

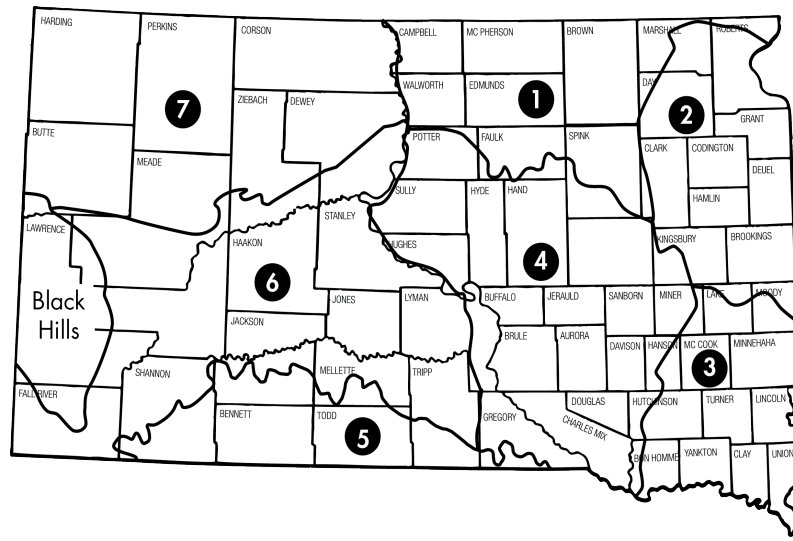
Jonathan Kleinjan | SDSU Extension Crop Performance Testing (CPT) Director

Chris Graham | SDSU Extension Agronomist, Rapid City

Kevin Kirby | Ag Research Manager, Brookings

Bruce Swan | Ag Research Manager, Rapid City

Shawn Hawks | Ag Research Manager, Brookings



Recommended/Promising Spring Wheat Varieties for Spring 2017 by Crop Zone†

Zone - 1	Zone - 2	Zone - 3	Zone - 4	Zone - 5	Zone - 6	Zone - 7
Advance Surpass MS Chevelle‡ Faller‡ HRS 3504‡ Prosper‡ RB07‡	Focus Forefront Prevail Surpass Faller‡ HRS 3419‡ HRS 3504‡	Not Evaluated§	Advance MS Chevelle‡ Faller‡ HRS 3419‡ HRS 3504‡ Prosper‡ WB9507	Not Evaluated§	Prevail Surpass MS Chevelle‡ Faller‡ Prosper‡ RB07‡ WB9507	Not Evaluated§

Promising

HRS 3530‡ SY Rustler‡ LCS Trigger‡ SY Valda WB9653	MS Chevelle‡ SY Rustler‡ LCS Trigger‡ SY Valda WB9653	Not Evaluated§	No data	Not Evaluated§	HRS 3530‡ LCS Trigger‡ SY Rustler‡ SY Valda	Not Evaluated§
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† Crop Zones for small grains are based on soil & climate information. Recommended varieties are in the top 1/3 or the trial over 3 years for each zone. Promising varieties are those in the top 1/3 of the trial over 2 years.

‡ Variety is susceptible or moderately susceptible to Fusarium Head Blight (Scab).

§ Varieties are not evaluated in this zone, however it is suggested to select a variety that appears frequently in the recommended list across all zones for the state or neighboring zones.

Table 1. List of 2016 spring wheat testing locations and soil/cultural characteristics.

Location	Testing location characteristics				
	Cooperator	GPS coordinates	Soil Type	Previous crop	Tillage system
East River Locations (7)					
Aberdeen	Locken Farms	45.496228 -98.558762	Barnes-Cresbard-Tonka complex, 0-3% slopes	Soybeans	No-till
Agar	Cronin Farms	44.943287 -100.123192	Eakin silt loam, 0-2% slopes	Field peas	No-till
Faulkton	Ryan Melius	45.084244 -99.083927	Williams-Bowbells loams, 0-3% slopes	Soybeans	No-till
Miller	Nathan Lichty	44.494365 -98.863085	Houdek-Prosper loams, 0-2% slopes	Soybeans	No-till
Selby	Tom Fidelar	45.492563 -100.011125	Mobridge silt loam, cool, 0-2% slopes	Soybeans	No-till
South Shore	NERF	45.106979 -97.097062	Kranzburg-Brookings silty clay loams, 0-2% slopes	Soybeans	Conv. Till
Volga	Volga Research Farm	44.302372 -96.920463	Brandt silty clay loam, 0-2% slopes	Soybeans	No-till
West River Locations (3)					
Bison	Brad Seidel	45.529722 -102.401111	Felor-Yegen loams, 2-6% slopes	Spring Wheat	No-till
Draper	Paul Patterson	43.860556 -100.529722	Bullcreek clay, 0-6% slopes	Milo	No-till
Wall	Merritt Patterson & Sons	44.095833 -102.338056	Satanta loam, 1-2% slopes	Chem Fallow	No-till

Table 2. Agronomic practices for 2016 spring wheat trial locations.

