

2022 Field Trials - Windstar Affiliated Gins - Trials Conducted by Dr. Randy Boman, Cotton Agronomics Manager, Windstar Inc.



Table number	Cooperator	Trial type and comments	Location	Gin	Planting date	Harvest date
Table 1	George	Enlist Technology Commercial Variety Trial	Kress	Edcot	10-May	20-Nov
Table 2	Williams	Enlist Technology Commercial Variety Trial	Panhandle	Lonestar	5-May	1-Nov
Table 3	Friemel	Enlist Technology Commercial Variety Trial	Panhandle	Lonestar	17-May	21-Nov
Table 4	Gruhlkey	Enlist Technology Commercial Variety Trial	Wildorado	Top of Texas	9-May	3-Nov
Table 5	All Enlist	Four Common Enlist Entries Across Four Panhandle Sites - Yield, Fiber Quality, and Storm Resistance	--	--	--	--
Table 6	Broman	Mixed Technology Commercial Variety Trial	Wildorado	Top of Texas	12-May	2-Dec
Table 7	Kight	NG 3406 B2XF Commercial N Rate Trial	Gruver	Adobe Walls	19-May	31-Oct
Table 8	Davis	NG 3195 B3XF Commercial N Rate Trial	Pampa	Lonestar	18-May	5-Dec
Table 9	George	Reviton Harvest Aid Demonstration Commercial Classing Observations	Tulia	Lakeview	--	--

For full detailed reports including cultural practices, in-season plant observations, and visual storm resistance ratings go to www.windstarinc.com



Table 1. Harvest results for the center pivot irrigated Enlist technology cotton variety trial, George Farm, Kress, TX, 2022.

Entry	Lint turnout	Seed turnout	Bur cotton yield	Lint yield	Seed yield	Lint loan value	Lint loan value	Net gin credit	Net value
	----- % -----		----- lb/acre -----			\$/lb		----- \$/acre -----	
PHY 350 W3FE	31.9	43.5	4352	1389	1892	0.5656	786	230	1016
PHY 332 W3FE	32.0	43.5	4360	1395	1898	0.5606	782	231	1014
PX22A214 W3FE	34.7	43.3	4127	1433	1786	0.5500	788	217	1005
PX22A215 W3FE	34.0	43.0	4027	1370	1733	0.5619	770	210	979
PX22A213 W3FE	32.8	43.3	4119	1352	1785	0.5619	760	217	977
PHY 205 W3FE	32.7	41.6	4085	1335	1697	0.5509	736	201	936
PHY 250 W3FE	31.8	43.2	4095	1301	1768	0.5533	720	214	934
PX40A383 W3FE	32.6	41.8	4003	1306	1673	0.5631	736	198	934
Test average	32.8	42.9	4146	1360	1779	0.5584	760	215	974
CV, %	--	--	4.7	4.7	4.7	--	4.7	4.7	4.7
OSL	--	--	0.2464	0.2358	0.0412	--	0.2153	0.0089	0.1610
LSD	--	--	NS	NS	119	--	NS	14	NS

For net value/acre, means within a column with the same letter are not significantly different.

CV - coefficient of variation.

OSL - observed significance level, or probability of a greater F value.

LSD - least significant difference at the 0.10 level, NS - not significant.

Note: some columns may not add up due to rounding error.

Assumes:

\$3.40/cwt commercial ginning cost.

\$400/ton for seed.

Net gin credit is defined as seed credit minus ginning expense.

Value for lint based on CCC loan value from commercial ginning and USDA-AMS classing results.



Table 2. Harvest results for the center pivot irrigated Enlist cotton variety trial, Williams Farm, Panhandle, TX, 2022.

Entry	Lint turnout	Seed turnout	Bur cotton yield	Lint yield	Seed yield	Lint loan value	Lint loan value	Net gin credit	Net value	
	----- % -----		----- lb/acre -----			\$/lb		----- \$/acre -----		
PX22A214 W3FE	32.8	46.0	5410	1775	2488	0.4549	807	357	1164	a
PHY 205 W3FE	32.3	44.7	5189	1673	2317	0.4702	787	327	1114	b
PHY 210 W3FE	32.3	45.4	5093	1646	2314	0.4763	784	329	1113	b
PHY 400 W3FE	33.7	44.5	5259	1772	2338	0.4305	763	329	1092	b
PHY 332 W3FE	31.6	45.3	5195	1641	2355	0.4536	745	335	1080	bc
PX22A215 W3FE	31.4	45.3	5407	1696	2447	0.4293	728	348	1076	bc
PX40A383 W3FE	33.1	46.0	4984	1650	2291	0.4271	705	328	1033	cd
PX22A213 W3FE	30.6	46.2	5214	1594	2408	0.4184	667	346	1013	d
PHY 411 W3FE	34.3	44.7	4518	1550	2021	0.4531	702	285	988	d
Test average	32.4	45.3	5141	1666	2331	0.4459	743	332	1075	
CV, %	--	--	3.0	3.1	3.0	--	3.1	3.0	3.1	
OSL	--	--	0.0001	0.0009	0.0001	--	0.0001	0.0001	0.0002	
LSD	--	--	219	73	99	--	33	14	47	

