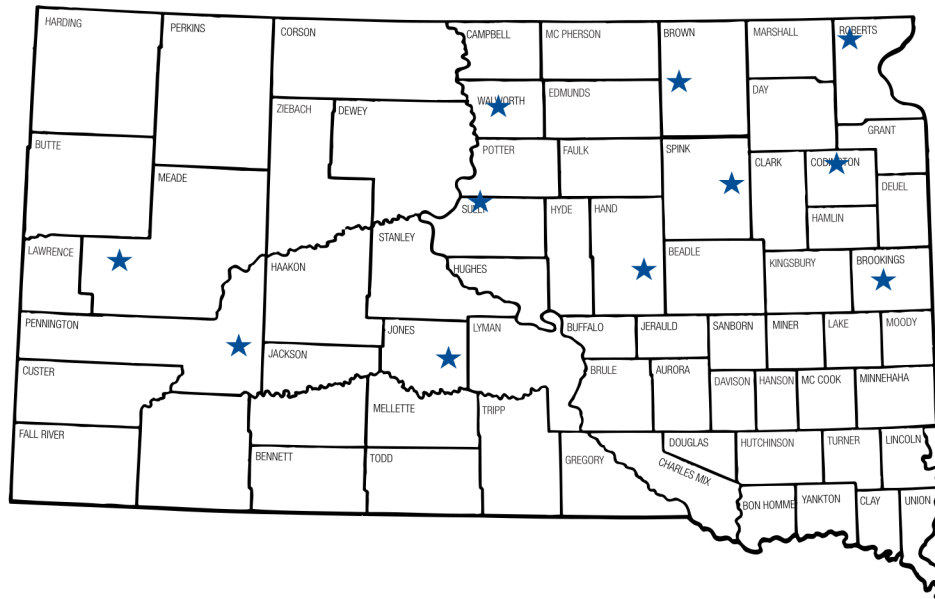




2021 South Dakota Spring Wheat Variety Trial Results Regional Summaries

Jonathan Kleinjan | SDSU Extension Agronomist
 Christopher Graham | SDSU Extension Agronomist
 Karl Glover | SDSU Spring Wheat Breeder
 Shaukat Ali | SDSU Small Grains Pathologist
 Kevin Kirby | Agricultural Research Manager
 Shawn Hawks | Agricultural Research Manager
 Bruce Swan | Agricultural Research Manager
 Christopher Nelson | Agricultural Research Assistant



Eastern trial locations: Brookings, Claire City, Frankfort, South Shore
 Central trial locations: Aberdeen, Gettysburg, Highmore, Selby
 Western trial locations: Draper, Sturgis, Wall

Individual trial location results can be accessed online at:
<https://extension.sdstate.edu/spring-wheat-variety-trial-results>



2021 South Dakota Spring Wheat Variety Trial Results Variety List

**SOUTH DAKOTA STATE
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Table 1. List of spring wheat varieties tested in 2021 along with origin, agronomic and grain quality characteristics.

Variety	Testing and Origin		Agronomic Characteristics			Grain Quality	
	Years tested in SD trials	Origin†-Year	Relative Heading (days)‡	Height (inches)	Lodging Score (1-5)§	2021 Test Wt. (lb/bu)#	2021 Protein (%)#
AP Gunsmoke CL2	new	AP-21	4	23	1.0	59.4	16.9
AP Murdock	3	AP-19	3	21	1.0	58.5	16.6
AP Revolution	new	AP-22	2	22	1.0	58.3	16.1
Bolles	5+	MN-15	5	25	1.0	59.1	18.2
Boost	5+	SD-15	6	26	1.0	60.0	16.8
CP3099A	2	WF-20	9	27	1.0	58.2	14.9
CP3119A	new	WF-21	8	26	1.0	56.5	15.0
CP3188	new	WF-20	4	24	1.0	59.0	15.1
CP3530	5+	WF-16	6	26	1.0	59.4	16.1
CP3915	3	WF-19	5	24	1.0	60.9	16.5
Driver	5+	SD-19	4	26	1.0	60.8	16.0
Focus	5+	SD-15	0	26	1.0	60.5	17.6
Lang-MN	5+	MN-17	4	24	1.0	59.5	16.4
LCS Buster	2	LCS-20	7	23	1.0	59.4	15.0
LCS Cannon	4	LCS-18	1	23	1.0	61.2	16.1
LCS Rebel	5+	LCS-17	2	26	1.0	60.8	16.7
LCS Trigger	5+	LCS-15	8	25	1.0	60.5	15.0
MN-Torgy	3	MN-20	5	23	1.0	61.6	16.9
MN-Washburn	4	MN-19	5	22	1.0	59.9	16.2
MS Barracuda	4	MS-18	1	22	1.0	59.3	16.8
MS Cobra	new	MS-22	4	24	1.0	59.6	16.5
MS Ranchero	2	MS-20	2	22	1.0	59.0	15.8
ND Frohberg	2	ND-20	4	25	1.0	59.3	16.7
PFS Buns	new	PFS-22	9	23	1.0	58.0	16.4
Prevail	5+	SD-13	3	22	1.0	59.5	16.3
Shelly	5+	MN-16	6	22	1.0	60.9	15.8
Surpass	5+	SD-15	1	22	1.0	60.0	16.5
SY Ingmar	5+	AP-14	6	22	1.0	60.4	16.4
SY Rustler	5+	AP-16	3	22	1.0	58.0	16.2
SY Valda	5+	AP-15	4	22	1.0	60.3	15.9
WB9590	5+	WB-18	2	20	1.0	59.4	17.1
WB9606	2	WB-20	4	24	1.0	60.8	15.5
WB9719	5+	WB-18	6	23	1.0	61.1	16.6
Trial Averages	-	-	-	24	1.0	59.7	16.3

