

News Column for Use Week of 07/6/2020
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River Valley District
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Two New Wheat Lines Ready for Release

This year with wheat plot tours being done a little differently, many farmers might have missed their normal chance of looking at the new varieties to pick one for next season. There are a lot of ways farmers can still have that opportunity.

1. Check out <https://www.agronomy.k-state.edu/services/crop-performance-tests/winter-wheat/2020-wheat-performance-tests.html>. It will have all the data from the wheat plots in 2020. It is constantly getting updated when plots get harvested.

2. You can also go back and watch the YouTube video of a different specialist going over varieties in certain regions. They discuss what areas, how it grows, and the disease packages with each variety.

May 27 session - <https://youtu.be/UnD12IADM3E>

May 28 session - <https://youtu.be/VrF3F2yqJpc>

3. If you are looking for more local data, check out the River Valley website and go to Wheat Plots. We have added data from local producers in the area along with a description of each variety planted there. https://www.rivervalley.k-state.edu/crops/wheat_plots.html

As for next year's new arrivals, Allan Fritz a wheat breeder at K-State is going to release two new varieties. They are planned for Central Kansas growing conditions and show promise for leaf rust resistance and have performed well in university trials.

"We don't have names for these yet, so right now they're referred to by their experimental numbers," Fritz told viewers during the field day. One variety, KS09049K8, is the offspring of two Kansas varieties – Duster and Overley – "with a little bit of spring wheat from CIMMYT," the International Maize and Wheat Improvement Center has headquarters in Mexico City, Mexico, according to Fritz. "It's a medium early variety, and is really the culmination of our efforts to breed race non-specific lines for leaf rust resistance," he said. "This holds up very well to leaf rust." Fritz said the new wheat line is "moderately tolerant" on acid soils, and has "very good" tillering capacity. "Those of you who remember Duster will know that it is extremely high for tillering." The new line, Fritz added, doesn't quite get to the capacity of Duster, but says he believes it will have good yield potential in Central Kansas. "The quality of this one is good, and the other thing I like about it is it does have some Hessian fly resistance," Fritz said. "Hessian fly is not a huge issue around here, but it is nice to have some options out there to deal with Hessian fly, when necessary." The line is moderately susceptible to stripe rust, Fritz said: "The genes that give us durable resistance to leaf rust also work on stripe rust, but they're just not quite as good, so they don't give us as strong a resistance to stripe. But I would say the resistance is good enough to give you a broader window for fungicide application. With this line, you should have enough stripe rust resistance, so I would put it in the moderately-susceptible category. If it's a stripe rust kind of year – like this year in many places – then you would definitely want to put a fungicide on it." Fritz stopped short of naming the new line, but noted he and others are considering a name to honor former U.S. Department of Agriculture entomologist Jim Hatchett, who was based in Manhattan and contributed to wheat breeding in the Great Plains, he said.

A second wheat line ready for release is currently known as KS12DH0156-88, which has lineage connected to an Oklahoma State University wheat named Gallagher. “We’re thinking of naming it KS Ahearn,” Fritz said. This wheat line is a late-maturing variety that “has effective levels of leaf and stripe rust. This one is more intermediate on acidic soils, so if you’re getting into soils with fairly low pH levels, I might lean toward planting something else,” Fritz said. “But this one will handle soils with pH levels down to at least 5 and maybe even a little lower than that.” He called the quality of this wheat line “good, but not great” with yield potential on the higher end. “This one has been a bit of a racehorse for us,” Fritz said. “It’s done really well in our trials, and that’s the history of Gallagher, as well. Even though it’s a later-maturing line – and I would normally say later fits better in the north part of Kansas – this has actually been better in Southcentral Kansas.”

Fritz said both of the lines he talked about are susceptible to Fusarium and, thus, he does not suggest either as an option in no-till fields following corn.

If you have any questions, please feel free to contact Rebecca Zach at zrebecca@ksu.edu or 785-541-0283. Also check out the River Valley e-newsletter where you can pick what area you want to receive information about, by going to <https://river-valley-extension.mailchimpsites.com/>.

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