Location	Agronomic practices					
	Planting date	Starter applied	Other Fertilizer applied	Herbicide applied	Fungicide applied	Harvest date
East River Locations (7)						
Aberdeen	04/04/16	90# 30-10-10	132-0-40-20S	1.5 pt Maestro MA	None	8/2/16
Agar	03/29/16	90# 30-10-10	100-0-0 pp	1.5 pt Maestro MA	None	8/3/16
Faulkton	04/08/16	90# 30-10-10	105-0-0 fall NH ₃	1.5 pt Maestro MA	None	8/3/16
Miller	04/04/16	90# 30-10-10	100-0-0-36S pp	1.5 pt Maestro MA	None	7/28/16
Selby	04/06/16	90# 30-10-10	172-52-0 pp	1.5 pt Maestro + 1 pt Axial XL	15 oz Carumba (flowering)	8/8/16
South Shore	04/13/16	90# 30-10-10	165-0-0 pp	1 pt Brox M Ultra	None	7/26/16
Volga	04/05/16	90# 30-10-10	100-30-30 pp	1.5 pt Maestro MA	None	8/5/16
West River Locations (3)						
Bison	4/13/16	6 gal 10-25-0-5-.5	80 lbs N/Acre as 28-0-0	1.3 pt Widematch + 12 oz MCPA ester	none	NA‡
Draper	04/04/16	6 gal 10-25-0-5-.5	125 lbs N/Acre as 28-0-0	1 pt Widematch (5/28/16)	none	8/3/16
Wall	03/29/16	6 gal 10-25-0-5-.5	125 lbs N/Acre as 28-0-0	16 oz Roundup Power Max (fall applied)	none	8/2/16

‡ Plots at Bison were abandoned due to damage caused by chemical drift.

Table 3a. 2016 East River Spring Wheat Performance - Yield (13% M), Test Weight (harvest M), and Protein (12% M). Varieties yielding in the upper 1/3 of each trial location are denoted by gray shading.

Variety	Crop Zone - 1									Crop Zone - 2		
	Aberdeen			Faulkton			Selby			South Shore		
	Yield	Test Wt	Protein	Yield	Test Wt	Protein	Yield	Test Wt	Protein	Yield	Test Wt	Protein
Advance	54.2	58.1	15.5	59.3	56.5	13.4	89.8	60.6	14.0	41.3	56.2	17.0
LCS Anchor†	58.0	58.6	16.0	56.7	54.7	14.3	89.5	61.9	14.5	42.8	55.7	17.5
Bolles	47.8	56.7	16.6	56.2	55.1	14.2	86.1	61.1	16.4	36.0	54.8	19.3
Boost	52.9	54.9	16.3	59.3	55.3	13.9	81.9	58.8	15.0	36.9	55.4	17.7
Brick	54.3	59.5	15.5	56.0	58.5	13.1	89.1	60.5	14.3	39.7	55.3	16.4
MS Chevelle	54.8	59.9	15.3	68.0	55.5	12.7	96.8	59.3	13.8	42.8	55.9	16.9
Elgin-ND	54.4	55.3	15.6	60.6	55.4	13.7	86.3	58.9	15.0	39.1	54.5	17.4
Faller	53.7	54.1	14.9	58.3	54.8	13.1	92.8	59.8	14.2	37.4	52.0	16.7
Focus	54.9	57.9	16.1	63.8	58.4	13.7	84.3	60.3	14.9	42.1	57.1	16.9
Forefront	51.5	57.9	15.4	63.4	57.2	14.1	85.2	59.8	14.2	43.8	56.6	16.2
HRS 3100†	56.5	57.6	14.7	68.9	55.6	13.6	91.9	59.7	14.6	38.5	54.5	17.2
HRS 3361	55.6	55.2	15.8	64.3	54.9	12.9	87.9	58.8	14.6	35.7	54.0	17.0
HRS 3419	52.1	54.3	14.7	69.1	55.9	12.4	96.9	59.7	13.9	36.3	53.0	18.0
HRS 3504	52.7	56.9	14.7	72.0	56.6	13.3	95.1	59.4	14.6	38.1	56.2	17.4
HRS 3530	51.4	57.7	15.8	63.4	57.0	14.4	97.5	60.3	14.5	39.9	52.8	17.7
HRS 3616†	57.1	58.1	15.9	61.8	54.7	13.8	87.8	58.9	14.6	39.6	55.0	16.9
SY Ingmart†	59.2	59.1	15.9	66.7	57.2	13.7	94.6	61.6	14.0	42.3	53.6	17.6
Linkert	55.1	57.3	15.9	63.9	57.3	15.1	90.6	60.0	14.5	39.0	56.8	18.1
Prevail	54.9	59.1	15.0	65.0	58.1	13.1	88.5	60.2	14.3	45.1	55.6	16.2
Prosper	52.6	57.7	15.7	64.8	56.0	13.0	91.0	57.8	13.8	38.1	52.1	17.1
RB07	50.3	58.7	15.0	64.4	56.4	13.7	94.8	60.5	14.2	40.6	55.2	17.3
SY Rustler	50.8	58.3	15.2	66.6	55.2	13.3	95.0	59.0	14.2	43.3	53.2	17.3
Select	56.1	58.8	15.1	60.2	58.9	14.0	91.1	62.6	13.8	43.2	55.9	16.9
Shelly†	55.3	56.6	14.3	61.5	56.0	13.8	93.4	60.6	14.0	42.5	55.7	16.7
Surpass	54.1	58.7	15.8	68.1	57.6	13.8	93.8	60.3	14.9	43.2	54.4	17.6
LCS Trigger	53.4	58.1	15.2	72.3	56.3	12.7	95.8	60.4	12.7	45.1	54.2	16.2
SY Valda	55.8	57.8	15.8	65.2	56.4	13.6	95.7	59.8	14.0	40.5	53.3	17.5
WB9312†	52.3	57.6	15.7	60.9	56.5	13.9	94.2	59.7	13.0	44.2	56.1	16.8
WB9507	53.2	56.7	15.6	56.0	53.3	12.7	94.0	60.0	14.7	36.1	52.5	17.7
WB9653	58.4	58.1	15.9	68.9	56.0	13.7	97.4	60.4	13.6	40.0	53.5	17.5
Trial Average	53.9	57.8	15.5	63.0	56.4	13.7	89	60.1	14.4	40.4	54.9	17.2
LSD(0.05)‡	3.6	1.8	1.0	7.1	1.1	1.3	4.3	1.1	1.2	3.7	1.2	0.8
CV(%)¶	4.8	2.2	4.8	8.1	1.4	6.8	3.5	1.3	6.2	6.4	1.6	3.3

