

### Fall control of winter annual weeds

This is Ag Outlook on 1420 KJCK, I'm Chuck Otte, Geary County, K-State Research and Extension Ag & Natural Resources Agent. You're going to hear me harping on fall control of winter annual weeds over the next few weeks. I know a lot of folks routinely say, so what do I care if there's some weeds out in my crop residue. I'm going to be killing them before I plant so what difference do they make? I think we often are only taking into consideration soil moisture availability when we should be looking at a bigger picture item, that of soil fertility. Studies were done in multiple locations across eastern Kansas in recent years so this is a good multiple location multiple year study. The predominant weeds in the study were field pennycress and henbit. I probably see more henbit in fields than any other weed over winter. If left unchecked, the weeds had used 16 pounds of nitrogen per acre by the time the weeds matured in May. Okay, 16 pounds, big deal you think? Well, that nitrogen has a value of about \$8 and in terms of yield at 1.5 pounds of applied fertilizer per bushel of corn, that's nearly 11 bushels. Early nitrogen uptake by corn was nearly 1/3 greater if weeds were controlled in the Nov to March time frame instead of waiting until April or May. Corn yield was from 10% to 16% more when winter weeds were controlled in late fall. Then we've got that whole herbicide resistant weed population management thing. Going in to stubble fields in the fall and spraying with herbicide combinations is a very effective way to tackle some of those weeds that next spring are going to be harder to control. This has been Ag Outlook on the Talk of JC, 1420 KJCK, I'm Chuck Otte.

## Fall control of 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 fall weed control of winter annual weeds and I want to follow that up with a weed that has been a bigger and bigger problem in recent years, marestail. Marestail is tricky in that it is not well controlled by glyphosate. It can germinate in either the fall or the spring and we may be seeing a switch to spring germination, especially in areas where a lot of fall treatment with contact only herbicides are used. If you are going to be rotating to corn or sorghum, consider a fall application of atrazine plus 2,4-D or dicamba. The combination will do a good job of controlling marestail and most other broadleaf weeds this fall and you should expect pretty good control of germinating marestail next spring from the atrazine. The atrazine can also provide pretty good control of about any other early germinating broadleaf weeds next spring. You can apply atrazine up to December 31<sup>st</sup> as long as the ground isn't frozen. If you also have winter annual grasses and or volunteer wheat, especially if they are well established by the time you spray, then even 2 pounds of atrazine per acre isn't going to be effective. However, adding glyphosate to the atrazine, 2,4-D mix will help immensely. Remember though that atrazine does antagonize glyphosate (meaning it doesn't work as well) so make sure that you use the full 3/4 pound per acre equivalent rate of whatever glyphosate product you are using as well as using ammonium sulfate as an adjuvant. Using a combination like this will get you through the winter and in good shape for your preplant treatment. This has been Ag Outlook on the Talk of JC, 1420 KJCK, I'm Chuck Otte.

## Likely Causes of poor wheat emergence

This is Ag Outlook on 1420 KJCK, I'm Chuck Otte, Geary County, K-State Research and Extension Ag & Natural Resources Agent. We got started on wheat planting and then we got some rain, but eventually we will get all wheat planted and then we'll start wondering how the stand is going to be. For the most part I think it's safe to assume that dry soil is NOT going to be one of our causes for poor wheat emergence. Crusting after planting is a possibility especially if we have a hard rain followed by lots of sunny days. The ideal temperature for wheat seed germination is 54 to 77 degrees. Even with some of these chilly rains, we are still sitting well inside of this range. In a few more weeks cool temperatures will definitely be slowing down germination though. The problems that I normally see causing poor germination or poor stand establishment come from other issues. Planting depth is one of the more common issues that I see. Planting too deep or not deep enough. Ideally, modern wheat varieties should be planted 1½ inches deep. Maximum planting depth would be about 2½ inches deep. The old varieties before semi-dwarfs could be socked in 3 and 4 inches but the newer varieties can't emerge from that deep. If you were using held over seed and didn't test it, we can't rule out poor germination. That can still be tested IF you have seed left. If you planted seed before the rain and it wasn't reated, we can even see seedling diseases take a fair toll. Finally, not often but regularly we also see herbicide carryover. This often is going to be more likely at the end rows or where spray overlap occurred. Not as common as it used to be, but still a possibility. And if you just can't figure it out, give me a call! This has been Ag Outlook on the Talk of JC, 1420 KJCK, I'm

Chuck Otte.