

2020 XtendFlex Variety Trials - Early Season Observations



Trial	Location	Previous crop/ Tillage System	Planting Date	Observation Date	Seeding rate seeds/acre
Williams	Panhandle	corn/strip-till	1-May	3-Jun	50,000
Patterson	Spearman	hay/strip till	5-May	28-May	65,000
Davis	Pampa	corn/disk	15-May	8-Jun	50,000
Cartrite (XtendFlex entries)	Sunray	corn/strip-till	2-May	11-Jun	65,000

Plants/acre (count)	Panhandle	Spearman	Pampa	Sunray*	Mean across sites
DP 1820 B3XF	29,621	46,174	35,138	29,621	35,139
DP 2012 B3XF	35,138	53,724	43,560	40,366	43,197
DP 2020 B3XF	36,300	52,853	47,335	43,560	45,012
NG 2982 B3XF	37,752	51,401	41,527	38,042	42,181
NG 3930 B3XF	42,689	58,371	45,883	38,333	46,319
ST 4480 B3XF	29,624	49,077	37,462	33,106	37,317
Mean	35,187	51,933	41,818	37,171	41,527
CV, %	13.9	6.1	10.5	10.0	--
Prob>F	0.0569	0.0133	0.0411	0.0111	--
LSD 0.10	7,231	4,706	6,468	5,515	--

Establishment (%)	Panhandle	Spearman	Pampa	Sunray*	Mean across sites
DP 1820 B3XF	59.3	71.0	70.3	45.6	61.6
DP 2012 B3XF	70.3	82.6	87.1	62.1	75.5
DP 2020 B3XF	72.6	81.3	94.7	67.0	78.9
NG 2982 B3XF	75.5	79.1	83.1	58.5	74.1
NG 3930 B3XF	85.4	89.8	91.8	59.0	81.5
ST 4480 B3XF	59.2	75.5	74.9	50.9	65.1
Mean	70.4	79.9	83.6	57.2	72.8
CV, %	13.9	6.1	10.5	10.0	--
Prob>F	0.0569	0.0137	0.0409	0.0111	--
LSD 0.10	14.5	7.3	12.9	8.5	--

Vigor (1-5, 5 best)	Panhandle	Spearman	Pampa	Sunray*	Mean across sites
DP 1820 B3XF	2.8	3.7	3.5	3.0	3.3
DP 2012 B3XF	3.2	4.2	4.2	3.3	3.7
DP 2020 B3XF	3.3	4.0	4.3	3.5	3.8
NG 2982 B3XF	3.2	4.2	4.3	3.7	3.9
NG 3930 B3XF	3.2	4.5	4.5	3.7	4.0
ST 4480 B3XF	3.2	4.2	4.0	3.2	3.7
Mean	3.1	4.1	4.1	3.4	3.7
CV, %	9.0	6.9	6.1	13.1	--
Prob>F	0.4651	0.0808	0.0083	0.4062	--
LSD 0.10	NS	0.4	0.4	NS	--

* - Note that Sunray observations were taken on June 11, 2 days after June 9 wind event. Stand counts included plants that were cut off by the high winds, vigor was highly variable and thus ratings were impacted.

Source: Dr. Randy Boman, Cotton Agronomics Manager, Windstar Inc.

2020 XtendFlex Variety Trials - In-Season Observations



Trial	Location	Previous crop/	Early bloom observations	Cutout observations	NACB observation	Storm resistance observation
		Tillage System	date	date	date	date
Williams	Panhandle	corn/strip-till	15-Jul	20-Aug	28-Sep	.
Patterson	Spearman	hay/strip till	28-Jul	27-Aug	30-Sep	27-Nov
Davis	Pampa	corn/disk	21-Jul	26-Aug	6-Oct	7-Dec
Cartrite (XtendFlex entries)	Sunray	corn/strip-till	28-Jul	27-Aug	30-Sep	20-Nov

