



2019 South Dakota Winter Wheat Variety Trial Results Sturgis

Jonathan Kleinjan | SDSU Extension Crop Production Associate

Christopher Graham | SDSU Extension Agronomist

Bruce Swan | Agricultural Research Manager

Kevin Kirby | Agricultural Research Manager

Shawn Hawks | Agricultural Research Manager

Cooperator: SDSU Sturgis Resarch Farm
Location: 44.424487°, -103.387110°
Soil Type: Nunn clay loam, 0-2% slopes
Previous crop: Cover crop
Tillage: No-till
Row spacing: 10"
Seeding Rate: 1.2 million PLS/acre
Fertilizer:
 -Starter: 6 gal/acre 10-25-0 + 4 gal/acre water carrier
 -Other: 45 gal/acre 28-0-0 mid-row banded
Herbicide:
 -Burndown: 0.3 oz/acre Prepare + 32 oz/acre RT3
 -Post: 0.67 oz/acre Outrider
Fungicide: None
Date seeded: 9/18/2018
Date harvested: 8/5/2019

Table 1. 2019 winter wheat variety performance trial results (average of 3 replications) at Sturgis, 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 %	2017 (bu/a)	2018 (bu/a)	2019 (bu/a)	2-year (bu/a)	3-year (bu/a)
Avery	NR	NR	58.5	13.3	46.5	56.3	55.4	55.9	52.7
Keldin	-	-	58.4	14.4	30.0	65.5	54.8	60.2	50.1
Ideal	-	-	57.3	14.7	40.2	57.4	51.2	54.3	49.6
SD14113-3	-	-	57.4	14.8	37.6	59.2	50.5	54.9	49.1
Redfield	-	-	56.4	15.2	34.1	57.2	54.7	56.0	48.7
Lyman	-	-	57.2	15.1	39.0	57.5	47.1	52.3	47.9
Cowboy	-	-	56.4	13.8	39.9	60.0	41.6	50.8	47.2
Oahe	-	-	57.2	13.6	35.9	52.8	50.6	51.7	46.5
SY Wolf	-	-	53.3	14.9	40.0	55.2	40.4	47.8	45.2
SY Monument	-	-	57.0	14.0	36.4	52.2	46.7	49.5	45.1
Overland	-	-	53.5	14.3	39.2	52.4	43.3	47.8	44.9
LCS Mint	-	-	59.1	14.2	31.1	52.6	50.9	51.7	44.9
WB-Grainfield	-	-	56.5	13.6	41.7	43.8	48.9	46.3	44.8
SD14115-5	-	-	55.5	15.0	43.7	36.7	49.9	43.3	43.4
SY 517 CL2	-	-	58.0	14.6	34.6	52.2	42.4	47.3	43.1
Alice	-	-	56.3	15.2	32.3	48.2	43.3	45.8	41.3
Wesley	-	-	52.9	14.9	33.3	45.4	43.8	44.6	40.8
Thompson	-	-	57.0	15.3	33.9	48.8	39.4	44.1	40.7
SY Sunrise	-	-	53.4	14.3	35.0	46.5	38.9	42.7	40.1
Expedition	-	-	53.7	14.4	34.2	49.1	36.1	42.6	39.8
Langin	-	-	54.2	13.7	41.0	31.8	40.8	36.3	37.9
WB4462	-	-	58.5	14.4	-	56.5	59.5	58.0	-
LCS Chrome	-	-	56.2	15.3	-	56.9	39.4	48.2	-
NHH144913-3	-	-	55.1	14.6	-	47.3	41.5	44.4	-
SY Wolverine	-	-	54.0	14.2	-	-	55.7	-	-
Canvas	-	-	57.8	13.9	-	-	49.5	-	-
NW13493	-	-	54.8	14.2	-	-	48.7	-	-
WB4595	-	-	57.6	13.7	-	-	40.3	-	-
Trial Average#	-	-	56.5	14.4	37.9	52.2	48.1	49.0	44.9
LSD(0.05)†	-	-	3.8	0.8	8.2	5.0	6.9	-	-
C.V.%‡	-	-	4.2	3.1	15.5	6.9	8.8	-	-

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.