† AP, AgriPro; LCS, Limagrain Cereal Seeds; MN, Minnesota; MS, Meridian Seeds; ND, North Dakota; PFS, Peterson Farms Seed; SD, South Dakota, WI, Winfield; WB, WestBred; and - (Year of Release).
‡ Difference in days to heading compared to Focus (2021 eastern and central locations - Julian date 161 - June 10th).
§ Lodging score: 1, perfectly standing; to 5, completely flat (eastern and central locations). Note: there was no lodging in 2021.
Test weight and protein are statewide averages.



2021 South Dakota Spring Wheat Variety Trial Results Disease Ratings

**SOUTH DAKOTA STATE
UNIVERSITY EXTENSION**

Table 2. Spring wheat variety disease ratings.

Variety	Disease Ratings†					
	Stripe Rust	Stem Rust	2021 Leaf Rust	2021 Tan Spot	2021 Bacterial Leaf Streak	2021 Fusarium Head Blight
AP Gunsmoke CL2	‡	(MR)§	(R)	(MR)	6	1
AP Murdock	-	(MR)	(R)	6	3	6
AP Revolution	-	(R)	(MR)	(MR)	9	1
Bolles	MS	-	4	7	2	4
Boost	S	-	4	7	1	4
CP3099A	-	-	5	7	7	9
CP3119A	-	-	8	6	2	4
CP3188	-	-	7	7	6	4
CP3530	S	(R)	(MR)	-	8	4
CP3915	-	(MR)	4	7	7	3
Driver	-	-	4	7	2	2
Focus	S	-	4	8	6	2
Lang-MN	MS	(R)	7	-	4	3
LCS Buster	-	(R)	(R)	-	1	5
LCS Cannon	(R)	(R)	5	6	9	3
LCS Rebel	(MR)	(R)	7	8	3	2
LCS Trigger	MS	(R)	3	6	1	4
MN-Torgy	-	-	3	7	3	3
MN-Washburn	-	(R)	3	8	5	5
MS Barracuda	MR	(R)	7	8	8	5
MS Cobra	(R)	(R)	4	6	6	5
MS Rancho	(R)	(R)	7	5	8	7
ND Frohberg	(MR)	(R-MR)	7	8	8	3
PFS Buns	-	-	4	6	5	6
Prevail	MR	MR	6	7	1	2
Shelly	MR	-	6	6	3	4
Surpass	S	-	6	8	2	2
SY Ingmar	S	(R)	4	6	8	4
SY Rustler	MS	(MR)	5	5	5	3
SY Valda	S	(R)	(MR)	(MR)	1	2
WB9590	S	(R)	7	8	2	5
WB9606	(MS)	(MR)	7	6	8	6
WB9719	S	(R)	7	4	7	5

† Disease ratings: R, resistant; MR, moderately resistant; MS, moderately susceptible; S, susceptible; or 1, most resistant to 9, most susceptible. Note: SDSU does not perform nursery screenings for all listed pathogens in each growing season.

‡ A dash (-) signifies no rating provided/available.

§ Parenthesis denote estimated ratings/rankings (X) based on information provided by the program that submitted the variety.



2021 South Dakota Spring Wheat Variety Trial Results Eastern Summary

**SOUTH DAKOTA STATE
UNIVERSITY EXTENSION**

Table 3. 2021 spring wheat variety performance trial results for testing sites in eastern South Dakota. Varieties ranking in the top third of each trial category are shaded light blue.