Plant height at early bloom (inches)	Panhandle	Spearman	Pampa	Sunray*	Mean across sites
DP 1820 B3XF	18.9	25.0	20.5	33.3	24.4
DP 2012 B3XF	18.1	24.7	20.7	32.0	23.9
DP 2020 B3XF	19.4	24.4	20.1	32.1	24.0
NG 2982 B3XF	17.8	23.1	19.5	28.2	22.2
NG 3930 B3XF	16.5	24.0	20.1	30.9	22.9
ST 4480 B3XF	17.4	23.1	19.6	28.9	22.3
Mean	18.0	24.1	20.1	30.9	23.3
CV, %	6.2	3.6	5.4	4.8	--
Prob>F	0.0907	0.0849	0.6968	0.0117	--
LSD 0.10	1.7	1.3	NS	2.2	--

Plant height at cutout (inches)	Panhandle	Spearman	Pampa	Sunray*	Mean across sites
DP 1820 B3XF	27.7	29.1	29.4	35.7	30.5
DP 2012 B3XF	26.1	28.9	29.8	35.1	30.0
DP 2020 B3XF	24.4	27.1	28.9	35.8	29.1
NG 2982 B3XF	23.1	25.7	26.0	31.7	26.6
NG 3930 B3XF	24.5	27.4	28.2	33.9	28.5
ST 4480 B3XF	27.3	27.1	28.0	32.6	28.8
Mean	25.5	27.6	28.4	34.1	28.9
CV, %	3.7	3.0	2.3	3.0	--
Prob>F	0.0008	0.0038	0.0004	0.0027	--
LSD 0.10	1.4	1.2	1.0	1.5	--

Delta plant height from early bloom through cutout (inches)	Panhandle	Spearman	Pampa	Sunray*	Mean across sites
DP 1820 B3XF	8.9	4.1	8.9	2.4	6.1
DP 2012 B3XF	7.9	4.2	9.1	3.1	6.1
DP 2020 B3XF	5.0	2.7	8.8	3.7	5.1
NG 2982 B3XF	5.3	2.6	6.5	3.5	4.5
NG 3930 B3XF	8.0	3.4	8.1	3.0	5.6
ST 4480 B3XF	9.9	4.0	8.4	3.7	6.5
Mean	7.5	3.5	8.3	3.2	5.6
CV, %	20.4	20.9	13.9	62.6	--
Prob>F	0.0163	0.0752	0.1676	0.9575	--
LSD 0.10	2.3	1.1	NS	NS	--

Terminal growth rate from early bloom through cutout (inches/day)	Panhandle	Spearman	Pampa	Sunray*	Mean across sites
DP 1820 B3XF	0.25	0.14	0.25	0.08	0.18
DP 2012 B3XF	0.22	0.14	0.25	0.10	0.18
DP 2020 B3XF	0.14	0.09	0.24	0.13	0.15
NG 2982 B3XF	0.15	0.09	0.18	0.12	0.13
NG 3930 B3XF	0.22	0.11	0.23	0.10	0.17
ST 4480 B3XF	0.27	0.13	0.23	0.12	0.19
Mean	0.21	0.12	0.23	0.11	0.17
CV, %	20.4	20.9	13.9	62.5	--
Prob>F	0.0167	0.0772	0.1654	0.9571	--
LSD 0.10	0.06	0.04	NS	NS	--

Nodes above white flower at early bloom (nodes)	Panhandle	Spearman	Pampa	Sunray*	Mean across sites
DP 1820 B3XF	8.3	8.1	10.1	10.0	9.1
DP 2012 B3XF	8.1	8.1	9.5	10.1	9.0
DP 2020 B3XF	7.9	8.3	9.3	9.7	8.8
NG 2982 B3XF	7.4	7.6	8.8	9.3	8.3
NG 3930 B3XF	7.9	7.5	9.6	9.5	8.6
ST 4480 B3XF	8.6	9.3	10.2	10.6	9.7
Mean	8.0	8.2	9.6	9.9	8.9
CV, %	5.0	4.8	4.6	3.2	--
Prob>F	0.0570	0.0026	0.0239	0.0049	--
LSD 0.10	0.6	0.6	0.7	0.5	--