† New entry in 2016, not previously tested.

‡ Yield, test weight, or protein value required (\geq LSD) to determine if varieties are statistically different than one another, ¶ Coefficient of Variation (C.V.) is a measure of the variability of the experimental error, 15% or less is acceptable.

Table 3b. 2016 East River Spring Wheat Performance, cont. - Yield (13% M), Test Weight (harvest M), and Protein (12% M). Varieties yielding in the upper 1/3 of each trial location are denoted by gray shading.

Variety	Crop Zone - 2			Crop Zone - 4						Crop Zones 1,2, & 4		
	Volga			Agar			Miller			East River		
	Yield	Test Wt	Protein	Yield	Test Wt	Protein	Yield	Test Wt	Protein	Yield	Test Wt	Protein
Advance	70.7	58.6	14.2	62.0	55.9	14.8	52.5	56.0	14.0	61.4	57.4	14.7
LCS Anchor†	69.9	58.9	15.7	59.1	55.8	16.0	55.1	56.9	14.9	61.6	57.5	15.5
Bolles	71.9	56.7	14.4	57.5	53.0	16.4	45.8	56.2	15.0	57.3	56.2	16.0
Boost	69.9	57.9	14.7	56.3	54.6	14.9	50.7	57.2	14.0	58.3	56.3	15.2
Brick	72.2	60.1	14.1	60.9	57.6	15.6	48.3	58.9	14.3	60.1	58.6	14.7
MS Chevelle	77.1	59.4	13.5	67.6	56.1	14.9	57.5	55.8	13.2	66.4	57.4	14.3
Elgin-ND	71.2	57.1	14.4	62.2	55.4	15.5	53.0	57.7	14.3	60.9	56.3	15.1
Faller	73.8	56.3	13.8	58.0	53.0	14.8	49.6	53.4	13.4	60.5	54.8	14.4
Focus	75.1	59.3	15.5	61.6	58.2	15.4	46.4	59.5	14.7	61.2	58.7	15.3
Forefront	71.9	59.3	15.4	55.3	54.6	14.9	43.1	57.5	14.1	59.2	57.6	14.9
HRS 3100†	74.9	59.4	14.4	63.0	53.6	15.2	53.1	56.0	14.1	63.8	56.6	14.8
HRS 3361	70.7	59.1	14.2	57.3	52.8	15.7	46.9	55.0	14.1	59.8	55.7	14.9
HRS 3419	80.5	60.3	13.2	60.7	53.2	14.8	50.9	56.2	14.6	63.8	56.1	14.5
HRS 3504	79.8	59.6	14.4	69.0	54.9	14.9	56.0	58.9	13.3	66.1	57.5	14.6
HRS 3530	76.3	59.6	14.2	62.0	55.6	15.6	50.3	55.2	14.8	63.0	56.9	15.3
HRS 3616†	70.9	57.9	13.9	55.8	54.5	15.3	49.8	57.3	14.5	60.4	56.6	15.0
SY Ingmar†	76.8	60.3	13.5	64.3	56.2	15.5	49.8	55.0	14.3	64.8	57.6	14.9
Linkert	65.5	57.6	15.1	61.4	55.4	15.6	48.6	57.0	14.5	60.6	57.3	15.5
Prevail	82.0	59.7	14.1	61.2	56.6	15.1	50.6	57.4	13.9	63.9	58.1	14.5
Prosper	75.1	58.6	14.7	60.5	53.6	15.3	50.3	56.6	14.3	61.8	56.0	14.8
RB07	71.9	58.7	14.5	62.6	54.4	16.1	47.1	57.5	14.5	61.7	57.3	15.0
SY Rustler	83.0	60.2	13.9	64.2	55.4	15.2	54.7	56.6	14.5	65.4	56.8	14.8
Select	78.8	61.9	14.4	62.5	58.7	14.0	49.6	57.1	13.9	63.1	59.1	14.6
Shelly†	78.8	59.3	14.5	63.9	56.1	14.8	53.9	57.5	13.5	64.2	57.4	14.5
Surpass	78.2	58.2	14.5	66.7	55.8	15.4	52.1	54.8	14.0	65.2	57.1	15.1
LCS Trigger	83.8	59.2	13.5	66.5	55.2	14.5	52.6	56.4	14.2	67.1	57.1	14.1
SY Valda	81.3	59.3	13.8	68.4	54.8	14.7	57.1	56.0	13.5	66.3	56.8	14.7
WB9312†	75.5	58.9	13.1	57.0	55.1	14.1	52.9	58.1	13.8	62.4	57.4	14.3
WB9507	60.7	55.8	14.5	56.5	52.2	15.3	51.6	54.2	13.9	58.3	55.0	14.9
WB9653	82.6	59.2	14.1	66.5	55.8	15.6	58.8	56.4	13.9	67.5	57.0	14.9
Trial Average	74.1	59.0	14.3	61.4	55.6	15.3	50.4	56.5	14.2	61.7	57.2	15.0
LSD(0.05)‡	5.0	1.6	1.6	3.3	1.6	1.0	3.6	2.0	0.9	1.7	0.6	0.4
CV(%)¶	4.9	1.9	8.2	3.9	2.1	4.9	5.0	2.5	4.6	5.3	1.9	5.6