For net value/acre, means within a column with the same letter are not significantly different.

CV - coefficient of variation.

OSL - observed significance level, or probability of a greater F value.

LSD - least significant difference at the 0.10 level, NS - not significant.

Note: some columns may not add up due to rounding error.

Assumes:

\$3.30/cwt commercial ginning cost.

\$430/ton for seed.

Net gin credit is defined as seed credit minus ginning expense.

Value for lint based on CCC loan value from commercial ginning and USDA-AMS classing results.



Table 3. Harvest results for the center pivot irrigated Enlist cotton variety trial, Friemel Farm, Panhandle, TX, 2022.

Entry	Lint turnout	Seed turnout	Bur cotton yield	Lint yield	Seed yield	Lint loan value	Lint value	Net gin credit	Net value	
	----- % -----		----- lb/acre -----			\$/lb		----- \$/acre -----		
PX22A214 W3FE	31.6	41.9	5346	1690	2239	0.4915	831	305	1136	a
PHY 205 W3FE	30.6	41.0	5327	1628	2182	0.4998	814	293	1107	ab
PHY 210 W3FE	30.9	41.8	5123	1581	2143	0.5029	795	292	1087	abc
PHY 400 W3FE	32.5	40.8	4919	1596	2005	0.4719	753	269	1022	bcd
PHY 350 W3FE	29.9	42.4	4872	1459	2065	0.4956	723	283	1006	cd
PHY 332 W3FE	29.5	39.5	5062	1495	2001	0.4944	739	263	1003	cd
PX22A213 W3FE	30.3	42.2	5034	1525	2124	0.4552	694	291	984	d
PX40A383 W3FE	31.8	40.6	4558	1450	1852	0.4908	712	248	959	d
Test average	30.9	41.3	5030	1553	2076	0.4878	758	281	1038	
CV, %	--	--	5.7	5.6	5.6	--	5.8	5.6	5.7	
OSL	--	--	0.0746	0.0418	0.0257	--	0.0135	0.0090	0.0229	
LSD	--	--	409	124	167	--	63	23	85	

For net value/acre, means within a column with the same letter are not significantly different.

CV - coefficient of variation.

OSL - observed significance level, or probability of a greater F value.

LSD - least significant difference at the 0.10 level, NS - not significant.

Note: some columns may not add up due to rounding error.

Assumes:

\$3.30/cwt commercial ginning cost.

\$430/ton for seed.

Net gin credit is defined as seed value minus ginning expense.

Value for lint based on CCC loan value from commercial ginning and USDA-AMS classing results.



Table 4. Harvest results for the center pivot-irrigated Enlist technology cotton variety trial, Gruhlkey Farm, Wildorado, TX, 2022.

Entry	Lint turnout	Seed turnout	Bur cotton yield	Lint yield	Seed yield	Lint loan value	Lint loan value	Net gin credit	Net value	
	----- % -----		----- lb/acre -----			\$/lb		----- \$/acre -----		
PHY 205 W3FE	32.6	47.1	4596	1497	2163	0.5577	835	309	1144	a
PX22A214 W3FE	34.0	48.6	4537	1542	2206	0.5212	804	320	1124	a
PX40A383 W3FE	32.1	48.9	4506	1447	2204	0.5307	768	321	1089	b
PX22A215 W3FE	33.0	49.5	4457	1472	2207	0.5182	763	323	1086	b
PHY 400 W3FE	33.4	47.4	4587	1532	2173	0.4852	743	311	1055	c
PX22A213 W3FE	32.5	50.0	4408	1431	2203	0.5015	717	324	1041	c
PHY 332 W3FE	30.8	48.2	4518	1393	2178	0.5109	711	315	1026	c
PHY 250 W3FE	31.9	48.6	4251	1354	2065	0.5127	694	299	994	d
Test average	32.5	48.5	4483	1459	2175	0.5173	754	315	1070	
CV, %	--	--	2.0	2.1	2.0	--	1.9	2.0	2.0	
OSL	--	--	0.0070	0.0001	0.0178	--	0.0001	0.0033	0.0001	
LSD	--	--	130	43	62	--	21	9	30	

For net value/acre, means within a column with the same letter are not significantly different.

