

## 2019 East Summary, Northern Plains

Variety	Yield (bu/ac)							Test Wt. lbs/bu	Protein %	Lodging 1-9	Heading 1-9	Height 1-9	BLS 1-9	FHB 1-9
	Glyndon MN	Hillsboro ND	McVile ND	Cando ND	Park River ND	Crookston MN	Avg.							
Faller	78.4	71.9	103.0	71.7	100.1	86.3	84.7	58.5	13.7	7	6	6	4	2
<b>SY Valda</b>	76.2	74.2	100.2	72.5	98.1	76.2	82.4	58.5	13.8	4	5	5	3	3
WB-Mayville	78.1	63.6	93.1	68.8	95.1	82.3	79.7	58.5	14.4	3	4	5	5	7
HRS 3530	73.7	68.9	99.1	61.6	93.8	80.9	79.2	58.5	14.8	6	6	6	5	3
WB9590	66.3	64.8	95.7	71.0	99.5	80.6	79.2	58.1	14.6	3	4	4	6	5
LCS Cannon	73.1	68.7	97.1	68.3	88.5	81.3	79.1	59.5	14.2	4	2	5	4	2
WB9479	64.0	67.5	92.5	68.4	96.2	85.3	78.6	58.8	15.0	3	4	4	6	6
LCS Rebel	76.6	69.7	92.8	64.9	95.5	72.1	78.2	59.6	14.5	6	3	6	3	3
MN-Washburn	72.2	67.4	95.1	65.5	95.4	71.4	77.4	58.6	13.9	3	6	5	3	3
WB9719	59.6	74.6	93.2	63.5	90.8	80.0	76.4	60.0	14.1	4	6	5	5	6
<b>SY 611 CL<sup>2</sup></b>	71.5	63.5	91.9	70.0	92.4	70.8	76.3	58.7	14.3	4	4	4	4	3
Shelly	70.8	63.4	90.4	65.9	98.7	67.6	75.8	58.2	13.9	6	6	5	4	3
<b>SY McCloud</b>	65.4	58.6	92.3	65.0	93.1	74.4	74.3	59.2	14.7	4	4	5	5	3
<b>SY Ingmar</b>	75.1	65.1	91.8	70.5	87.1	57.1	74.1	59.3	14.7	3	5	5	3	4
<b>Knudson</b>	64.4	61.3	86.5	65.8	91.8	61.4	71.6	57.6	13.6	6	5	5	4	4
<b>SY Longmire</b>	60.4	62.7	91.8	63.0	90.0	59.0	70.9	58.4	14.7	4	4	5	4	6
Lang-MN	66.4	60.5	83.0	67.1	87.1	63.2	70.9	58.8	14.9	6	6	6	4	2
<b>SY Soren</b>	65.9	47.7	85.3	71.9	87.2	67.0	70.5	58.5	14.6	3	4	4	5	3
Glenn	58.8	60.3	78.8	68.3	83.0	69.4	69.4	60.3	14.8	7	3	6	5	2
ND-VitPro	66.1	61.0	82.0	60.6	84.3	62.9	69.1	59.8	15.0	6	4	5	3	2
Linkert	66.9	57.6	79.7	60.5	86.0	60.3	68.2	58.2	15.0	3	5	5	4	4
Bolles	57.7	57.7	78.5	63.0	91.7	58.5	67.6	57.7	16.1	6	7	5	5	3
Mean	70.1	64.3	91.1	66.6	91.1	72.0	75.5	58.8	14.4	4.0	4.6		3.7	3.5
LSD (5%)	8.9	8.5	8.4		6.5	10.4	5.3	0.7	0.4	1.1	0.5		2	
CV %	7.8	8.1	5.7	8.5	3.3	8.9	6.9	1.0	2.2	17.0	10.5		31.2	

Numerical ratings: Heading: 1 = early; Height: 1 = short; Lodging: 1 = no lodging; Disease 1 = tolerant

All seed treated with CruiserMaxx® Vibrance® Cereals

These agronomic assessments are made by Syngenta scientists and reflect each variety's relative performance within these characteristics through the 2019 crop year. Specific conditions may cause variations within those characteristics. These relative protection values are based on current pest and disease populations. These have been known to shift periodically and may cause changes in specific evaluations. Resistance to many other diseases and pests is sensitive to environmental conditions, plant development stages and the presence and intensity of other diseases which may result in specific evaluation inconsistencies. This chart is updated annually to reflect the most current trends.

