



# 2021 On-Farm Trial Summary

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2021 Field Trials - Windstar Affiliated Gins



Table number	Cooperator	Trial type and comments	Location	Gin	Planting date	Harvest date
Table 1	Byrd	Mixed Technology Commercial Variety Trial - Cash Value for Lint	Plainview	Edcot	24-May	1-Dec
Table 2	Byrd	Mixed Technology Commercial Variety Trial - Loan Value for Lint	Plainview	Edcot	24-May	1-Dec
Table 3	Cartrite	Mixed Technology Commercial Variety Trial (High Verticillium Wilt Pressure)	Sunray	Adobe Walls	7-May	7-Nov
Table 4	Sargent	Mixed Technology Commercial Variety Trial (Low Irrigation Input)	Stinnett	Adobe Walls	25-May	15-Nov
Table 5	George	Enlist Technology Commercial Variety Trial - Cash Value for Lint (High Verticillium Wilt Pressure)	Edmonson	Edcot	21-May	22-Nov
Table 6	George	Enlist Technology Commercial Variety Trial - Loan Value for Lint (High Verticillium Wilt Pressure)	Edmonson	Edcot	21-May	22-Nov
Table 7	Gruhlkey	Enlist Technology Commercial Variety Trial	Wildorado	Top of Texas	15-May	10-Nov
Table 8	Sargent	Enlist Technology Commercial Variety Trial (Low irrigation Input)	Stinnett	Adobe Walls	25-May	15-Nov
Table 9	Friemel	Enlist Technology Commercial Variety Trial (Low Irrigation Input, Some Hail Damage in June)	Claude	Lonestar/Top of Texas	2-May	29-Oct
Table 10	All Enlist	Four Common Entries Across Four Panhandle Sites - Yield, Fiber Quality, and Storm Resistance	--	--	--	--
Table 11	Cartrite	PHY 210 W3FE Commercial N Rate Trial - \$350/Ton 32-0-0	Sunray	Adobe Walls	13-May	8-Nov
Table 12	Cartrite	PHY 210 W3FE Commercial N Rate Trial - \$650/Ton 32-0-0	Sunray	Adobe Walls	13-May	8-Nov
Table 13	McCloy	Commercial Irrigated Foliar Fertilizer Trial	Pringle	Adobe Walls	7-May	21-Oct
Table 14	Evans	Commercial Dryland N Fertilizer Trial	Kress	Edcot	2-May	19-Oct
Table 15	Evans	Commercial Dryland Foliar Fertilizer Trial	Kress	Edcot	2-May	18-Oct

For full detailed reports including cultural practices, in-season plant observations, and visual storm resistance ratings go to [www.windstarinc.com](http://www.windstarinc.com)



Table 1. Harvest results with lint cash value from the drip irrigated mixed technology cotton variety trial, Bobby Byrd Farm, Plainview, TX, 2021.

Entry	Lint turnout	Seed turnout	Bur cotton yield	Lint yield	Seed yield	Lint cash value	Lint cash value	Net gin credit	Seed/tech cost	Net value
----- % -----										
----- lb/acre -----										
FM 1621 GL	33.0	39.7	5173	1706	2055	1.1253	1920	76	55	1941
DP 1822 XF	30.9	38.4	5387	1665	2069	1.1452	1906	71	62	1915
FM 2498 GLT	33.0	39.7	4983	1643	1977	1.1407	1874	73	76	1871
FM 2202 GL	32.2	36.4	4943	1590	1797	1.1407	1814	53	55	1812
PHY 332 W3FE	30.7	34.1	5105	1566	1740	1.1453	1794	40	86	1749
PHY 394 W3FE	28.6	41.9	5063	1450	2121	1.1294	1638	87	85	1640
FM 2398 GLTP	32.1	39.0	4434	1425	1729	1.1442	1630	61	79	1613
ST 4993 B3XF	35.0	34.8	4138	1449	1442	1.1426	1655	36	84	1607
Test average	31.9	38.0	4903	1562	1866	1.1392	1779	62	73	1769
CV, %	--	--	3.4	3.4	3.3	--	3.4	3.0	--	3.5
OSL	--	--	0.0001	0.0001	0.0001	--	0.0001	0.0001	--	0.0001
LSD	--	--	237	76	87	--	87	3	--	90

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.

\$240/ton for seed.

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

Lint value based on cash bids for each variety on January 13th at 116.75 cent March 2022 futures using commercial ginning and USDA-AMS classing results.



Table 2. Harvest results with lint loan value from the drip irrigated mixed technology cotton variety trial, Bobby Byrd Farm, Plainview, TX, 2021.