† New entry in 2016, not previously tested.

‡ Yield, test weight, or protein value required (\geq LSD) to determine if varieties are statistically different than one another, ¶ Coefficient of Variation (C.V.) is a measure of the variability of the experimental error, 15% or less is acceptable.

Table 4. 2016 East River Spring Wheat Performance, sorted by yield (13% M).

Variety	Crop Zones 1, 2, & 4					
	East River Average					
	Yield	Top 1/3 %*	Test Wt	Protein	Revenue/acre††	Revenue Rank
WB9653	67.5	86	57.0	14.9	\$331.21	3
LCS Trigger	67.1	86	57.1	14.1	\$284.99	27
MS Chevelle	66.4	86	57.4	14.3	\$292.74	20
SY Valda	66.3	86	56.8	14.7	\$313.76	9
HRS 3504	66.1	71	57.5	14.6	\$312.95	10
SY Rustler	65.4	86	56.8	14.8	\$309.55	12
Surpass	65.2	86	57.1	15.1	\$329.70	4
SY Ingmart	64.8	86	57.6	14.9	\$317.93	8
Shelly†	64.2	86	57.4	14.5	\$293.59	18
Prevail	63.9	57	58.1	14.5	\$292.15	21
HRS 3100†	63.8	71	56.6	14.8	\$302.26	16
HRS 3419	63.8	43	56.1	14.5	\$291.67	22
Select	63.1	43	59.1	14.6	\$288.49	25
HRS 3530	63.0	29	56.9	15.3	\$328.84	5
WB9312†	62.4	57	57.4	14.3	\$275.47	30
Prosper	61.8	0	56.0	14.8	\$303.02	15
RB07	61.7	14	57.3	15.0	\$312.00	11
LCS Anchor†	61.6	43	57.5	15.5	\$331.54	2
Advance	61.4	14	57.4	14.7	\$290.79	23
Focus	61.2	29	58.7	15.3	\$319.40	7
Elgin-ND	60.9	14	56.3	15.1	\$308.35	13
Linkert	60.6	14	57.3	15.5	\$326.10	6
Faller	60.5	14	54.8	14.4	\$276.71	29
HRS 3616†	60.4	14	56.6	15.0	\$296.36	17
Brick	60.1	0	58.6	14.7	\$284.45	28
HRS 3361	59.8	14	55.7	14.9	\$293.19	19
Forefront	59.2	14	57.6	14.9	\$290.21	24
WB9507	58.3	14	55.0	14.9	\$285.95	26
Boost	58.3	0	56.3	15.2	\$304.29	14
Bolles	57.3	0	56.2	16.0	\$336.37	1
Trial Average	61.7	-	57.2	15.0	\$304.13	-
LSD(0.05)‡	1.7	-	0.6	0.4	-	-
CV(%)¶	5.3	-	1.9	5.6	-	-

† New entry in 2016, not previously tested. ‡ Yield, test weight, or protein value required (\geq LSD) to determine if varieties are statistically different than one another, ¶ Coefficient of Variation (C.V.) is a measure of the variability of the experimental error, 15% or less is acceptable.

