

South Dakota State University Extension South Dakota Agricultural Experiment Station at SDSU

2021 South Dakota Spring Wheat Variety Trial Results Gettysburg

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Cooperator: Cronin Farms

Location: 44.973730°, -100.063979°

Soil Type: Highmore silt loam, 0-2% slopes

Previous crop: soybeans
Tillage: no-till
Row spacing: 8"

Seeding Rate: 1.8 million PLS/acre

Fertilizer:

-Starter: 90 lb/acre 30-10-10

-Other: 40 gal/acre 28-0-0 preemerge

Herbicide:

-Burndown: NR

-Post: 1pt/acre WideMatch

Fungicide: none

Date seeded: 4/21/2021

Date harvested: 7/28/2021

Notes: Very dry throughout the growing season.



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Table 1. 2021 spring wheat variety performance trial results (average of four replications) at Frankfort, South Dakota. Entries are sorted by overall two-year yield. Varieties yielding in the top third of the trial are shaded light blue.

| Variety | Height (in) | Lodging* (1-5) | Test Wt (lbs) | Protein % | 2019 (bu/a)# | 2020 (bu/a) | 2021 (bu/a) | 2-year (bu/a) | 3-year (bu/a) |
|-----------------|----------------|-------------------|------------------|--------------|-----------------|----------------|----------------|------------------|------------------|
| LCS Trigger | not | not | 60.3 | 15.1 | 45.2 | 79.4 | 41.3 | 60.4 | 55.3 |
| Shelly | reported | reported | 61.7 | 16.1 | 40.2 | 66.0 | 40.0 | 53.0 | 48.8 |
| LCS Cannon | - | - Toportou | 62.8 | 16.7 | 40.4 | 66.4 | 33.4 | 49.9 | 46.8 |
| SY Valda | _ | _ | 61.2 | 16.4 | 44.0 | 62.2 | 33.0 | 47.6 | 46.4 |
| MN-Torgy | _ | _ | 61.1 | 17.9 | 44.6 | 62.4 | 31.8 | 47.1 | 46.3 |
| CP3915 | _ | _ | 61.0 | 17.9 | 39.6 | 64.2 | 33.4 | 48.8 | 45.7 |
| Driver | _ | _ | 61.0 | 17.2 | 41.9 | 63.4 | 31.8 | 47.6 | 45.7 |
| CP3530 | _ | _ | 59.4 | 17.3 | 42.0 | 62.9 | 30.1 | 46.5 | 45.0 |
| MN-Washburn | _ | _ | 59.8 | 17.3 | 34.2 | 67.4 | 31.2 | 49.3 | 44.3 |
| Surpass | _ | _ | 61.2 | 17.3 | 42.6 | 62.3 | 27.6 | 45.0 | 44.2 |
| WB9719 | _ | _ | 61.3 | 18.2 | 43.0 | 55.0 | 34.1 | 44.6 | 44.1 |
| LCS Rebel | _ | _ | 60.9 | 17.7 | 42.7 | 54.3 | 34.1 | 44.2 | 43.7 |
| Lang-MN | - | - | 60.6 | 17.3 | 41.7 | 54.4 | 31.2 | 42.8 | 42.4 |
| SY Rustler | _ | _ | 58.0 | 17.8 | 37.5 | 58.6 | 29.9 | 44.2 | 42.0 |
| WB9590 | _ | _ | 59.2 | 18.8 | 36.8 | 58.7 | 28.7 | 43.7 | 41.4 |
| AP Murdock | _ | - | 59.3 | 17.9 | 40.1 | 55.4 | 26.5 | 41.0 | 40.7 |
| Boost | _ | _ | 59.3 | 17.9 | 35.0 | 55.5 | 30.8 | 43.2 | 40.4 |
| Focus | _ | _ | 61.1 | 18.1 | 41.0 | 54.8 | 25.3 | 40.0 | 40.3 |
| MS Barracuda | - | - | 59.8 | 17.5 | 42.6 | 51.9 | 26.0 | 39.0 | 40.2 |
| Bolles | _ | - | 57.9 | 20.3 | 36.2 | 55.0 | 27.0 | 41.0 | 39.4 |
| SY Ingmar | - | - | 59.8 | 18.3 | 34.6 | 49.3 | 32.7 | 41.0 | 38.9 |
| Prevail | - | - | 58.7 | 17.8 | 39.4 | 51.9 | 22.4 | 37.1 | 37.9 |
| CP3099A | _ | - | 54.3 | 15.7 | _ | 72.0 | 45.3 | 58.7 | _ |
| LCS Buster | _ | - | 58.3 | 15.6 | - | 76.4 | 34.2 | 55.3 | _ |
| WB9606 | - | - | 61.0 | 16.7 | - | 69.5 | 34.7 | 52.1 | - |
| MS Ranchero | _ | - | 59.2 | 16.5 | - | 64.8 | 33.1 | 48.9 | _ |
| ND Frohberg | - | - | 59.6 | 18.1 | - | 57.3 | 30.2 | 43.7 | _ |
| CP3119A | - | - | 52.7 | 15.8 | - | - | 43.2 | - | - |
| PFS Buns | _ | - | 55.9 | 17.2 | _ | - | 39.3 | - | _ |
| CP3188 | _ | - | 59.7 | 15.2 | _ | - | 35.6 | _ | _ |
| AP Gunsmoke CL2 | - | - | 59.9 | 17.5 | - | - | 35.2 | - | - |
| AP Revolution | - | - | 59.9 | 17.3 | - | - | 30.4 | - | - |
| MS Cobra | - | - | 58.8 | 18.0 | - | - | 27.9 | - | |
| Trial Average# | - | - | 59.5 | 17.4 | 38.4 | 60.9 | 32.3 | 46.5 | 43.6 |
| LSD (0.05)+ | - | - | 1.5 | 0.6 | 4.4 | 3.8 | 4.3 | - | - |
| C.V. %‡ | - | - | 1.8 | 2.4 | 8.2 | 4.5 | 9.6 | - | - |

^{*} Lodging score: 1, perfectly standing; to 5, completely flat.

[#] Trial averages may include values from experimental lines that are not reported, yield is reported @13%M, protein is @12%M.

[†] Value required (≥LSD) to determine if varieties are significantly different from one another.

[‡] C.V. is a measure of variability or experimental error, 15% or less is considered acceptable.