CV - coefficient of variation.

OSL - observed significance level, or probability of a greater F value.

LSD - least significant difference at the 0.10 level, NS - not significant.

Note: some columns may not add up due to rounding error.

Assumes:

\$3.40/cwt commercial ginning cost.

\$430/ton for seed.

Net gin credit is defined as seed credit minus ginning expense.

Value for lint based on CCC loan value from commercial ginning and USDA-AMS classing results.

Table 5. 2022 Enlist Variety Trials - Four Common Entries Across Four Panhandle Sites - Yield, Fiber Quality, and Storm Resistance.



Trial	Location	Previous crop/ Tillage System	Planting date	Harvest date
George	Kress	grain sorghum/no-till	10-May	20-Nov
Gruhlkey	Wildorado	wheat silage/no-till	9-May	3-Nov
Williams	Panhandle 1	corn/strip-till	5-May	1-Nov
Friemel	Panhandle 2	corn/conventional	17-May	21-Nov

Note: Where statistics are presented, they represent analysis of variance results for all entries planted at that particular site.

Lint yield	Kress	Wildorado	Panhandle 1	Panhandle 2	Mean across sites
PHY 205 W3FE	1,335	1,497	1,673	1,628	1,533
PHY 332 W3FE	1,395	1,393	1,641	1,495	1,481
PX22A213 W3FE	1,352	1,431	1,594	1,525	1,476
PX22A214 W3FE	1,433	1,542	1,775	1,690	1,610
Mean	1,379	1,466	1,671	1,585	1,525
CV, %	4.7	2.1	3.1	5.6	--
Prob>F	0.2358	0.0001	0.0009	0.0418	--
LSD 0.10	NS	43	73	124	--

Loan value	Kress	Wildorado	Panhandle 1	Panhandle 2	Mean across sites
PHY 205 W3FE	0.5509	0.5577	0.4702	0.4998	0.5197
PHY 332 W3FE	0.5606	0.5109	0.4536	0.4944	0.5049
PX22A213 W3FE	0.5619	0.5015	0.4184	0.4552	0.4843
PX22A214 W3FE	0.5500	0.5212	0.4549	0.4915	0.5044
Mean	0.5559	0.5228	0.4493	0.4852	0.5033
CV, %	--	--	--	--	--
Prob>F	--	--	--	--	--
LSD 0.10	--	--	--	--	--

Table 5 (continued). 2022 Enlist Variety Trials - Four Common Entries Across Four Panhandle Sites - Yield, Fiber Quality, and Storm Resistance.

Net value	Kress	Wildorado	Panhandle 1	Panhandle 2	Mean across sites
PHY 205 W3FE	936	1,144	1,114	1,107	1,075
PHY 332 W3FE	1,014	1,026	1,080	1,003	1,031
PX22A213 W3FE	977	1,041	1,013	984	1,004
PX22A214 W3FE	1,005	1,124	1,164	1,136	1,107
Mean	983	1,084	1,093	1,058	1,054
CV, %	4.7	2.0	3.1	5.7	--
Prob>F	0.161	0.0001	0.0002	0.0229	--
LSD 0.10	NS	30	47	85	--

Micronaire	Kress	Wildorado	Panhandle 1	Panhandle 2	Mean across sites
PHY 205 W3FE	4.71	3.73	3.07	3.37	3.72
PHY 332 W3FE	4.07	3.27	2.73	3.06	3.28
PX22A213 W3FE	4.33	3.31	2.78	3.00	3.36
PX22A214 W3FE	4.26	3.37	2.82	3.13	3.40
Mean	4.34	3.42	2.85	3.14	3.44
CV, %	--	--	--	--	--
Prob>F	--	--	--	--	--
LSD 0.10	--	--	--	--	--

Staple	Kress	Wildorado	Panhandle 1	Panhandle 2	Mean across sites
PHY 205 W3FE	35.4	36.7	37.4	36.6	36.5
PHY 332 W3FE	37.3	38.1	38.8	37.3	37.9
PX22A213 W3FE	37.6	38.5	39.7	38.6	38.6
PX22A214 W3FE	35.8	37.5	38.6	37.6	37.4
Mean	36.5	37.7	38.6	37.5	37.6
CV, %	--	--	--	--	--
Prob>F	--	--	--	--	--
LSD 0.10	--	--	--	--	--

Table 5 (continued). 2022 Enlist Variety Trials - Four Common Entries Across Four Panhandle Sites - Yield, Fiber Quality, and Storm Resistance.

