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SOUTH DAKOTA STATE UNIVERSITY® AGRONOMY, HORTICULTURE, & PLANT SCIENCE DEPARTMENT

2018 South Dakota Spring Wheat Variety Trial Results Aberdeen

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Cooperator: Locken Farms

Location: 45.487637°, -98.551674°

Soil Type: Barnes-Cresbard-Tonka complex, 0-3% 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: 147-70-0-17S preplant broadcast

Herbicide:

-Burndown: NR

-Post: 1.5 pt Bromac

Fungicide: none

Date seeded: 5/1/2018

Date harvested: 8/5/2018

Notes: Trial was affected by drought conditions



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Table 1. 2018 spring wheat variety performance trial results (average of 4 replications) at Aberdeen, SD. Entries are sorted by overall 3-year yield. Varieties yielding in the top 1/3 of the trial are shaded light blue.

| Variety | Height (in) | Lodging* (1-5) | Test Wt (lbs) | Protein % | 2016 (bu/a) | 2017 (bu/a) | 2018 (bu/a) | 2-year (bu/a) | 3-year (bu/a) |
|----------------|----------------|-------------------|------------------|--------------|----------------|----------------|----------------|------------------|------------------|
| LCS Trigger | - | - | 59.0 | 15.7 | 53.4 | 44.9 | 41.9 | 43.4 | 46.7 |
| SY Ingmar | _ | _ | 59.0 | 17.3 | 59.2 | 38.6 | 38.0 | 38.3 | 45.2 |
| SY Valda | _ | _ | 56.9 | 16.7 | 55.8 | 38.2 | 39.0 | 38.6 | 44.3 |
| Shelly | _ | _ | 56.7 | 16.4 | 55.3 | 41.8 | 34.7 | 38.2 | 43.9 |
| Lang-MN | - | - | 60.1 | 17.8 | 57.8 | 39.7 | 31.9 | 35.8 | 43.1 |
| Advance | - | _ | 57.6 | 16.1 | 54.2 | 39.3 | 34.9 | 37.1 | 42.8 |
| WB9653 | _ | _ | 54.6 | 16.5 | 58.4 | 34.3 | 35.0 | 34.6 | 42.6 |
| HRS 3616 | - | _ | 54.6 | 18.3 | 57.1 | 35.5 | 34.8 | 35.1 | 42.4 |
| HRS 3504 | - | - | 55.9 | 16.6 | 52.7 | 38.3 | 35.7 | 37.0 | 42.2 |
| HRS 3530 | - | _ | 55.4 | 17.8 | 51.4 | 42.4 | 32.4 | 37.4 | 42.1 |
| HRS 3100 | - | _ | 56.1 | 16.9 | 56.5 | 31.4 | 38.3 | 34.8 | 42.0 |
| HRS 3419 | - | _ | 56.1 | 16.9 | 52.1 | 40.3 | 31.2 | 35.7 | 41.2 |
| MS Chevelle | - | - | 58.0 | 16.7 | 54.8 | 34.4 | 33.6 | 34.0 | 40.9 |
| Faller | - | _ | 56.9 | 17.0 | 53.7 | 36.1 | 32.1 | 34.1 | 40.6 |
| Boost | - | _ | 58.0 | 17.9 | 52.9 | 34.1 | 34.3 | 34.2 | 40.4 |
| Prosper | - | - | 56.3 | 16.9 | 52.6 | 33.2 | 35.1 | 34.1 | 40.3 |
| Forefront | - | - | 57.3 | 17.7 | 51.5 | 37.5 | 27.6 | 32.6 | 38.9 |
| Linkert | - | _ | 56.7 | 18.7 | 55.1 | 30.1 | 29.4 | 29.8 | 38.2 |
| Select | - | _ | 56.7 | 17.0 | 56.1 | 28.5 | 27.8 | 28.1 | 37.5 |
| Bolles | - | - | 54.8 | 20.0 | 47.8 | 35.2 | 28.7 | 32.0 | 37.2 |
| Prevail | - | - | 59.0 | 16.9 | 54.9 | 24.2 | 32.3 | 28.2 | 37.1 |
| SY Rustler | _ | - | 56.9 | 17.2 | 50.8 | 29.0 | 30.8 | 29.9 | 36.9 |
| Surpass | - | _ | 55.5 | 17.9 | 54.1 | 29.2 | 27.4 | 28.3 | 36.9 |
| Brick | - | - | 56.7 | 17.6 | 54.3 | 30.2 | 25.4 | 27.8 | 36.6 |
| RB07 | - | - | 55.5 | 18.6 | 50.3 | 28.4 | 28.7 | 28.5 | 35.8 |
| Focus | _ | - | 58.6 | 18.2 | 54.9 | 21.1 | 30.4 | 25.7 | 35.5 |
| WB9719 | - | - | 58.4 | 17.6 | - | 45.4 | 36.7 | 41.0 | - |
| LCS Rebel | - | - | 57.6 | 18.0 | - | 38.6 | 34.8 | 36.7 | - |
| Ambush | - | - | 58.2 | 17.5 | - | 32.7 | 35.1 | 33.9 | - |
| WB9479 | - | _ | 60.7 | 18.9 | - | 32.4 | 31.6 | 32.0 | - |
| ND Vitpro | - | _ | 58.4 | 18.0 | - | 28.9 | 33.4 | 31.1 | - |
| WB9590 | - | _ | 56.1 | 18.6 | _ | 26.9 | 29.4 | 28.1 | - |
| MS Camaro | - | - | 56.7 | 17.9 | - | 21.3 | 30.8 | 26.0 | - |
| HRS 3888 | _ | _ | 59.2 | 17.4 | _ | <u>-</u> | 34.3 | - | - |
| MN10201-4-A | _ | - | 57.8 | 17.4 | - | - | 34.2 | - | - |
| LCS Cannon | _ | _ | 59.2 | 17.5 | _ | _ | 32.7 | - | - |
| MS Barracuda | - | - | 60.1 | 18.3 | - | - | 27.8 | - | - |
| Trial Average# | - | - | 57.2 | 17.5 | 53.9 | 33.3 | 32.6 | 33.4 | 40.4 |
| LSD(0.05)† | _ | - | 4.2 | 0.4 | 3.6 | 5.3 | 7.1 | _ | - |
| C.V.%‡ | - | - | 5.2 | 1.7 | 4.8 | 11.4 | 15.6 | - | - |

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

[#] Trial averages may include values from experimental lines that are not reported.

[†] 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.