2016 Collaborative On-Farm Tests (COFT)

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The objective of our on-farm testing program is to compare the performance of wheat varieties that are of most interest to Colorado farmers. In 2016, five varieties were included: Byrd (popular HRW), Denali (HRW), Sunshine (high quality HWW), Avery (newly released HRW) and WB-Grainfield (HRW from WestBred). Varieties in the COFT program are tested under farm field-scale conditions with farmer equipment. Colorado State University Extension Agents oversee all aspects of the program. The COFT program is in its 20th year and the majority of Colorado’s winter wheat acreage is planted to varieties that have been tested in the program. On-farm testing leads to more rapid replacement of older inferior varieties and wider and faster adoption of improved varieties.

In the fall of 2015, over thirty eastern Colorado wheat producers received seed of the five varieties and planted them in side-by-side strips under the same conditions as the wheat in the rest of the field. Twenty viable harvest results were obtained. Failed tests were due to drought conditions and hail. In 2016, there were extremes in yield across Colorado. The highest yielding strip was over 105 bu/acre while the lowest recorded yield this year was 21 bu/acre. Yields were affected by stripe rust, winter drought, viruses, and hail.

The varieties tested in COFT this year fit different farmer needs. Farmers wanting to grow white wheat with high exceptional quality should be growing Sunshine, the top yielding variety in this year’s COFT. Denali is a great HRW option that is medium-late maturing and has very good test weight. Avery is a new HRW option that is medium-maturing and has above-average test weight. WB-Grainfield is an early-maturing HRW variety that has excellent test weight and good stripe rust resistance. Byrd is a medium-maturing HRW variety that has done well in the COFT, especially during drought years. Don’t select a variety to plant based upon the results from a single on-farm test. It is very important to use results from multiple locations.

We should not be lulled into complacency by the good precipitation received in 2015 and 2016. It should not be forgotten that drought is the major yield-determining factor in eastern Colorado. You can’t spray for drought!