*Top 1/3% is the percentage of time a variety yields in the top 1/3 of a location (includes some experimental lines not reported). ††Revenue is based on a cash price of \$4.25/bu and a 10 year average Minneapolis grain exchange protein premium/discount schedule.

Table 5. 2016 West River Spring Wheat Performance - Yield (13% M), Test Weight (harvest M), and Protein (12% M). Varieties yielding in the upper 1/3 of each trial location are denoted by gray shading.

Variety	Crop Zone - 6						Crop Zone - 6		
	Draper			Wall			West River		
	Yield	Test Wt	Protein	Yield	Test Wt	Protein	Yield	Test Wt	Protein
Advance	43.4	55.7	15.3	35.6	54.2	14.2	39.5	55.0	14.7
LCS Anchor†	39.9	57.7	16.8	45.8	57.7	14.8	42.8	57.7	15.8
Bolles	37.8	56.6	18.5	27.8	53.8	15.7	32.8	55.2	17.1
Boost	35.6	56.2	15.8	33.3	53.3	14.3	34.4	54.7	15.1
Brick	41.4	58.6	15.1	39.2	56.9	13.9	40.3	57.8	14.5
MS Chevelle	42.9	56.5	14.5	37.2	54.0	13.4	40.0	55.2	14.0
Elgin-ND	39.4	55.7	16.0	39.2	55.5	14.3	39.3	55.6	15.1
Faller	38.1	53.8	15.4	40.4	52.9	13.3	39.3	53.3	14.4
Focus	37.6	59.1	16.9	41.2	58.4	14.4	39.4	58.7	15.6
Forefront	29.5	58.1	15.5	35.9	56.4	14.1	32.7	57.3	14.8
HRS 3100†	41.8	54.6	15.7	41.3	53.1	13.6	41.5	53.8	14.6
HRS 3361	33.5	54.0	15.8	36.5	53.2	14.0	35.0	53.6	14.9
HRS 3419	32.8	55.4	16.2	35.0	52.1	14.3	33.9	53.8	15.3
HRS 3504	41.0	53.6	15.1	42.6	53.1	13.2	41.8	53.3	14.2
HRS 3530	46.8	55.8	16.8	37.0	53.3	14.8	41.9	54.5	15.8
HRS 3616†	38.7	55.5	16.0	36.5	56.9	14.0	37.6	56.2	15.0
SY Ingmart†	38.6	57.9	17.2	38.1	54.2	14.4	38.4	56.1	15.8
Linkert	39.1	57.0	15.9	38.5	56.2	14.5	38.8	56.6	15.2
Prevail	48.7	57.0	14.4	38.6	56.2	13.7	43.7	56.6	14.1
Prosper	40.4	51.5	15.6	39.2	52.8	13.2	39.8	52.2	14.4
RB07	43.1	57.2	15.7	40.0	55.8	14.1	41.6	56.5	14.9
SY Rustler	43.4	55.9	15.3	41.1	55.1	14.2	42.2	55.5	14.8
Select	45.5	57.5	14.9	35.8	56.5	13.9	40.6	57.0	14.4
Shelly†	44.0	57.0	15.9	43.7	56.1	13.4	43.9	56.5	14.6
Surpass	44.9	54.7	15.1	41.7	54.7	13.3	43.3	54.7	14.2
LCS Trigger	43.5	56.9	15.3	44.0	54.1	13.7	43.7	55.5	14.5
SY Valda	49.7	56.4	15.4	44.5	55.3	13.5	47.1	55.8	14.4
WB9312†	41.3	56.6	15.2	34.6	51.8	13.9	37.9	54.2	14.6
WB9507	41.0	54.4	15.6	37.8	53.0	13.8	39.4	53.7	14.7
WB9653	43.8	55.2	14.6	44.3	53.5	13.1	44.0	54.3	13.9
Trial Average	40.2	56.4	15.7	39.2	55.0	14.0	39.7	55.7	14.9
LSD(0.05)‡	4.8	1.7	0.6	6.3	1.9	0.5	3.9	1.3	0.4
CV(%)¶	8.5	2.2	2.4	11.5	2.5	2.6	10.1	2.3	2.5

† New entry in 2016, not previously tested.

‡ Yield, test weight, or protein value required (\geq LSD) to determine if varieties are statistically different than one another, ¶ Coefficient of Variation (C.V.) is a measure of the variability of the experimental error, 15% or less is acceptable.

Table 6. 2016 West River Spring Wheat Performance, sorted by yield (13% M).

