

The impact of a crop on the following crop

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 things that we have studied quite a bit over the years has been the impact of one crop on the following crop. This is nothing new. We've known for years that if you grow a legume crop, like soybeans or clover or alfalfa, the crop that follows it will receive a yield boost from the nitrogen that the legume fixed from the atmosphere and left in the soil. Farmers have known this for over 100 years. We also know that trying to plant wheat following corn and especially milo can have a negative impact on yield. Part of it is loss of moisture in the root zone, part of it is delayed planting til later in the fall after the best management practice date. But what about the typical spring planted crops following another spring planted crop. Beans following corn or sorghum, or more importantly, corn following soybeans or sorghum. Then let's compare that to corn following corn. Looking at three years worth of data out of Oklahoma State University carries some surprises. Corn following corn, was significantly less than corn following beans or sorghum. I think we all could see that coming. But here's the kicker that caught me off guard. Corn following sorghum was not significantly different than corn following soybeans. Two out of the three years corn following beans yielded slightly more than corn following sorghum but across all three years the yield following beans and sorghum was non-significant. Ya gotta keep that rotation, and sorghum isn't going to hurt the next corn crop! This has been Ag Outlook on the Talk of JC, 1420 KJCK, I'm Chuck Otte.

## Marestail control in soybeans

This is Ag Outlook on 1420 KJCK, I'm Chuck Otte, Geary County, K-State Research and Extension Ag & Natural Resources Agent. I can remember when the first folks started no-tilling, one of the weeds that immediately started to become a problem was a little known weed called marestail. It traditionally was not a problem because pre-plant tillage always eliminated it. But early on it was apparent that glyphosate was not very effective on it. The weed scientists at first just brushed it off, but several of us stayed persistent and they finally admitted that it was a potential issue in no-till production. Because it can grow about as tall as soybeans it is far more of an issue in beans than in corn. Fall burndown treatments can help control marestail but it'll also sprout in the spring. It is very important that an early spring burndown is used though because once it starts to bolt, or send up that flower stalk, it becomes very difficult to kill. Both 2,4-D and dicamba will give good control of marestail in the spring rosette stage, although dicamba seems to do a better job and afford some residual control. But I really think that the best is to apply your 2,4-D or dicamba before the end of March and include a longer term residual control herbicide. Probably leading that list is going to be herbicides that include products like Canopy EX, Autumn Super, Classic, FirstRate, Sharpen, metribuzin and valor. By applying these in late March you don't have to worry about waiting periods before planting because of the 2,4-D and dicamba even if you aren't planting dicamba resistant soybeans. But don't wait, get on it early in the spring. This has been Ag Outlook on the Talk of JC, 1420 KJCK, I'm Chuck Otte.

## Upcoming meetings

This is Ag Outlook on 1420 KJCK, I'm Chuck Otte, Geary County, K-State Research and Extension Ag & Natural Resources Agent. A couple of weeks ago I talked about some upcoming meetings, some local, some a few weeks away yet. But I know how my memory is so I'm just going to keep pumping those dates out to you. The local one is the furthest out but I'll give you the details on that now. We will have a soybean production meeting on Wednesday, March 14<sup>th</sup> at the 4-H/Sr. Citizens Building. It will start at 4:30 with the training that is required if you want to apply the new dicamba technology to soybeans. Once that's over, about 90 minutes or so we will have dinner and then right after dinner we'll go in to the rest of the soybean production meeting. That'll include weed management, disease management, insect management and some basics on fertility, planting rates and planting dates. Please call the office to pre-register so we make sure we have enough food! Okay, backing up to a little sooner, we've got a 2018 Farm Bill meeting all day, well, 9 to 2:30 on March 1 at Pottorf Hall in Manhattan. Pre-registration deadline is February 23<sup>rd</sup> and cost is \$20. March 2<sup>nd</sup> is the annual Cattleman's Day at Weber Arena at K-State. Cost is \$20 if you preregister by noon on the 1<sup>st</sup> and \$30 if you wait and pay at the door. March 8<sup>th</sup> is a soil health workshop focusing on cover crops. It's also at Pottorf Hall in Manhattan and runs from 9 until 2. You need to pre-register for all of these but I won't bore you with the details of how to do that. Just call the Extension Office and I can help you out with all of them! This has been Ag Outlook on the Talk of JC, 1420 KJCK, I'm Chuck Otte.

You can't fix a plant

This is Ag Outlook on 1420 KJCK, I'm Chuck Otte, Geary County, K-State Research and Extension Ag & Natural Resources Agent. The problem that we have as humans is that we think like humans. Plants and animals are different, vastly different. If a human gets sick or a calf gets sick, we have the opportunity to make them better. We can administer drugs and medication and they will recover and often be none the worse for the wear. Plants aren't like that. If a plant gets diseases on it's leaves, we can't cure that leaf. We can stop the disease from spreading, but that photosynthetic area has been lost. It doesn't matter whether we're talking about a petunia in a flower bed, a tomato in your vegetable garden or a corn plant in your field. You can not "fix" a plant, you simply have to give it the right conditions to flourish. The key is to know what those conditions are. There are so many things that affect how our crop plants grow and many, many of them are out of our control. You can't change the temperature, you can't change the rainfall, but if you have irrigation you can substitute for lost rain. You can raise low pH soils, something that we often forget to do with alfalfa seedings. What we can do is change WHEN we plant our crop, we can change the population of the plants in the fields and we can certainly improve the soil fertility. Since so many things are out of our control we have to put effort into the things that we can control. So take the time to soil test to make sure we are applying the right mix of nutrients. Use the seed treatments to get the plants started off right and then monitor plant health all through the season. This has been Ag Outlook on the Talk of JC, 1420 KJCK, I'm Chuck Otte.

Are seed treatments worth it?

This is Ag Outlook on 1420 KJCK, I'm Chuck Otte, Geary County, K-State Research and Extension Ag & Natural Resources Agent. When it comes time to order seed for planting, one of the things that has to be decided is whether to get it with fungicide seed treatments, insecticide seed treatments or both. Here's the challenge. You often don't know if you NEED the treatments, until it's too late. Fungicidal seed treatments protect against many of the seedling diseases and can also prevent, in the case of wheat, seed borne diseases like bunt and smut. If you remember back to spring 2015 and the wheat flag smut - that wouldn't have happened had all seed wheat been treated. We know that seedling diseases are going to be the biggest problem in cool wet soils. So corn and early planted soybeans really need to be treated with a fungicidal seed treatment. Seedling sorghum is always at risk from chinch bugs so an insecticidal seed treatment is very effective at preventing early season sorghum attacks by these little rascals. But what about insecticidal seed treatments on soybeans? Are they worth the extra expense? What about double crop or late planted soybeans. They're going into warm soil so is there much of a chance of seedling diseases? Remember yesterday I talked about being sure to control what you can control. Most seed treatments only need a bushel or two of yield increase, or yield savings to justify the expense. I look at it like insurance. We buy insurance all the time and pray that we never need it. But if you do need it, and you haven't bought it, it's too late. The things that seed treatments can protect against, may not be around every year. But it's insurance, and if you need it and didn't buy it... This has been Ag Outlook on the Talk of JC, 1420 KJCK, I'm Chuck Otte.