Leaf grade	Kress	Wildorado	Panhandle 1	Panhandle 2	Mean across sites
PHY 205 W3FE	2.8	3.5	3.9	3.6	3.5
PHY 332 W3FE	2.7	3.0	3.4	3.0	3.0
PX22A213 W3FE	3.0	4.0	4.8	3.6	3.9
PX22A214 W3FE	3.0	3.7	3.7	3.2	3.4
Mean	2.9	3.6	4.0	3.4	3.4
CV, %	--	--	--	--	--
Prob>F	--	--	--	--	--
LSD 0.10	--	--	--	--	--

Storm resistance (1-9 scale, 9 tightest)	Kress	Wildorado	Panhandle 1	Panhandle 2	Mean across sites
PHY 205 W3FE	8.5	8.5	8.0	8.0	8.3
PHY 332 W3FE	6.0	6.2	6.3	6.3	6.2
PX22A213 W3FE	8.3	8.0	7.8	8.0	8.0
PX22A214 W3FE	7.7	8.2	7.7	7.8	7.9
Mean	7.6	7.7	7.5	7.5	7.6
CV, %	3.0	3.5	5.3	4.4	--
Prob>F	0.0001	0.0001	0.0001	0.0001	--
LSD 0.10	0.3	0.4	0.5	0.5	--

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



Table 6. Harvest results for the center pivot-irrigated mixed technology cotton variety trial, Borman Farm, Wildorado, TX, 2022.

Entry	Lint turnout	Seed turnout	Bur cotton yield	Lint yield	Seed yield	Lint loan value	Lint loan value	Net gin credit	Net value	
	----- % -----		----- lb/acre -----			\$/lb		----- \$/acre -----		
PHY 332 W3FE	27.5	44.3	5178	1423	2295	0.4826	687	317	1004	a
DP 1822 XF	28.0	44.9	5140	1438	2308	0.4530	651	322	973	b
ST 4993 B3XF	33.2	43.1	4191	1391	1804	0.5129	714	245	959	b
PHY 400 W3FE	29.0	42.6	5110	1479	2177	0.4264	631	294	925	c
DP 2123 B3XF	27.4	45.7	4503	1232	2056	0.4642	572	289	861	d
NG 3930 B3XF	28.2	44.4	4441	1251	1971	0.4373	547	273	820	e
Test average	28.9	44.2	4761	1369	2102	0.4627	634	290	924	
CV, %	--	--	2.3	2.3	2.3	--	2.3	2.3	2.3	
OSL	--	--	0.0001	0.0001	0.0001	--	0.0001	0.0001	0.0001	
LSD	--	--	161	46	71	--	22	10	31	

For net value/acre, means within a column with the same letter are not significantly different.

CV - coefficient of variation.

OSL - observed significance level, or probability of a greater F value.

LSD - least significant difference at the 0.10 level, NS - not significant.

Note: some columns may not add up due to rounding error.

Assumes:

\$3.40/cwt commercial ginning cost.

\$430/ton for seed.

Net gin credit is defined as seed credit minus ginning expense.

Value for lint based on CCC loan value from commercial ginning and USDA-AMS classing results.



Table 7. Harvest results for the center pivot irrigated NexGen 3406 B2XF nitrogen rate trial, Ag Partners Farm, Gruver, TX, 2022.

N rate	Lint turnout	Seed turnout	Bur cotton yield	Lint yield	Seed yield	Lint loan value	Lint loan value	Net gin credit	N cost	Net value
lb/acre	----- % -----		----- lb/acre -----			\$/lb		----- \$/acre -----		
0	33.6	48.7	5938	1993	2892	0.5547	1106	420	0	1526 a
50	33.2	48.1	6082	2017	2923	0.5233	1056	422	40	1437 b
100	32.9	48.5	5887	1939	2855	0.5280	1024	414	80	1357 c
150	32.8	48.3	5979	1959	2887	0.5124	1004	418	121	1301 d
Test average	33.1	48.4	5972	1977	2889	0.5296	1048	419	60	1405
CV, %	--	--	2.5	2.5	2.5	--	2.5	2.5	--	2.6
OSL	--	--	0.3551	0.1886	0.6358	--	0.0019	0.7397	--	0.0001
LSD	--	--	NS	NS	NS	--	34	NS	--	47

For net value/acre, means within a column with the same letter are not significantly different.