Nodes above white flower at cutout (nodes)	Panhandle	Spearman	Pampa	Sunray*	Mean across sites
DP 1820 B3XF	2.1	1.5	1.2	2.4	1.8
DP 2012 B3XF	2.1	1.3	1.4	2.3	1.8
DP 2020 B3XF	2.1	0.5	1.0	2.4	1.5
NG 2982 B3XF	1.5	0.3	0.7	2.1	1.2
NG 3930 B3XF	2.0	0.6	1.3	2.1	1.5
ST 4480 B3XF	3.7	1.3	2.1	2.5	2.4
Mean	2.2	0.9	1.3	2.3	1.7
CV, %	28.4	50.7	18.7	11.5	--
Prob>F	0.0315	0.0298	0.0007	0.5151	--
LSD 0.10	0.9	0.7	0.4	NS	--

Delta NAWF from early bloom through cutout (nodes)	Panhandle	Spearman	Pampa	Sunray*	Mean across sites
DP 1820 B3XF	6.3	6.6	8.9	7.6	7.4
DP 2012 B3XF	6.0	6.7	8.1	7.9	7.2
DP 2020 B3XF	5.8	7.9	8.3	7.3	7.3
NG 2982 B3XF	5.9	7.3	8.1	7.1	7.1
NG 3930 B3XF	5.9	6.9	8.3	7.3	7.1
ST 4480 B3XF	4.9	8.0	8.1	8.1	7.3
Mean	5.8	7.2	8.3	7.6	7.2
CV, %	13.7	7.7	5.3	5.3	--
Prob>F	0.4821	0.0502	0.2114	0.0884	--
LSD 0.10	NS	0.8	NS	0.6	--

Nodes above cracked boll (NACB)	Panhandle	Spearman	Pampa	Sunray*	Mean across sites
DP 1820 B3XF	2.0	7.8	4.8	6.8	5.3
DP 2012 B3XF	2.0	8.2	4.8	6.7	5.4
DP 2020 B3XF	1.6	7.2	5.0	7.2	5.3
NG 2982 B3XF	0.8	3.9	3.0	6.2	3.5
NG 3930 B3XF	2.0	6.4	4.2	5.3	4.5
ST 4480 B3XF	3.3	8.6	6.1	6.4	6.1
Mean	2.0	7.0	4.7	6.4	5.0
CV, %	30.2	13.5	9.5	8.5	--
Prob>F	0.0101	0.0012	0.0002	0.0271	--
LSD 0.10	0.9	1.4	0.7	0.8	--

Storm resistance	Panhandle	Spearman	Pampa	Sunray*	Mean across sites
DP 1820 B3XF	.	4.7	3.8	4.2	4.2
DP 2012 B3XF	.	4.5	3.3	4.8	4.2
DP 2020 B3XF	.	4.7	3.2	4.0	4.0
NG 2982 B3XF	.	6.2	5.2	6.7	6.0
NG 3930 B3XF	.	4.5	4.0	4.7	4.4
ST 4480 B3XF	.	5.3	4.7	5.8	5.3
Mean	.	5.0	4.0	5.0	4.7
CV, %	.	4.4	12.9	5.0	--
Prob>F	.	0.0001	0.0001	0.0001	--
LSD 0.10	.	0.3	0.8	0.4	--

* Sunray trial had high Verticillium wilt infection rate.

Source: Dr. Randy Boman, Cotton Agronomics Manager, Windstar Inc.

2020 XtendFlex Variety Trials - Yield and Fiber Quality



Trial	Location	Previous crop/ Tillage System	Planting date	Harvest date
Williams	Panhandle	corn/strip-till	1-May	4-Nov
Patterson	Spearman	hay/strip till	5-May	27-Nov
Davis	Pampa	corn/disk	15-May	7-Dec
Cartrite (XtendFlex entries)	Sunray	corn/strip-till	2-May	20-Nov

Lint yield	Panhandle	Spearman	Pampa	Sunray*	Mean across sites
DP 1820 B3XF	1,044	1,781	1,556	993	1,344
DP 2012 B3XF	794	1,487	1,089	910	1,070
DP 2020 B3XF	905	1,450	1,090	917	1,091
NG 2982 B3XF	1,103	1,829	1,414	917	1,316
NG 3930 B3XF	1,034	1,739	1,360	1,073	1,302
ST 4480 B3XF	1,120	1,551	1,229	652	1,138
Mean	1,000	1,640	1,290	910	1,210
CV, %	9.7	3.5	2.3	4.4	--
Prob>F	0.0138	0.0001	0.0001	0.0001	--
LSD 0.10	143	85	44	59	--

