South Dakota State University
College of Agriculture, Food and Environmental Sciences

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

2024 South Dakota Spring Wheat Variety Trial Results Agar

Karl Glover | SDSU Spring Wheat Breeder
Kevin Kirby | Agricultural Research Manager
Shawn Hawks | Agricultural Research Manager

Cooperator:	Cronin Farms
Location:	44.898211°, -100.087388°
Soil Type:	Highmore-Mobridge silt loams, 0-2% 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:	35 gallons 28% N
Herbicide:	
-Burndown:	0 oz Banvel, 24 oz RT3
-Post:	0.3 oz Affinity tank mix, 10.6 oz Parity, 16 oz Widematch
Fungicide:	1 oz Tebucconazole, 13.7 oz Miravis Ace
Date seeded:	4/23/2024
Date harvested:	8/30/2024

S-0002-2024-04-SW-Agar

South Dakota State University Extension

2024 South Dakota Spring Wheat Variety Trial Results

Agar

Table 1. 2024 spring wheat variety performance trial results (average of 4 replications) at Agar, 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 %	2022 (bu/a)#	2023 (bu/a)	2024 (bu/a)	2-year (bu/a)	3-year (bu/a)
LCS TRIGGER	28	1.3	59.5	12.8	**77.0**	**62.1**	**55.4**	**58.7**	**64.8**
CAG JUSTIFY	29	1.8	56.6	13.5	**71.0**	**55.5**	**58.9**	**57.2**	**61.8**
LCS BUSTER	29	1.3	57.2	12.8	**73.5**	**61.7**	47.6	**54.6**	**60.9**
MS CHARGER	27	1.6	58.7	12.7	**77.3**	54.2	50.3	52.3	**60.6**
SY VALDA	26	1.3	58.9	13.9	**70.2**	**56.1**	**54.7**	**55.4**	**60.3**
ASCEND-SD	30	1.3	59.8	14.8	67.5	55.1	**57.9**	**56.5**	**60.1**
LCS DUAL	28	1.5	59.0	13.6	**72.1**	**57.4**	47.4	52.4	**58.9**
LCS ASCENT	27	1.5	59.3	13.9	**69.2**	54.5	**53.2**	53.8	**58.9**
LCS BOOM	27	1.3	60.3	14.7	64.4	53.2	**56.0**	54.6	57.9
CAG RECKLESS	29	1.2	59.3	14.8	66.5	**55.5**	50.7	53.1	57.6
BRAWN-SD	28	1.3	60.2	13.8	**69.4**	48.9	**54.3**	51.6	57.5
LCS CANNON	26	1.3	60.3	14.5	63.1	55.1	**53.0**	54.1	57.1
WB9606	28	1.4	58.5	14.0	68.9	**58.0**	44.0	51.0	56.9
DRIVER	29	1.3	59.3	14.2	66.1	52.5	51.3	51.9	56.6
MN-ROTHSAY	26	1.1	58.2	14.8	64.2	**57.1**	46.8	51.9	56.0
AP REVOLUTION	26	1.2	59.1	15.2	68.5	50.0	46.6	48.3	55.0
AP GUNSMOKE CL2	27	1.9	59.0	14.8	68.2	49.4	46.2	47.8	54.6
SURPASS	28	1.6	58.8	15.2	61.1	48.3	**52.7**	50.5	54.0
MS COBRA	27	1.2	58.3	14.5	64.7	49.5	46.7	48.1	53.6
PFS BUNS	26	1.1	54.5	13.8	67.6	55.1	37.5	46.3	53.4
LCS HAMMER AX	26	1.4	57.3	14.7	62.4	52.9	44.8	48.9	53.4
PREVAIL	28	1.3	59.0	14.7	62.3	46.2	51.6	48.9	53.4
AP MURDOCK	25	1.3	58.3	15.0	62.8	48.6	48.3	48.4	53.2
CP3099A	30	1.2	54.6	12.2	68.7	48.8	34.4	41.6	50.7
MN-TORGY	27	1.3	59.5	14.1	-	**57.8**	**56.4**	**57.1**	-
WB9590	23	0.9	57.6	15.9	-	51.3	42.4	46.8	-
CAG RECOIL	25	0.9	56.4	14.5	-	50.7	**52.8**	51.7	-
CP3188	27	2.2	56.7	13.4	-	50.1	43.1	46.6	-
MS NOVA	26	1.1	59.5	14.7	-	-	50.6	-	-
ND STAMPEDE	27	1.3	58.4	14.0	-	-	49.2	-	-
ND THRESHER	26	1.1	57.2	14.6	-	-	45.5	-	-
CP3055	29	1.1	53.6	13.3	-	-	41.3	-	-
CAG CERES	25	1.1	57.8	14.7	-	-	40.6	-	-
CP3322	28	1.6	53.7	14.4	-	-	34.9	-	-
Trial Average#	27.5	1.3	58.3	14.3	66.3	52.9	48.4	51.2	56.8
LSD (0.05)†	-	-	1.6	0.9	3	7.1	4.4	4.7	3.3
C.V. %‡	-	-	-	-	3.3	10.2	6.5	9.3	7.3

* 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.