Entry	Lint turnout	Seed turnout	Bur cotton yield	Lint yield	Seed yield	Lint loan value	Lint loan value	Net gin credit	Seed/tech cost	Net value
----- % -----										
----- lb/acre -----										
FM 1621 GL	33.0	39.7	5173	1706	2055	0.5568	950	76	55	972 a
DP 1822 XF	30.9	38.4	5387	1665	2069	0.5764	960	71	62	968 a
FM 2498 GLT	33.0	39.7	4983	1643	1977	0.5710	938	73	76	935 ab
FM 2202 GL	32.2	36.4	4943	1590	1797	0.5736	912	53	55	910 b
PHY 332 W3FE	30.7	34.1	5105	1566	1740	0.5757	902	40	86	856 c
PHY 394 W3FE	28.6	41.9	5063	1450	2121	0.5553	805	87	85	808 d
FM 2398 GLTP	32.1	39.0	4434	1425	1729	0.5755	820	61	79	803 d
ST 4993 B3XF	35.0	34.8	4138	1449	1442	0.5767	835	36	84	788 d
Test average	31.9	38.0	4903	1562	1866	0.5701	890	62	73	880
CV, %	--	--	3.4	3.4	3.3	--	3.4	3.0	--	3.7
OSL	--	--	0.0001	0.0001	0.0001	--	0.0001	0.0001	--	0.0001
LSD	--	--	237	76	87	--	44	3	--	46

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.

\$240/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 mixed technology cotton variety trial, Cartrite Farm, Sunray, TX, 2021.

Entry	Lint turnout	Seed turnout	Bur cotton yield	Lint yield	Seed yield	Lint loan value	Lint loan value	Net gin credit	Seed/tech cost	Net value
	----- % -----		----- lb/acre -----		\$/lb		----- \$/acre -----			
FM 2398 GLTP	35.1	40.6	4699	1649	1906	0.5721	944	64	106	901 a
FM 2202 GL	36.4	43.0	4296	1564	1847	0.5740	898	71	74	895 a
PHY 205 W3FE	32.8	41.5	4668	1533	1937	0.5676	870	69	113	826 b
DP 2123 B3XF	30.6	43.1	4729	1448	2038	0.5732	830	78	90	818 b
NG 3195 B3XF	35.0	42.2	4254	1489	1793	0.5714	851	66	115	802 bc
NG 3930 B3XF	32.8	43.9	4409	1445	1936	0.5734	828	77	105	801 bc
PHY 332 W3FE	32.2	43.1	4482	1442	1930	0.5557	801	74	116	759 cd
PHY 210 W3FE	32.7	42.5	4284	1401	1820	0.5723	802	68	113	757 cd
FM 1730 GLTP	32.6	42.0	4117	1343	1730	0.5783	777	63	109	731 d
DP 2115 B3XF	36.1	41.0	3643	1316	1493	0.5563	732	52	116	667 e
Test average	33.6	42.3	4358	1463	1843	0.5694	833	68	106	796
CV, %	--	--	4.3	4.3	4.3	--	4.3	4.2	--	4.9
OSL	--	--	0.0001	0.0002	0.0001	--	0.0001	0.0001	--	0.0001
LSD	--	--	262	90	112	--	51	4	--	55

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.

\$230/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 4. Harvest results for the center pivot limited irrigation mixed technology cotton variety trial, Sargent Farm, Stinnett, TX, 2021.

Entry	Lint turnout	Seed turnout	Bur cotton yield	Lint yield	Seed yield	Lint loan value	Lint loan value	Net gin credit	Seed/tech cost	Net value
	----- % -----		----- lb/acre -----			\$/lb		----- \$/acre -----		
FM 1621 GL	35.2	38.9	3974	1397	1546	0.5743	802	47	64	785 a
NG 3195 B3XF	36.0	43.1	3727	1343	1605	0.5622	755	61	99	718 b
ST 4993 B3XF	37.5	42.5	3511	1315	1491	0.5682	747	55	98	705 bc
DP 2012 B3XF	34.0	43.9	3729	1266	1638	0.5720	724	65	100	689 bc
FM 2202 GL	34.8	41.0	3537	1230	1449	0.5715	703	50	64	689 bc
DP 2115 B3XF	35.8	41.9	3564	1274	1492	0.5727	730	54	100	684 bc
NG 3930 B3XF	33.2	44.0	3676	1222	1618	0.5749	702	65	90	677 cd
FM 1730 GLTP	32.7	42.6	3602	1179	1536	0.5778	681	58	94	645 de
DP 2123 B3XF	31.3	46.0	3669	1149	1689	0.5608	644	73	78	640 e
Test average	34.5	42.6	3665	1264	1563	0.5705	721	59	87	692
CV, %	--	--	3.1	3.1	3.1	--	3.1	3.3	--	3.5
OSL	--	--	0.0045	0.0001	0.0002	--	0.0001	0.0001	--	0.0001
LSD	--	--	161	56	69	--	32	3	--	35

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.

\$230/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.



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Table 5. Harvest results for the center pivot irrigated Enlist technology cotton variety trial, George Farm, Edmonson, TX, 2021.

