



2022 Irrigated Winter Wheat Variety Performance Trial at Wiggins

| Variety | Brand/Source | Market Class | Grain | Test | Plant | Wheat Stem | Protein |
|-------------------------------|--------------------------------|--------------|--------------------|-----------|-----------|------------------------------|-------------|
| | | | Yield ^a | Weight | Height | Sawfly Cutting | |
| | | | bu/ac | lb/bu | in | avg score (1-9) ^b | percent |
| CO18SFD009W | Colorado State University exp. | HWW | 75.5 | 62 | 16 | 1 | 14.5 |
| Breck | PlainsGold | HWW | 72.0 | 63 | 16 | 2 | 15.0 |
| CO13D1479 | Colorado State University exp. | HWW | 71.5 | 60 | 22 | 3 | 14.5 |
| Fortify SF | PlainsGold | HRW | 71.5 | 61 | 22 | 2 | 14.2 |
| Ray | PlainsGold | HRW | 71.0 | 53 | 26 | 2 | 15.7 |
| Canvas | PlainsGold | HRW | 69.5 | 61 | 20 | 5 | 14.8 |
| CO18D297R | Colorado State University exp. | HRW | 68.5 | 60 | 20 | 7 | 14.3 |
| Crescent AX | PlainsGold | HRW | 68.0 | 61 | 19 | 8 | 14.5 |
| Kivari AX | PlainsGold | HRW | 68.0 | 61 | 24 | 8 | 12.8 |
| CO17449R | Colorado State University exp. | HRW | 66.5 | 62 | 25 | 5 | 14.2 |
| KS Silverado | Kansas Wheat Alliance | HWW | 66.0 | 62 | 16 | 3 | 14.7 |
| Breakthrough | Oklahoma Genetics, Inc. | HRW | 65.5 | 61 | 17 | 2 | 14.6 |
| CO18D007W | Colorado State University exp. | HWW | 64.5 | 61 | 17 | 7 | 15.1 |
| CP7017AX | CROPLAN | HRW | 64.5 | 61 | 18 | 8 | 14.7 |
| Monarch | PlainsGold | HWW | 64.5 | 60 | 25 | 3 | 13.7 |
| Byrd CL Plus | PlainsGold | HRW | 63.0 | 60 | 20 | 8 | 14.6 |
| CO18042RA | Colorado State University exp. | HRW | 63.0 | 59 | 21 | 9 | 15.0 |
| CO18035RA | Colorado State University exp. | HRW | 62.5 | 59 | 20 | 7 | 14.3 |
| CP7266AX | CROPLAN | HRW | 59.5 | 62 | 21 | 7 | 14.6 |
| Brawl CL Plus | PlainsGold | HRW | 59.0 | 61 | 20 | 9 | 15.7 |
| Snowmass 2.0 | PlainsGold | HWW | 56.5 | 61 | 20 | 8 | 14.3 |
| Guardian | PlainsGold | HRW | 53.5 | 61 | 22 | 8 | 15.6 |
| Average | | | 65.5 | 60 | 20 | 5 | 14.6 |
| °LSD (0.30) | | | 4.5 | 1 | | | |
| °LSD (0.05) | | | 9.0 | 1 | | | |
| Coefficient of Variation (CV) | | | 8.8 | | | | |

^aYield adjusted to 12% moisture and varieties ranked by yield (highest to lowest). Variety yields in bold are in the top LSD group

^bWheat Stem Sawfly Cutting score: 1 equals no damage/cutting and 9 is severe damage/cutting, averaged across three replicates.

^cFarmers selecting a variety based on yield should use the LSD (0.30) to protect from false negative decisions. Companies or researchers may be interested in the LSD (0.05) to avoid false positive conclusions.

Site Information

Collaborator: Cooksey Farms LLC

Harvest date: July 12, 2022

Planting date: October 4, 2021

Soil Type: Truckton sandy loam

GPS Coordinates: 40.0004, -104.10129

Trial Comments: Planted into tilled corn residue. Good fall emergence and some growth. In late-April cosmetic freeze damage was noted on the leaves. In mid-May trial had more growth but was later in maturing due to Oct. planting date. Wheat stem sawfly was present and caused severe lodging in some varieties. Radar estimates showed the trial received 6.9" of precipitation and 3540 growing degree-days (GDD) (base 32°F) from Jan. 1st through July 11th, which was 3.7" below and 59 GDD below the 10-year average, respectively. Trial was irrigated in fall and again in spring and early summer as water was available.

The data included in this table may not be republished without permission.

Contact Sally Jones-Diamond (sally.jones@colostate.edu)