Variety	2019	2020	2021			2-year			3-year		
	Yield (bu/a)	Yield (bu/a)	Yield (bu/a)	Test Wt (lbs)	Protein %	Yield (bu/a)	Test Wt (lbs)	Protein %	Yield (bu/a)	Test Wt (lbs)	Protein %
LCS Trigger	46.3	72.3	59.9	61.6	13.8	66.1	61.1	13.5	59.0	58.6	13.6
SY Valda	49.8	63.8	54.1	60.6	15.0	58.9	60.7	14.9	55.0	58.2	15.3
MN-Torgy	46.2	63.4	51.7	62.3	16.3	57.5	61.1	15.8	54.9	59.3	16.0
CP3530	48.7	65.9	51.6	60.0	15.4	58.8	60.3	15.2	54.7	58.3	15.7
Driver	40.9	65.1	56.6	62.4	15.3	60.8	61.9	15.1	53.6	58.9	15.5
Shelly	38.4	65.6	56.7	61.7	14.8	61.2	60.9	14.5	53.0	58.1	15.0
AP Murdock	48.3	63.4	47.8	58.7	15.6	55.6	59.1	15.2	52.3	57.4	15.3
SY Ingmar	50.9	58.6	50.3	60.8	15.4	54.4	60.8	15.5	52.2	58.6	15.8
WB9719	43.6	61.1	54.0	62.8	15.9	57.6	62.2	15.5	52.2	59.8	15.5
Prevail	47.0	61.5	49.3	60.4	15.1	55.4	60.1	14.7	51.7	58.4	15.0
SY Rustler	48.6	59.2	48.2	57.9	15.1	53.7	58.7	15.1	51.0	57.0	15.5
WB9590	46.1	58.9	50.0	60.7	16.3	54.5	60.0	16.2	50.8	57.8	16.3
CP3915	43.8	60.0	50.8	62.2	15.8	55.4	61.5	15.4	50.8	59.1	15.7
Surpass	47.0	59.1	47.7	61.0	15.4	53.4	60.0	15.4	50.3	57.9	15.8
Boost	43.7	58.5	50.0	60.9	16.1	54.3	60.7	15.8	50.0	58.5	16.0
MN-Washburn	37.6	61.4	51.5	61.0	15.3	56.5	60.2	14.9	49.5	57.6	15.3
Lang-MN	39.6	59.4	50.6	60.0	15.6	55.0	60.4	15.5	49.2	58.4	15.9
LCS Cannon	38.0	60.2	51.0	61.5	15.3	55.6	61.5	15.0	49.0	59.2	15.5
LCS Rebel	37.0	54.9	51.7	61.7	16.1	53.3	61.2	15.9	47.1	59.1	16.2
Bolles	36.3	59.0	48.0	59.8	17.9	53.5	59.8	17.2	47.1	57.3	17.6
Focus	41.2	58.7	42.0	60.8	17.2	50.4	60.7	16.4	46.4	58.8	16.6
MS Barracuda	35.3	56.8	47.5	60.2	15.8	52.1	59.9	15.8	45.8	57.6	16.4
LCS Buster	-	68.8	58.1	60.3	13.7	63.5	59.7	13.5	-	-	-
WB9606	-	62.4	58.4	61.7	14.3	60.4	60.8	13.9	-	-	-
CP3099A	-	56.9	58.5	59.4	13.5	57.7	57.5	13.3	-	-	-
ND Frohberg	-	58.2	52.8	60.8	15.8	55.5	60.7	15.5	-	-	-
MS Ranchero	-	56.9	49.6	59.3	14.6	53.2	58.6	14.8	-	-	-
CP3119A	-	-	56.3	57.9	14.2	-	-	-	-	-	-
PFS Buns	-	-	54.2	59.1	15.3	-	-	-	-	-	-
AP Gunsmoke CL2	-	-	53.8	59.6	16.2	-	-	-	-	-	-
CP3188	-	-	53.0	58.5	14.1	-	-	-	-	-	-
MS Cobra	-	-	50.2	60.7	15.7	-	-	-	-	-	-
AP Revolution	-	-	47.8	59.1	15.1	-	-	-	-	-	-
Trial Average#	43.7	60.8	52.2	60.6	15.4	56.7	60.3	15.2	53.0	58.9	15.6
LSD(0.05)†	6.6	1.9	2.3	0.5	0.3	5.5	1.6	0.6	6.2	1.4	0.6
C.V.%‡	7.7	4.8	6.4	1.2	5.7	5.3	1.2	2.0	6.0	1.4	2.2

Trial averages may include values from experimental lines that are not reported.
 † Value required (\geq 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.