CV - coefficient of variation.

OSL - observed significance level, or probability of a greater F value.

LSD - least significant difference at the 0.10 level, NS - not significant.

Note: some columns may not add up due to rounding error.

Assumes:

\$3.40/cwt commercial ginning cost.

\$430/ton for seed.

Net gin credit is defined as seed credit minus ginning expense.

N cost was determined based on \$515/ton of 32-0-0 (\$0.805/lb actual N)

Net value is defined as gross loan value/acre plus net gin credit minus N fertilizer cost.

Value for lint based on CCC loan value from commercial ginning and USDA-AMS classing results.



Table 8. Harvest results for the center pivot irrigated NexGen 3195 B3XF nitrogen rate trial, Davis Farm, Pampa, TX, 2022.

N rate	Lint turnout	Seed turnout	Bur cotton yield	Lint yield	Seed yield	Lint loan value	Lint loan value	Net gin credit	N cost	Net value
lb/acre	----- % -----		----- lb/acre -----			\$/lb		----- \$/acre -----		
0	35.0	41.5	3352	1173	1393	0.5647	663	189	0	852 a
50	34.3	41.5	3530	1210	1466	0.5669	686	199	38	847 a
100	34.4	42.0	3597	1238	1509	0.5682	703	206	76	833 a
150	34.6	42.5	3686	1276	1566	0.5702	728	215	114	828 a
Test average	34.6	41.9	3541	1224	1484	0.5675	695	202	57	840
CV, %	--	--	2.9	2.9	2.9	--	2.9	2.9	--	3.1
OSL	--	--	0.0078	0.0165	0.0019	--	0.0087	0.0008	--	0.5694
LSD	--	--	133	46	56	--	26	8	--	NS

For net value/acre, means within a column with the same letter are not significantly different.

CV - coefficient of variation.

OSL - observed significance level, or probability of a greater F value.

LSD - least significant difference at the 0.10 level, NS - not significant.

Note: some columns may not add up due to rounding error.

Assumes:

\$3.30/cwt commercial ginning cost.

\$430/ton for seed.

Net gin credit is defined as seed credit minus ginning expense.

N cost was determined based on \$1250/ton of 82-0-0.

Net value is defined as gross loan value/acre plus net gin credit minus N fertilizer cost.

Value for lint based on CCC loan value from commercial ginning and USDA-AMS classing results.



Table 9. George Brothers Reviton Demonstration Mean Commercial Bale Classing for Four Harvest Aid Treatments, Tulia, TX, 2022.

Treatment	Total commercial	Color 1	Color 2	Leaf	Staple	Micronaire	Extraneous	Remarks	Strength	Rd	+b	Trash	Uniformity	Length	Loan rate
	bales classed	grade	grade	grade	32nds inch	units	matter	--	g/tex	%	%	%	%	100ths inch	cents/lb
Treatment #1	Ethephon 48 oz/acre followed by Paraquat (3 lb/gal) 1 qt/acre + AMS 15 lb/100 gal spray mix														
	13	3.0	1.0	3.2	35.0	4.6	none	none	30.2	78.4	7.4	3.6	80.1	108.8	53.74
Treatment #2	Ethephon 48 oz/acre followed by Reviton 2 oz/acre + 1% MSO														
	12	3.1	1.0	3.5	36.3	4.6	2/12 bales	level 1 bark	32.3	77.7	7.7	4.4	81.1	112.9	54.80
Treatment #3	Ethephon 48 oz/acre + Reviton 1 oz/acre + 1% MSO followed by Paraquat (3 lb/gal) 1 qt/acre + AMS 15 lb/100 gal spray mix														
	9	3.0	1.0	3.2	35.4	4.6	1/9 bales	level 1 bark	31.3	78.2	7.7	3.6	80.2	110.4	54.11
Treatment #4	Ethephon 48 oz/acre + Reviton 1 oz/acre + 1% MSO followed by Reviton 2 oz/acre + 1% MSO														
	13	3.0	1.0	3.2	35.9	4.6	none	none	30.8	78.3	7.6	3.7	80.6	111.7	55.38

Irrigated field near Tulia, TX

Variety: PHY 250 W3FE

Planted: May 1

Base treatments applied: October 10

Follow up treatments applied: November 1

Harvested: December 1 using a JD CS690 stripper

Ginned: Lakeview Gin, Tulia, TX