Loan value	Panhandle	Spearman	Pampa	Sunray*	Mean across sites
DP 1820 B3XF	0.5651	0.4713	0.5080	0.3510	0.4739
DP 2012 B3XF	0.5552	0.4147	0.4197	0.3348	0.4311
DP 2020 B3XF	0.5616	0.4088	0.4401	0.3730	0.4459
NG 2982 B3XF	0.4714	0.2222	0.4699	0.2831	0.3617
NG 3930 B3XF	0.5561	0.4322	0.5007	0.3320	0.4553
ST 4480 B3XF	0.5619	0.3763	0.4742	0.3623	0.4437
Mean	0.5452	0.3876	0.4688	0.3394	0.44
CV, %	--	--	--	--	--
Prob>F	--	--	--	--	--
LSD 0.10	--	--	--	--	--

Net value	Panhandle	Spearman	Pampa	Sunray*	Mean across sites
DP 1820 B3XF	605	927	813	376	680
DP 2012 B3XF	466	699	468	339	493
DP 2020 B3XF	546	647	510	385	522
NG 2982 B3XF	530	527	733	312	526
NG 3930 B3XF	602	866	717	404	647
ST 4480 B3XF	671	654	607	248	545
Mean	570	720	641	344	569
CV, %	9.7	4.7	2.3	4.7	--
Prob>F	0.0151	0.0001	0.0001	0.0001	--
LSD 0.10	82	50	22	24	--

Micronaire	Panhandle	Spearman	Pampa	Sunray*	Mean across sites
DP 1820 B3XF	4.0	3.1	3.2	2.5	3.2
DP 2012 B3XF	3.6	2.9	2.6	2.5	2.9
DP 2020 B3XF	3.6	2.8	2.7	2.7	3.0
NG 2982 B3XF	3.1	3.0	3.0	2.5	2.9
NG 3930 B3XF	3.6	3.1	3.2	2.5	3.1
ST 4480 B3XF	3.7	2.9	3.0	2.6	3.1
Mean	3.6	3.0	3.0	2.6	3.0
CV, %	--	--	--	--	--
Prob>F	--	--	--	--	--
LSD 0.10	--	--	--	--	--

Staple	Panhandle	Spearman	Pampa	Sunray*	Mean across sites
DP 1820 B3XF	36.8	39.4	37.1	36.8	37.5
DP 2012 B3XF	36.0	36.8	36.3	34.8	36.0
DP 2020 B3XF	36.6	37.4	36.8	35.6	36.6
NG 2982 B3XF	36.4	37.8	35.6	34.8	36.2
NG 3930 B3XF	36.8	38.2	37.0	36.0	37.0
ST 4480 B3XF	37.0	38.1	37.1	35.7	37.0
Mean	36.6	38.0	36.7	35.6	36.7
CV, %	--	--	--	--	--
Prob>F	--	--	--	--	--
LSD 0.10	--	--	--	--	--

Leaf grade	Panhandle	Spearman	Pampa	Sunray*	Mean across sites
DP 1820 B3XF	2.1	3.9	2.8	2.5	2.8
DP 2012 B3XF	2.1	4.6	3.2	2.5	3.1
DP 2020 B3XF	2.3	4.4	3.1	2.7	3.1
NG 2982 B3XF	4.6	8.0	3.7	6.2	5.6
NG 3930 B3XF	2.2	5.1	2.8	4.2	3.6
ST 4480 B3XF	2.1	6.0	2.9	4.0	3.8
Mean	2.6	5.3	3.1	3.7	3.7
CV, %	--	--	--	--	--
Prob>F	--	--	--	--	--
LSD 0.10	--	--	--	--	--

* Sunray trial had high Verticillium wilt infection rate.

Source: Dr. Randy Boman, Cotton Agronomics Manager, Windstar Inc.