

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

2021 South Dakota Spring Wheat Variety Trial Results Highmore

Jonathan Kleinjan | SDSU Extension Agronomist Kevin Kirby | Agricultural Research Manager Shawn Hawks | Agricultural Research Manager

Cooperator: Matt Leisinger

Location: 44.723669°, -99.452980°

Soil Type: Glenham-Java-Prosper loams, 1-6% 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: 58-0-0 as urea broadcast

Herbicide:

-Burndown: NR

-Post: 1.3 pt/acre WideMatch + 1.5 pt/acre MCPA

Fungicide: none

Date seeded: 4/21/2021

Date harvested: 8/5/2021

Notes: Very dry throughout the growing season.



2021 South Dakota Spring Wheat Variety Trial Results Highmore

Table 1. 2021 spring wheat variety performance trial results (average of four replications) at Highmore, 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 Buster	not	1.0	58.1	14.4	not	82.8	22.8	52.8	not
LCS Trigger	reported	1.0	59.4	15.1	harvested	80.8	24.2	52.5	available
CP3530	-	1.0	58.7	15.6	_	79.0	24.7	51.8	-
Driver	_	1.0	60.9	15.7	_	75.0	28.0	51.5	_
SY Valda	_	1.0	60.0	14.8	_	72.5	26.6	49.5	_
Shelly	_	1.0	59.5	15.3	_	73.3	25.1	49.2	_
LCS Cannon	-	1.0	61.0	16.9	-	72.5	21.7	47.1	-
CP3099A	_	1.0	59.0	13.8	_	70.0	22.8	46.4	_
LCS Rebel	_	1.0	60.1	17.4	_	69.5	22.2	45.8	_
MN-Torgy	-	1.0	60.8	17.9	-	69.8	21.3	45.6	-
CP3915	_	1.0	61.3	16.0	_	69.1	21.7	45.4	_
SY Ingmar	_	1.0	60.2	16.4	-	70.1	20.5	45.3	-
AP Murdock	-	1.0	59.0	17.4	-	72.0	18.6	45.3	-
MN-Washburn	_	1.0	59.0	15.6	-	70.0	19.8	44.9	-
WB9590	_	1.0	58.9	18.7	-	68.4	20.3	44.3	_
WB9719	-	1.0	59.9	18.9	-	70.9	17.4	44.2	-
WB9606	_	1.0	60.5	15.8	-	63.4	22.4	42.9	-
MS Ranchero	_	1.0	58.5	16.2	-	64.3	21.4	42.8	-
Bolles	-	1.0	59.2	17.8	-	65.2	20.2	42.7	-
Boost	_	1.0	59.8	16.5	-	61.6	23.2	42.4	-
Surpass	_	1.0	60.5	17.7	-	63.8	20.7	42.3	-
MS Barracuda	-	1.0	59.1	17.1	-	66.8	17.6	42.2	-
Prevail	_	1.0	59.2	17.7	-	66.2	17.4	41.8	-
Lang-MN	_	1.0	58.0	16.2	-	63.6	19.7	41.6	-
SY Rustler	-	1.0	57.7	18.0	-	68.7	12.9	40.8	-
ND Frohberg	_	1.0	59.0	17.2	-	61.1	18.9	40.0	-
Focus	-	1.0	60.2	18.7	-	62.3	12.9	37.6	-
PFS Buns	-	1.0	57.4	16.7	-	-	21.7	-	-
MS Cobra	-	1.0	59.7	16.2	-	-	21.5	-	-
CP3119A	_	1.0	57.2	15.3	-	-	21.2	_	-
AP Gunsmoke CL2	-	1.0	58.8	17.2	-	-	21.0	-	-
AP Revolution	_	1.0	59.7	16.8	-	-	21.0	-	-
CP3188	-	1.0	59.3	15.0	-	-	19.9		-
Trial Average#	-	1.0	59.5	16.5	-	68.4	21.2	45.1	-
LSD (0.05)+	_	-	0.7	1.1	-	3.3	3.2	_	-
C.V. %‡	-	-	0.9	4.6	-	3.4	10.7	-	-

^{*} 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.