



2018 South Dakota Winter Wheat Variety Trial Results Hayes

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Cooperator: Terry Hand
Location: 44.376611°, -101.048703°
Soil Type: Promise Clay, 3-6% slopes
Previous crop: Spring wheat
Tillage: No-till
Row spacing: 8"
Seeding Rate: 1.2 million PLS/acre
Fertilizer:
 -Starter: 10 gal/acre 10-34-0
 -Other: 175 lb/acre 46-0-0 coated with ContainN, broadcast 4/26/18
Herbicide:
 -Burndown: NR
 -Post: 2 oz PowerFlex HL on 4/27; 12 oz WideMatch + 6 oz MCPA on 5/21
Fungicide: 4 oz Propi-Star applied with herbicide on 5/21
Date seeded: 9/21/2017
Date harvested: 7/19/2018
Notes: Trial location was affected by heat and drought conditions during flowering.

Table 1. 2018 winter wheat variety performance trial results (average of 4 replications) at Hayes, 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)
Alice	24	1	62.8	11.7	56.1	hailed	41.6	NA	48.8
Lyman	21	3	63.2	12.0	47.6	out§	45.6	-	46.6
Expedition	24	3	63.4	11.1	48.2	-	41.7	-	45.0
Overland	24	2	63.8	11.3	46.6	-	41.8	-	44.2
WB-Grainfield	24	2	62.4	11.3	46.1	-	41.4	-	43.8
Cowboy	26	1	64.6	11.2	42.7	-	44.2	-	43.4
Redfield	23	1	63.8	12.0	44.8	-	41.9	-	43.3
SY Sunrise	22	1	63.5	11.3	46.8	-	39.2	-	43.0
Avery	25	1	63.2	10.4	47.8	-	37.4	-	42.6
LCS Mint	27	1	65.7	10.9	43.8	-	40.4	-	42.1
Thompson	23	1	64.0	11.0	45.8	-	38.2	-	42.0
SY Wolf	22	1	65.0	11.7	44.7	-	37.4	-	41.1
SY Monument	23	1	62.2	10.0	43.7	-	38.4	-	41.1
PSB13NEDH-7-140	22	1	65.4	12.2	47.4	-	33.4	-	40.4
Oahe	26	3	64.4	11.0	39.9	-	40.5	-	40.2
Wesley	23	1	62.7	11.5	43.7	-	34.7	-	39.2
Ideal	26	1	64.4	11.8	38.6	-	39.6	-	39.1
LCS Chrome	27	1	63.0	12.0	-	-	44.7	-	-
WB4418	25	1	64.2	10.7	-	-	43.4	-	-
Keldin	25	1	64.1	11.5	-	-	42.6	-	-
SY 517 CL2	24	1	64.1	11.2	-	-	39.9	-	-
Dyna-Gro Long Branch	24	3	62.0	10.6	-	-	39.1	-	-
WB4462	25	3	63.5	10.3	-	-	39.0	-	-
Langin	22	3	62.7	10.4	-	-	39.0	-	-
SY Benefit	23	4	63.6	11.2	-	-	37.8	-	-
LCS Link	26	1	64.0	12.3	-	-	37.3	-	-
NHH144913-3	25	2	60.5	11.6	-	-	37.1	-	-
WB4623CLP	19	1	65.0	11.9	-	-	26.7	-	-
Trial Average#	24	1.6	63.7	11.3	44.5	-	39.5	-	-
LSD (0.05)†	-	-	0.8	0.7	6.9	-	7.9	-	-
C.V. %‡	-	-	0.8	4.4	11.1	-	14.2	-	-

* 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.

§The trial location was hailed out in 2017. Three-year yields are an average of 2016 and 2018.