Notes from Pennington

Variety selection for 2019's crop

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There are several factors that should be considered when selecting varieties of wheat to plant on your farm this fall. You should consider options that help to spread risk and look at data from multiple sources and multiple years.

Be sure to review the data in the MSU Wheat Performance Report by clicking here.

Evaluate yield data for test plot locations close to where you will plant. Varieties perform differently across the state.

Plant more than one variety – selecting early and late maturities will spread risk from weather- and disease-related issues.

- 1. **Yield** is the number-one trait to consider when selecting varieties. This is where you set the bar. After this, weather, planting date, disease, etc. will lower the bar. Set your bar as high as you can and eliminate as many things as you can that might lower the bar.
- 2. **FHB resistance** is the largest profit-reducing disease in Michigan wheat. There is a wide range of susceptibility to fusarium head blight. If you don't want to use fungicides, make sure you select the most resistant varieties you can find. Remember there are susceptible varieties that yield very well with fungicide application. So carefully select varieties based on your management goals.
- 3. Standability is particularly important at harvest. Lodged wheat reduces yield and increases harvesting fatigue. If you apply manure and/or higher rates of nitrogen, consider selecting shorter varieties. In extreme cases, plant growth regulators can be used to shorten internode length and strengthen straw stems.
- 4. Seed size/weight can affect emergence. Select seed that has a minimum of 57 test weight to make sure the quality of the seed will allow it to germinate and emerge quickly and as evenly as possible. Uneven stands lead to uneven yields and difficulties timing fungicide application at flowering for head scab.
- 5. Disease resistance is important to consider because pathogens lower the bar for yield potential. While most diseases can be managed with seed treatments and fungicides, the cost may be higher. Stripe rust robbed yield in some parts of the state this year. The infection was so high that we were able to get a good rating system for stripe rust resistance. Click here to check ratings in the MSU Wheat Performance Report.
- 6. **Early vs. late** selecting varieties that flower early and late will spread your harvest window and risk for diseases and weather-related events.

If you plant bin-run seed, you are encouraged to get it cleaned and treated prior to planting. Also, consider purchasing 1/3 of your seed as certified to rotate through your farm so that you are never planting seed more than two years from certified. The **BEST** option is to plant certified seed every year.