Variety	Crop Zone 6#					
	West River Average					
	Yield	Top 1/3 %*	Test Wt	Protein	Revenue/acre††	Revenue Rank
SY Valda	47.1	100	55.8	14.4	\$215.26	4
WB9653	44.0	100	54.3	13.9	\$192.07	14
Shelly†	43.9	100	56.5	14.6	\$207.73	6
LCS Trigger	43.7	100	55.5	14.5	\$200.00	8
Prevail	43.7	50	56.6	14.1	\$185.53	19
Surpass	43.3	100	54.7	14.2	\$191.15	15
LCS Anchor†	42.8	50	57.7	15.8	\$237.44	2
SY Rustler	42.2	100	55.5	14.8	\$199.92	9
HRS 3530	41.9	50	54.5	15.8	\$239.02	1
HRS 3504	41.8	50	53.3	14.2	\$177.54	22
RB07	41.6	50	56.5	14.9	\$203.91	7
HRS 3100†	41.5	50	53.8	14.6	\$196.72	11
Select	40.6	50	57.0	14.4	\$185.70	18
Brick	40.3	0	57.8	14.5	\$184.22	21
MS Chevelle	40.0	50	55.2	14.0	\$174.56	25
Prosper	39.8	0	52.2	14.4	\$175.49	24
Advance	39.5	50	55.0	14.7	\$187.07	16
Focus	39.4	50	58.7	15.6	\$218.44	3
WB9507	39.4	0	53.7	14.7	\$186.48	17
Elgin-ND	39.3	0	55.6	15.1	\$198.79	10
Faller	39.3	0	53.3	14.4	\$173.28	28
Linkert	38.8	0	56.6	15.2	\$196.26	12
SY Ingmar†	38.4	0	56.1	15.8	\$212.69	5
WB9312†	37.9	0	54.2	14.6	\$173.41	27
HRS 3616†	37.6	0	56.2	15.0	\$184.34	20
HRS 3361	35.0	0	53.6	14.9	\$171.53	29
Boost	34.4	0	54.7	15.1	\$174.25	26
HRS 3419	33.9	0	53.8	15.3	\$177.03	23
Bolles	32.8	0	55.2	17.1	\$192.39	13
Forefront	32.7	0	57.3	14.8	\$154.87	30
Trial Average	39.7	-	55.7	14.9	\$192.24	-
LSD(0.05)‡	3.9	-	1.3	0.4	-	-
CV(%)¶	10.1	-	2.3	2.5	-	-

† New entry in 2016, not previously tested. ‡ Yield, test weight, or protein value required (≥LSD) to determine if varieties are statistically different than one another, ¶ Coefficient of Variation (C.V.) is a measure of the variability of the experimental error, 15% or less is acceptable.

Bison was abandoned due to damage from chemical drift. *Top 1/3% is the percentage of time a variety yields in the top 1/3 of a location (includes some experimental lines not reported). ††Revenue is based on a cash price of \$4.25/bu and a 10 year average Minneapolis grain exchange protein premium/discount schedule.

Table 7. 2014-2016 (2 and 3-year averages) East River Yield (bu/ac @ 13% M) Performance - sorted by overall 3-year yield. Varieties yielding in the upper 1/3 of each trial location are denoted by gray shading.

