

## 2023 Dryland Winter Wheat Variety Performance Trial at Genoa



|                  |                                      | Market     |                          |             | Plant  |              |
|------------------|--------------------------------------|------------|--------------------------|-------------|--------|--------------|
| Variety          | Brand/Source                         | Class      | Grain Yield <sup>a</sup> | Test Weight | Height | Protein      |
|                  |                                      |            | bu/ac                    | lb/bu       | in     | percent      |
| CO19410R         | Colorado State University exp.       | HRW        | 69.0                     | 58          | 30     | 11.6         |
| Steamboat        | Crop Research Foundation of WY       | HRW        | 63.5                     | 58          | 30     | 10.9         |
| CO18D297R        | Colorado State University exp.       | HRW        | 62.0                     | 58          | 36     | 12.0         |
| Langin           | PlainsGold                           | HRW        | 62.0                     | 56          | 28     | 13.2         |
| Whistler         | PlainsGold                           | HRW        | 62.0                     | 54          | 33     | 9.3          |
| CO18042RA        | Colorado State University exp.       | HRW        | 61.0                     | 57          | 32     | 9.9          |
| Monarch          | PlainsGold                           | HWW        | 60.5                     | 56          | 27     | 10.9         |
| Crescent AX      | PlainsGold                           | HRW        | 60.0                     | 56          | 32     | 12.5         |
| AP Solid         | AgriPro                              | HRW        | 59.5                     | 56          | 32     | 10.4         |
| Amplify SF       | PlainsGold                           | HRW        | 58.5                     | 56          | 30     | 13.3         |
| CO19393R         | Colorado State University exp.       | HRW        | 58.5                     | 56          | 33     | 13.0         |
| Sunshine         | PlainsGold                           | HWW        | 58.5                     | 54          | 28     | 12.3         |
| CO19S053R        | Colorado State University exp.       | HRW        | 57.0                     | 55          | 32     | 12.0         |
| Byrd CL Plus     | PlainsGold                           | HRW        | 56.5                     | 56          | 33     | 10.3         |
| CO18035RA        | Colorado State University exp.       | HRW        | 56.5                     | 55          | 27     | 14.2         |
| CO19D087R        | Colorado State University exp.       | HRW        | 56.5                     | 56          | 25     | 12.8         |
| LCS Steel AX     | Limagrain                            | HRW        | 56.5                     | 56          | 29     | 10.7         |
| Byrd             | PlainsGold                           | HRW        | 56.0                     | 56          | 34     | 9.5          |
| Kivari AX        | PlainsGold                           | HRW        | 56.0                     | 53          | 26     | 11.9         |
| CO19S085W        | Colorado State University exp.       | HWW        | 55.5                     | 56          | 29     | 14.4         |
| Hatcher          | PlainsGold                           | HRW        | 55.5                     | 53          | 33     | 9.3          |
| MS Maverick      | Meridian Seeds                       | HRW        | 55.0                     | 54          | 30     | 10.9         |
| CO19D304R        | Colorado State University exp.       | HRW        | 54.5                     | 53          | 33     | 11.9         |
| KS Territory     | Kansas Wheat Alliance                | HRW        | 54.0                     | 54          | 27     | 11.0         |
| Snowmass 2.0     | PlainsGold                           | HWW        | 54.0                     | 55          | 30     | 10.3         |
| Avery            | PlainsGold                           | HRW        | 53.5                     | 55          | 34     | 9.7          |
| Breck            | PlainsGold                           | HWW        | 53.5                     | 55          | 27     | 9.7          |
| CO18D007W        | Colorado State University exp.       | HWW        | 53.5                     | 56          | 28     | 9.9          |
| CO19S135W        | Colorado State University exp.       | HWW        | 53.5                     | 56          | 28     | 11.3         |
| CO20D108R        | Colorado State University exp.       | HRW        | 53.0                     | 55          | 30     | 9.7          |
| CP7017AX         | CROPLAN                              | HRW        | 53.0                     | 56          | 27     | 10.6         |
| Guardian         | PlainsGold                           | HRW        | 53.0                     | 57          | 33     | 11.7         |
| PSB13NEDH-14-83W | University of Nebraska-Lincoln exp.  | HWW        | 52.5                     | 58          | 36     | 10.0         |
| Windom SF        | PlainsGold                           | HWW        | 52.5                     | 51          | 32     | 9.2          |
| Brawl CL Plus    | PlainsGold                           | HRW        | 50.5                     | 56          | 28     | 10.9         |
| CO200037R        | Colorado State University exp.       | HRW        | 50.5                     | 54          | 29     | 10.8         |
| CO19S129W        | Colorado State University exp.       | HWW        | 49.5                     | 56          | 29     | 9.4          |
| LCS Atomic AX    | Limagrain                            | HRW        | 48.0                     | 57          | 31     | 12.0         |
| Fortify SF       | PlainsGold                           | HRW        | 47.5                     | 56          | 34     | 9.9          |
| Canvas           | PlainsGold                           | HRW        | 46.0                     | 54          | 31     | 11.2         |
| Valley           | Frenchman Valley Coop                | HWW        | 44.5                     | 56          | 26     | 13.3         |
| AP Bigfoot       | AgriPro                              | HRW        | 44.0                     | 56          | 29     | 10.1         |
| AP Roadrunner    | AgriPro                              | HRW        | 41.5                     | 53          | 29     | 11.5         |
|                  | Agrirro<br>PlainsGold                | HRW        | 41.5                     | 33<br>47    | 34     |              |
| Ray              | University of Nebraska-Lincoln exp.  |            | 41.5<br>37.5             | 55          | 36     | 13.0<br>13.2 |
| NHH17450         | Oniversity of iveoraska-Lincoin exp. | HRW        |                          | 55          | 30     | 11.2         |
|                  | h                                    | Average    |                          |             | 30     | 11.2         |
|                  |                                      | LSD (0.30) |                          | 1           |        |              |
|                  | b                                    | LSD (0.05) | 9.5                      | 2           |        |              |
|                  |                                      |            |                          |             |        |              |

Coeffecient of Variation (CV) 16.0 <sup>a</sup>Yield adjusted to 12% moisture and varieties ranked by yield (highest to lowest). Variety yields in bold are in the top LSD

## **Site Information**

group (0.30).

Collaborator: Homestead Farms July 27, 2023 Harvest date: September 20, 2022 Planting date: Soil Type: Weld silt loam GPS Coordinates: 39.359785,-103.510437

Trial Comments: Planted 2" deep into good moisture and sunflower residue. Dry conditions in fall, emergence and stands were above-average. Wheat stem sawfly present but minimal lodging was observed at harvest. Minor hail damage received in July. Radar estimates showed the trial received 18" of precipitation

and 3,611 growing degree-days (GDD) (base  $32^{\circ}F$ ) from January 1st through July 26th.

<sup>&</sup>lt;sup>b</sup>Farmers selecting a variety based on yield should use the LSD (.30) to protect themselves from false negative conclusions (concluding varieties are the same when they are actually different). Companies or researchers may use the LSD (.05) to avoid false positive conclusions (concluding varieties are different when they are actually the same).