

### Leaf Rust Update

This is Ag Outlook, I'm Chuck Otte, Geary County Extension Agent. Last week we had our first report of leaf rust in wheat. The weather has been kind of psychotic bouncing between leaf rust weather and stripe rust weather. So it was no surprise that both leaf rust and stripe rust were found in research plots in Reno County. Incidence was less than 1% which is exactly what we would expect at this time of year. The wheat was just starting to joint at the time of discovery so we have a lot of time for nothing to happen or for the disease level to build up to threatening levels. The good news was that while rust was found in one county, 34 other counties that were surveyed had zero rust detected. But south winds can change this in a hurry. Remember that fungicide spraying before flag leaf emergence has rarely shown any impact on yield, so let's monitor for rust but not be in a hurry to spray! I'm Chuck Otte and this has been Ag Outlook.

## Rust Management and Forecasting

This is Ag Outlook, I'm Chuck Otte, Geary County Extension Agent. Yesterday we talked about rust being detected about 10 days ago in Reno County. We have plant pathologists that watch the conditions here in Kansas as well as the conditions south of us and then try to match this up with 30 to 60 day climatic outlooks. Stripe and leaf rust survived in southern Texas so that is the nursery that is going to feed rust spores north to us with every south wind. While April was somewhat drier than normal, NOAA's mid April forecasts showed the next three months to likely be normal temperatures but a strong likelihood for wetter than normal. Recent foggy mornings would be perfect conditions for rust diseases to get started. All of this means we may have to spray, once the flag leaf emerges, but for now, it's simply keep monitoring and wait to see what the weather does and what the rust does! I'm Chuck Otte and this has been Ag Outlook.

## Phosphorus Management

This is Ag Outlook, I'm Chuck Otte, Geary County Extension Agent. We had a good field day at the Harold Erichsen farm last week. Quite a bit of the research being done there has to do with evaluating phosphorus levels in water that runs off the fields. Much of what we are learning in recent years is somewhat contradictory to what we've always thought we knew. While stopping sediment certainly reduces phosphorus in the water, we are now discovering that there is far more dissolved phosphorus IN the water that isn't attached to sediment. This is actually one of the driving issues with harmful algal blooms in our reservoirs. But thanks to no till we are also seeing some early indications of incredible stratification in the top inch or two of soil. When we measure soil phosphorus in a 6 inch sample it doesn't look like a lot, but when we take it an inch at a time we are finding high levels. Stay tuned! I'm Chuck Otte and this has been Ag Outlook.

## Cover Crops: Questions or Answers

This is Ag Outlook, I'm Chuck Otte, Geary County Extension Agent. I've been involved in agriculture most of my life. I've seen fads come and go. I've seen prices, come and go. I've seen floods and droughts and everything in between. But what I have not seen is that magical silver bullet that solves everything or is the perfect crop. Nature just has a way to humble us all on a regular basis. Everything that we do in agriculture has benefits and drawbacks. Our job is simply to try to find the best balance from year to year. Cover crops have been catching a lot of attention in recent years for many reasons. Some years they work well for this reason or that reason, but no two years are the same and the outcome will always be different. Don't plant cover crops just because someone says you should. Have a reason, know what you want to accomplish, and know what the unintended consequences might also be! I'm Chuck Otte and this has been Ag Outlook.

## Nitrogen Fertilizer Management

This is Ag Outlook, I'm Chuck Otte, Geary County Extension Agent. Last year in July, as we finished harvesting much of our corn crop for forage, we figured we'd have a lot of residual nitrogen. At that time there was a lot of residual nitrogen. But nitrogen is fickle and can disappear in a matter of weeks. A couple of weeks ago I pulled quite a few profile soil samples and ran extensive analyses on them. Some fields had a lot of nitrogen on them last year. Some even in the fall of 2017 to the point that wheat planted last fall was still showing anhydrous injection shank lines. Two feet away the wheat was pale yellow because of dry weather following the top dressing 3 weeks prior. As I started looking at the soil test results two things became clear. There was no residual nitrogen anywhere, period! Plan accordingly, Secondly, we have a lot of fields that also need sulfur and chloride! I'm Chuck Otte and this has been Ag Outlook.