Variety	Crop Zone - 1						Crop Zone - 2				Zone - 4	Crop Zones 1, 2, & 4	
	Aberdeen		Faulkton		Selby		South Shore		Volga		Miller	East River Average	
	2 year	3 year	2 year	3 year	2 year	3 year	2 year	3 year	2 year	3 year	2 year*	2 year	3 year
HRS 3419	50.2	59.4	56.0	59.0	77.3	77.9	57.6	58.4	78.5	76.4	63.3	62.5	65.4
Prevail	51.6	58.7	54.3	57.5	80.7	78.4	57.8	62.8	75.4	73.5	58.8	62.5	64.8
MS Chevelle	52.1	59.9	55.9	58.3	85.9	84.3	53.4	53.5	69.8	67.4	66.3	63.2	64.7
HRS 3504	50.5	59.2	58.5	59.2	85.8	81.9	50.3	54.5	72.0	69.3	61.5	63.2	64.4
Surpass	47.0	56.5	53.2	57.5	84.6	83.6	54.3	59.7	69.6	70.6	57.2	61.1	64.3
Faller	48.1	58.6	47.9	54.4	90.1	89.1	45.2	54.3	67.6	69.1	60.7	58.7	63.9
Prosper	46.5	57.3	51.8	56.3	86.7	87.8	45.2	53.7	64.4	66.5	61.4	58.0	63.3
RB07	47.7	56.9	55.4	58.3	87.5	85.9	52.6	53.3	66.8	64.6	53.9	60.8	62.4
Focus	46.7	54.7	54.3	57.7	80.7	79.7	52.9	58.5	67.0	68.9	52.3	59.1	62.1
Advance	50.5	58.5	47.2	52.7	87.2	85.4	51.3	53.5	64.0	62.6	59.8	59.6	62.0
Brick	47.1	53.8	49.0	54.0	83.1	78.7	51.8	53.9	65.6	67.1	57.6	58.5	60.8
Boost	49.0	57.0	51.2	54.9	72.6	72.2	51.0	56.5	66.7	65.4	58.8	57.4	60.4
Forefront	45.9	55.3	51.4	56.4	80.0	72.3	53.5	56.4	69.1	69.2	52.6	58.1	60.2
Select	50.0	58.5	46.4	52.7	81.3	77.0	51.6	50.2	68.6	67.0	56.5	58.6	60.1
Linkert	49.8	54.7	54.5	55.0	77.2	78.1	51.4	54.2	63.3	60.7	54.1	58.4	59.5
Elgin	47.0	54.2	51.1	54.1	74.1	74.9	47.2	52.2	62.3	61.8	56.6	56.3	58.8
Bolles	42.4	53.0	49.8	54.1	76.9	76.5	46.5	51.5	63.1	63.3	54.9	54.9	58.7
HRS 3361	44.4	53.7	53.6	56.4	74.9	74.2	43.3	50.3	61.0	62.8	54.3	54.3	58.2
WB9507	42.3	53.0	47.4	53.7	86.6	83.3	31.2	42.0	47.6	57.2	60.2	50.9	57.3
LCS Trigger	57.9	-	62.2	-	95.7	-	62.6	-	78.7	-	-	69.8	-
SY Valda	51.9	-	55.4	-	89.6	-	54.2	-	75.9	-	-	65.1	-
WB9653	52.6	-	59.5	-	87.4	-	50.1	-	73.7	-	-	64.1	-
SY Rustler	49.0	-	57.6	-	86.1	-	54.0	-	75.5	-	-	63.6	-
HRS 3530	45.1	-	53.2	-	91.3	-	46.2	-	67.2	-	-	59.6	-
HRS 3100†	-	-	-	-	-	-	-	-	-	-	-	-	-
HRS 3616†	-	-	-	-	-	-	-	-	-	-	-	-	-
LCS Anchor†	-	-	-	-	-	-	-	-	-	-	-	-	-
Shelly†	-	-	-	-	-	-	-	-	-	-	-	-	-
SY Ingmar†	-	-	-	-	-	-	-	-	-	-	-	-	-
WB9312†	-	-	-	-	-	-	-	-	-	-	-	-	-
Trial Average	48.4	56.4	55.2	57.6	82.7	80.0	50.8	54.2	68.0	66.5	57.8	60.4	62.3
LSD(0.05)‡	3.0	2.7	5.1	4.0	3.4	2.9	3.1	2.6	3.4	2.7	3.7	5.9	5.2

* Miller 2-year data is from 2014 and 2016.

† New entry in 2016, not previously tested.

‡ Yield value required (≥LSD) to determine if varieties are statistically different than one another.

Table 8. 2014-2016 (2 and 3-year averages) West River Yield (bu/ac @ 13% M) Performance - sorted by overall 3-year yield. Varieties yielding in the upper 1/3 of each trial location are denoted by gray shading.

Variety	Crop Zone - 7	Crop Zone - 6		Crop Zone 6	
	Draper	Wall		West River Average	
	2 year*	2 year	3 year	2 year	3 year
Prevail	62.1	47.5	48.0	46.6	50.3
WB9507	54.8	46.7	52.2	44.2	49.8
Surpass	58.7	47.8	47.9	45.8	49.4
Prosper	52.6	48.9	50.7	45.7	49.3
MS Chevelle	53.3	48.2	50.8	45.8	48.9
RB07	54.6	49.5	48.8	46.8	48.3
Elgin	52.9	45.1	47.3	42.5	47.1
Faller	51.1	48.6	48.8	44.8	47.0
Select	56.9	43.3	44.5	42.7	46.6
HRS 3504	50.9	48.5	48.3	45.4	46.6
Focus	51.5	44.2	48.0	41.3	46.4
Brick	52.5	44.5	47.0	42.5	46.3
Advance	54.7	44.1	44.1	42.8	46.0
Linkert	51.5	43.9	45.8	41.5	45.7
HRS 3419	46.9	48.0	50.7	43.2	45.4
Forefront	50.6	40.8	44.6	36.8	43.8
Bolles	48.1	38.8	43.7	37.4	43.0
HRS 3361	48.2	41.2	43.0	38.1	42.9
Boost	45.0	43.9	44.5	40.7	41.4
SY Valda	-	54.1	-	51.9	-
LCS Trigger	-	52.1	-	48.8	-
SY Rustler	-	50.6	-	47.7	-
HRS 3530	-	48.5	-	47.0	-
WB9653	-	47.8	-	45.5	-
HRS 3100†	-	-	-	-	-
HRS 3616†	-	-	-	-	-
LCS Anchor†	-	-	-	-	-
Shelly†	-	-	-	-	-
SY Ingmar†	-	-	-	-	-
WB9312†	-	-	-	-	-
Trial Average	52.2	46.5	47.3	44.6	45.7
LSD(0.05)‡	5.3	4.2	4.6	5.3	5.6

* Draper 2-year data is from 2014 and 2016.

