spike in nitrates as the plant takes up a bunch of N and then it allocates it around. The corn could be harvested today and then simply mixed with lower nitrate food sources and be safe. Or, with careful feeding and a week or two of time, cattle can develop tolerance to high levels of nitrate through changes in the predominant bacteria in the rumen. But you simply need to be aware, take precautions and monitor you herd! This has been Ag Outlook on the Talk of JC, 1420 KJCK, I'm Chuck Otte.

Keeping Back Seed Wheat? Maybe not.

This is Ag Outlook on 1420 KJCK, I'm Chuck Otte, Geary County, K-State Research and Extension Ag & Natural Resources Agent. It isn't uncommon for producers to keep back seed wheat to plant in the fall. While I understand the economics of that, I think we sometimes let the economics over rule the agronomics. One of the most crucial seed quality factors when it comes to seed wheat is test weight. We know that kernels that are full and plump produce seedlings that establish quickly and produce vigorous plants. Shriveled and shrunken kernels, like we saw a lot of this year, produces smaller plants that aren't as vigorous. Under ideal conditions, low test weight seed wheat fields can do okay. But under stress, they will have problems and yield will be compromised. Ideally I like to see test weight of seed wheat above 60 pounds per bushel. That could be a challenge this year if you are keeping back your own seed wheat. The minimum that I'd be willing to accept is 57 pounds per bushel and I'd like to see it above 58. You can take light test weight seed and get it cleaned. Cleaning will often add 2 to 3 pounds per bushel. But one question that I always ask is how much are you going to lose? In other words if it takes 2 bushels of raw wheat to get 1 bushel of seed wheat, is it worth it? Granted that's a bit of an extreme, but it gets my point across. If you are keeping seed wheat back this year I'd suggest that you bring in a sample to be sent off for germination testing in August. I'd also strongly suggest that while you are getting the seed cleaned, you also have it treated with a fungicidal seed treatment. It's cheap insurance! This has been Ag Outlook on the Talk of JC, 1420 KJCK, I'm Chuck Otte.