



2019 South Dakota Winter Wheat Variety Trial Results Winner

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Cooperator: Jorgensen Land and Cattle
Location: 43.530135°, -99.841030°
Soil Type: Witten silty clay, 0-3% slopes
Previous crop: Oats
Tillage: No-till
Row spacing: 8"
Seeding Rate: 1.2 million PLS/acre
Fertilizer:
-**Starter:** 10 gal 10-34-0, (intensive only: + 4 gal SG7-25-5 + 0.5 gal InFuze)
-**Other:** 42 gal/acre 28-0-0 stream-bar applied at Feekes 5-6
Herbicide:
-**Burndown:** 3.2 oz Hel-Fire + 22 oz RT3 + 28 oz Durango
-**Post:** 13 oz Bromac + 13 oz Puma
Fungicide: 0.5 gal SG Shift + 6.5 oz Prosaro @ Feekes 10.5
Date seeded: 10/2/2018
Date harvested: 7/24/2019 (intensive)
7/25/2019
Notes: Intensive trail incorporates micronutrients and other additives, good growing conditions.

Table 1. 2019 winter wheat variety trial results (average of 4 replications) at Winner, SD.
Entries are sorted by overall 3-year yield. Varieties yielding in the top 1/3 of each 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)
SD14115-5	32	1.3	62.3	12.4	48.1	91.2	75.9	83.5	71.7
Cowboy	35	4.0	61.8	12.2	45.6	83.8	73.7	78.7	67.7
SY Monument	31	1.7	60.7	12.4	51.2	72.4	78.2	75.3	67.3
SY Wolf	30	1.0	62.9	11.9	49.6	78.1	73.5	75.8	67.1
SD14113-3	31	1.0	62.1	12.4	40.8	85.6	74.0	79.8	66.8
Keldin	34	1.0	63.0	12.4	49.2	78.3	72.4	75.3	66.6
Langin	27	4.3	60.9	11.6	53.9	78.0	67.9	72.9	66.6
Ideal	33	2.0	62.9	12.3	41.3	83.1	74.7	78.9	66.3
Redfield	32	2.0	62.5	12.5	46.2	81.9	70.6	76.2	66.2
WB-Grainfield	31	3.3	61.0	11.6	41.6	85.9	70.7	78.3	66.0
Oahe	38	4.0	63.2	12.8	45.3	80.1	70.8	75.4	65.4
Overland	35	3.7	62.3	12.0	44.0	81.5	70.1	75.8	65.2
Thompson	35	2.0	63.1	12.8	46.0	80.3	68.2	74.2	64.8
LCS Mint	33	3.3	64.0	12.6	49.6	72.2	68.9	70.5	63.6
SY Sunrise	28	1.7	61.6	12.4	48.0	67.9	72.6	70.2	62.8
Wesley	30	2.0	60.9	13.2	34.2	76.5	70.3	73.4	60.4
Avery	32	4.3	61.5	12.4	54.3	61.5	65.3	63.4	60.3
Lyman	34	5.0	62.5	14.2	29.7	84.9	66.2	75.5	60.3
Alice	29	2.0	61.9	12.9	39.2	72.9	61.7	67.3	57.9
Expedition	33	3.7	61.5	12.6	37.8	73.9	56.2	65.1	56.0
SY 517 CL2	28	1.0	63.6	13.5	37.6	69.7	60.3	65.0	55.9
WB4462	32	3.0	61.6	12.8	-	94.8	72.1	83.4	-
LCS Chrome	33	2.3	62.0	13.1	-	86.4	61.4	73.9	-
NHH144913-3	30	1.3	58.2	13.5	-	71.2	63.0	67.1	-
WB4595	31	1.3	63.9	12.2	-	-	73.4	-	-
NW13493	31	3.7	62.9	12.0	-	-	71.6	-	-
SY Wolverine	27	1.0	62.6	11.6	-	-	69.7	-	-
Canvas	30	2.3	62.8	12.5	-	-	69.1	-	-
Trial Average#	32	2.5	62.2	12.5	43.9	80.1	70.4	74.0	64.0
LSD (0.05)†	1.7	1.3	0.7	0.9	10.5	10.1	7.2	-	-
C.V. %‡	-	-	0.1	5.2	17.0	9.0	7.4	-	-

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

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.

Table 2. 2019 winter wheat variety trial results (average of 4 replications) at Winner, SD (intensive). Entries are sorted by overall 3-year yield. Varieties yielding in the top 1/3 of each 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)
SD14115-5	NR	NR	61.5	12.4	53.7	93.0	77.3	85.2	74.7
WB-Grainfield	-	-	59.9	11.6	55.5	80.1	77.2	78.6	70.9
Cowboy	-	-	60.6	12.2	46.1	90.7	74.1	82.4	70.3
SD14113-3	-	-	60.9	12.1	49.5	89.1	70.2	79.7	69.6
Langin	-	-	60.3	11.6	54.2	81.8	71.4	76.6	69.1
SY Monument	-	-	58.9	12.1	51.9	83.5	71.0	77.2	68.8
Oahe	-	-	62.5	12.3	48.8	81.8	75.4	78.6	68.7
Avery	-	-	60.1	12.0	61.2	80.2	63.5	71.9	68.3
Thompson	-	-	62.5	12.6	44.5	83.9	74.1	79.0	67.5
Overland	-	-	61.1	12.7	46.5	78.5	74.0	76.2	66.3
Keldin	-	-	61.7	12.6	45.5	78.1	74.7	76.4	66.1
Redfield	-	-	61.3	12.8	47.9	84.6	65.2	74.9	65.9
SY Wolf	-	-	61.5	12.4	43.4	81.4	73.0	77.2	65.9
LCS Mint	-	-	63.2	12.8	55.4	74.7	63.7	69.2	64.6
Ideal	-	-	61.8	12.7	45.0	83.6	61.2	72.4	63.2
Wesley	-	-	60.3	12.5	37.0	80.5	69.6	75.0	62.3
Alice	-	-	60.6	13.1	42.9	76.8	64.9	70.8	61.5
SY Sunrise	-	-	60.5	12.5	44.5	68.4	71.7	70.0	61.5
Expedition	-	-	60.5	13.1	42.1	79.1	63.1	71.1	61.4
Lyman	-	-	61.5	13.5	40.7	81.1	62.1	71.6	61.3
SY 517 CL2	-	-	62.8	12.6	44.7	69.6	60.9	65.2	58.4
WB4462	-	-	60.7	12.6	-	99.6	64.8	82.2	-
LCS Chrome	-	-	61.0	13.8	-	82.9	66.9	74.9	-
NHH144913-3	-	-	57.4	14.1	-	75.3	56.1	65.7	-
WB4595	-	-	61.9	13.2	-	-	75.5	-	-
NW13493	-	-	61.9	12.3	-	-	75.1	-	-
SY Wolverine	-	-	62.0	12.0	-	-	73.7	-	-
Canvas	-	-	61.2	12.1	-	-	63.5	-	-
Trial Average#	-	-	61.1	12.6	47.6	82.2	69.3	75.1	66
LSD (0.05)†	-	-	0.8	1.0	8.7	10.9	9.5	-	-
C.V. %‡	-	-	0.9	5.9	13.0	9.5	9.8	-	-

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

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