† New entry in 2016, not previously tested.

‡ Yield value required (≥LSD) to determine if varieties are statistically different than one another.

Table 9. List of spring wheat varieties tested in 2016 along with origin, agronomic and grain quality characteristics, and disease ratings.

Variety	Testing and Origin		Agronomic Characteristics			Grain Quality		Disease Ratings¶				
	Years Tested in SD	Origin†-Year	Relative Hd‡ (days)	Relative Ht‡ (inches)	Lodging Score§	Test Wt.	Protein %	Stripe Rust	Stem Rust	Leaf Rust	2016 BLS	2016 FHB (scab)
Advance	5+	SD-11	4	-3	1.5	Avg.	Avg.	MR	R-MR	MR-MS	MS	MR
LCS Anchor	new	LCS-16	2	-4	1.4	Avg.	Good	(MR)	-	(MR)	MR	MS
Bolles	4	MN-15	6	-1	1.2	Low	High	MR	-	(R)#	MS	MS
Boost	4	SD-exp	6	-1	1.2	Avg.	Avg.	MS	-	MR	MR	MS
Brick	5+	SD-08	0	0	1.4	Good	Avg.	MS	R	MR-MS	MR	MR
MS Chevelle	3	MS-14	2	-3	1.2	Avg.	Low	(MR)	(MR)	(R)	S	MS
Elgin-ND	5+	ND-12	3	2	1.3	Avg.	Avg.	MS	R	MS	MS	MS
Faller	5+	ND-07	6	-1	1.3	Low	Low	S	R	MS	MS	MS
Focus	4	SD-15	-1	2	1.4	Good	Avg.	MS	-	S	MR	MR
Forefront	5+	SD-11	1	2	1.3	Avg.	Avg.	MR	R-MR	MS	MR	MR
HRS 3100	new	CP-16	5	-3	1.0	Avg.	Avg.	-	-	-	MS	MS
HRS 3361	3	CP-14	5	-3	1.0	Low	Avg.	(MS)	(MR)	(MR)	MS	MS
HRS 3419	3	CP-15	6	-2	1.2	Low	Avg.	(MR)	(R)	(R)	S	MS
HRS 3504	2	CP-15	5	-3	1.0	Avg.	Avg.	(MR)	(MR)	(MR)	MS	MS
HRS 3530	2	CP-16	6	1	1.3	Avg.	Avg.	(MS)	(R)	(R)	MS	MS
HRS 3616	new	CP-17	5	-2	1.0	Avg.	Avg.	-	-	-	MS	MS
SY Ingmar	new	SY-14	5	-3	1.1	Avg.	Avg.	-	(R)	(MR)	MR	MR
Linkert	5+	MN-13	4	-4	1.0	Avg.	Good	MR	-	MR-MS	MR	MS
Prevail	5+	SD-13	1	-2	1.4	Avg.	Avg.	MR	MR	MS	MR	MR
Prosper	5+	ND-11	5	-1	1.6	Low	Avg.	S	R	MS	MS	MS
RB07	5+	MN-07	3	-2	1.4	Avg.	Avg.	MS	MR	MR	MS	MS
SY Rustler	2	SY-16	3	-3	1.3	Avg.	Avg.	MR	-	MR	MR	MS
Select	5+	SD-09	0	-1	1.5	Good	Avg.	MR	R-MR	MR-MS	MR	MR
Shelly	new	MN-16	7	-3	1.2	Avg.	Avg.	-	-	-	MS	MS
Surpass	3	SD-exp	1	-1	1.5	Avg.	Avg.	-	-	-	MR	MR
LCS Trigger	new	LCS-15	7	-1	1.1	Avg.	Low	MS	(R)	(R)	MS	S
SY Valda	new	SY-15	4	-3	1.2	Avg.	Avg.	MS	-	MR	MR	MR
WB9312	new	WB-16	2	-3	1.4	Avg.	Low	-	-	-	MR	MS
WB9507	3	WB-14	4	-1	1.3	Low	Avg.	(MR)	(MR)	(MR)	MR	MS
WB9653	new	WB-15	5	-4	1.1	Avg.	Avg.	MR	-	MR	MR	MR

† CP, Croplan; LCS, Limagrain Cereal Seeds; MN, Minnesota; MS, Meridian Seeds; ND, North Dakota; SD, South Dakota; SY, Syngenta; WB, Westbred and - (Year of Release)

‡ Difference in days to heading and height in inches compared to **Brick (31 inches)** statewide.

§ Lodging scores range from 1 (perfectly standing) to 5 (completely flat).

¶ Disease ratings: R, resistant; MR, moderately resistant; MS, moderately susceptible; S, susceptible.

Estimated ratings (X), based on information provided by the entity that submitted the variety.