Syngenta Data, 2017-2019

## Three-Year East Summary, Northern Plains Ranked by Three-Year Yield Average

Variety	Economic Return <sup>1</sup>		Yield (bu/ac)					3-Yr Avg						
	\$/Bu	Gross \$/A	2017	2018	2019	2-yr Avg	3-yr Avg	Test Wt. lbs/bu	Protein %	Heading 1-9	Height 1-9	Lodging 1-9	BLS 1-9	FHB 1-9
Faller	\$4.54	\$425.84	107.0	89.6	84.7	87.2	93.8	59.4	13.8	6	6	7	4	3
<b>SY Valda</b>	\$4.58	\$409.11	99.2	86.6	82.4	84.5	89.4	59.4	13.9	5	5	5	3	4
HRS 3530	\$5.18	\$452.24	99.0	83.6	79.2	81.4	87.3	59.3	14.7	6	6	6	5	2
Shelly	\$4.66	\$404.91	104.0	81.2	75.6	78.4	87.0	59.3	14.0	6	5	6	4	3
WB-Mayville	\$5.26	\$449.28	95.0	81.4	79.7	80.6	85.4	59.5	14.8	3	4	2	6	7
<b>SY McCloud</b>	\$5.47	\$449.62	90.0	82.2	74.3	78.2	82.2	60.3	15.1	5	5	4	5	4
<b>SY Ingmar</b>	\$5.39	\$443.04	89.8	82.4	74.2	78.3	82.1	60.1	15.0	5	4	2	3	3
<b>Knudson</b>	\$4.63	\$365.50	89.5	75.7	71.6	73.6	78.9	58.8	14.0	5	5	6	4	5
<b>SY Soren</b>	\$5.42	\$425.84	87.7	77.5	70.5	74.0	78.6	59.1	15.0	4	4	2	5	3
Linkert	\$5.63	\$438.75	88.5	77.0	68.2	72.6	77.9	59.3	15.3	4	4	2	4	4
Bolles	\$6.47	\$501.64	91.2	73.7	67.6	70.6	77.5	58.6	16.3	6	6	6	4	3
Glenn	\$5.45	\$410.83	85.5	71.4	69.4	70.4	75.4	61.1	15.0	2	6	7	5	3
WB9590				82.7	79.2	81.0		59.7	14.7	4	4	3	6	5
WB9479				81.5	78.6	80.0		60.3	15.1	4	4	2	6	6
<b>SY 611 CL<sup>2</sup></b>				76.1	76.3	76.2		59.8	14.5	4	4	4	4	3
Lang-MN				71.1	70.9	71.0		59.9	15.3	6	6	7	4	2
ND-VitPro				71.9	69.1	70.5		61.0	15.1	5	6	6	3	3
Mean			94.2	80.4	75.5	77.3	83.3	60.5	14.7	4.6	5.0	4.8	4.0	4.0
LSD (5%)			5.6	5.6	5.3	4.0	3.5	0.7	0.4	0.4		1.6		
CV %			5.8	5.6	6.9	5.7	6.9	1.5	3.3	12.7		27.1		
No. of Locs.			5	5	6	11	16	16	16	16	16	8	2	2

Numerical ratings: Heading: 1 = early; Height: 1 = short; Lodging: 1 = no lodging; Disease 1 = tolerant

All seed treated with CruiserMaxx® Vibrance® Cereals

2017-2018 Locations: Argusville, Glyndon, McVie, Park River, ND and Crookston, MN

2019 Locations: Hillsboro, Glyndon, McVie, Park River, Cando, ND, and Crookston, MN

<sup>1</sup> Economic return calculated using Sept. local cash grain price of \$4.63 for 14% protein and 10-year average MGE protein premium/discounts (Mendota Wheat & Milling Associates).

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Syngenta Data, 2017-2019

## Three-Year East Summary, Northern Plains Ranked by Economic Return

Variety	Economic Return <sup>1</sup>		Yield (bu/ac)					3-Yr Avg						
	\$/Bu	Gross \$/A	2017	2018	2019	2-yr Avg	3-yr Avg	Test Wt. lbs/bu	Protein %	Heading 1-9	Height 1-9	Lodging 1-9	BLS 1-9	FHB 1-9
Bolles	\$6.47	\$501.64	91.2	73.7	67.6	70.6	77.5	58.6	16.3	6	6	6	4	3
HRS 3530	\$5.18	\$452.24	99	83.6	79.2	81.4	87.3	59.3	14.7	6	6	6	5	2
<b>SY McCloud</b>	\$5.47	\$449.62	90	82.2	74.3	78.2	82.2	60.3	15.1	5	5	4	5	4
WB-Mayville	\$5.26	\$449.28	95	81.4	79.7	80.6	85.4	59.5	14.8	3	4	2	6	7
<b>SY Ingmar</b>	\$5.39	\$443.04	89.8	82.4	74.2	78.3	82.1	60.1	15	5	4	2	3	3
Linkert	\$5.63	\$438.75	88.5	77	68.2	72.6	77.9	59.3	15.3	4	4	2	4	4
Faller	\$4.54	\$425.84	107	89.6	84.7	87.2	93.8	59.4	13.8	6	6	7	4	3
<b>SY Soren</b>	\$5.42	\$425.84	87.7	77.5	70.5	74	78.6	59.1	15	4	4	2	5	3
Glenn	\$5.45	\$410.83	85.5	71.4	69.4	70.4	75.4	61.1	15	2	6	7	5	3
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<b>Knudson</b>	\$4.63	\$365.50	89.5	75.7	71.6	73.6	78.9	58.8	14	5	5	6	4	5
WB9590				82.7	79.2	81		59.7	14.7	4	4	3	6	5
WB9479				81.5	78.6	80		60.3	15.1	4	4	2	6	6
<b>SY 611 CL<sup>2</sup></b>				76.1	76.3	76.2		59.8	14.5	4	4	4	4	3
Lang-MN				71.1	70.9	71		59.9	15.3	6	6	7	4	2
ND-VitPro				71.9	69.1	70.5		61	15.1	5	6	6	3	3
Mean			94.2	80.4	75.5	77.3	83.3	60.5	14.7	4.6	5.0	4.8	4.0	4.0
LSD (5%)			5.6	5.6	5.3	4.0	3.5	0.7	0.4	0.4		1.6		
CV %			5.8	5.6	6.9	5.7	6.9	1.5	3.3	12.7		27.1		
No. of Locs.			5	5	6	11	16	16	16	16	16	8	2	2

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2017-2018 Locations: Argusville, Glyndon, McVille, Park River, ND and Crookston, MN

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