Entry	Lint turnout	Seed turnout	Bur cotton yield	Lint yield	Seed yield	Lint cash value	Lint cash value	Net gin credit	Net value
----- % -----									
PHY 205 W3FE	28.1	33.4	4151	1164	1386	1.0279	1197	29	1226 a
PHY 210 W3FE	28.7	39.4	3779	1083	1488	1.0200	1104	54	1158 b
PHY 350 W3FE	26.3	32.0	3836	1009	1227	1.0230	1033	20	1054 c
PHY 443 W3FE	28.3	34.0	3519	979	1177	1.0345	1013	27	1040 c
PHY 332 W3FE	26.4	31.1	3386	894	1053	1.0155	907	15	922 d
PHY 394 W3FE	24.6	28.7	3578	880	1027	0.9948	876	5	881 d
PX 3E33 W3FE	27.4	30.2	3138	859	946	1.0009	860	10	870 d
PHY 250 W3FE	26.2	32.7	3198	837	1046	1.0073	843	20	863 d
Test average	27.0	32.7	3573	963	1169	1.0155	979	23	1002
CV, %	--	--	4.6	4.6	4.5	--	4.5	4.7	4.5
OSL	--	--	0.0001	0.0001	0.0001	--	0.0001	0.0001	0.0001
LSD	--	--	237	63	75	--	64	2	65

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.

\$240/ton for seed.

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

Lint value based on cash bids for each variety on January 10th at 115.25 cent March 2022 futures using commercial ginning and USDA-AMS classing results.



Table 6. Harvest results for the center pivot irrigated Enlist technology cotton variety trial, George Farm, Edmonson, TX, 2021.

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	28.1	33.4	4151	1164	1386	0.4210	490	29	519 a
PHY 210 W3FE	28.7	39.4	3779	1083	1488	0.4230	458	54	512 a
PHY 443 W3FE	28.3	34.0	3519	979	1177	0.4563	447	27	474 b
PHY 350 W3FE	26.3	32.0	3836	1009	1227	0.4430	447	20	468 b
PHY 332 W3FE	26.4	31.1	3386	894	1053	0.4423	395	15	410 c
PX 3E33 W3FE	27.4	30.2	3138	859	946	0.4194	360	10	370 d
PHY 250 W3FE	26.2	32.7	3198	837	1046	0.3753	314	20	334 e
PHY 394 W3FE	24.6	28.7	3578	880	1027	0.3738	329	5	334 e
Test average	27.0	32.7	3573	963	1169	0.4193	405	23	428
CV, %	--	--	4.6	4.6	4.5	--	4.5	4.7	4.5
OSL	--	--	0.0001	0.0001	0.0001	--	0.0001	0.0001	0.0001
LSD	--	--	237	63	75	--	26	2	28

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.

\$240/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 Enlist technology cotton variety trial, Gruhlkey Farm, Wildorado, TX, 2021.

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	33.7	41.6	3814	1287	1586	0.5699	733	61	794 a
PHY 205 W3FE	35.0	40.4	3817	1336	1542	0.5400	721	55	777 b
PHY 400 W3FE	36.5	41.7	3515	1283	1467	0.5619	721	56	777 b
PX3E33W3FE	33.4	39.9	3699	1236	1475	0.5660	700	51	751 c
PHY 350 W3FE	32.7	42.6	3665	1198	1560	0.5678	680	62	743 c
PHY 250 W3FE	34.0	41.4	3418	1161	1416	0.5705	663	54	716 d
PHY 210 W3FE	35.4	42.4	3228	1143	1369	0.5731	655	54	709 d
PHY 394 W3FE	31.0	40.6	3731	1155	1516	0.5156	596	55	651 e
Test average	34.0	41.3	3611	1225	1491	0.5581	684	56	740
CV, %	--	--	1.4	1.4	1.4	--	1.4	1.4	1.4
OSL	--	--	0.0001	0.0001	0.0001	--	0.0001	0.0001	0.0001
LSD	--	--	71	24	29	--	13	1	15

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.

\$235/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 8. Harvest results for the center pivot limited irrigation Enlist cotton variety trial, Sargent Farm, Stinnett, TX, 2021.

Entry	Lint turnout	Seed turnout	Bur cotton yield	Lint yield	Seed yield	Lint loan value	Lint loan value	Net gin credit	Seed/tech cost	Net value
----- % -----										
----- lb/acre -----										
PHY 205 W3FE	32.1	42.6	3925	1259	1673	0.5604	706	63	97	671 a
PHY 332 W3FE	31.4	43.5	3834	1204	1667	0.5792	698	65	100	663 ab
PHY 400 W3FE	33.0	41.5	3650	1204	1516	0.5783	696	54	99	651 ab
PX3E33 W3FE	32.4	40.8	3620	1172	1476	0.5781	677	50	100	628 bc
PHY 250 W3FE	31.4	43.8	3541	1112	1549	0.5776	642	61	97	606 cd
PHY 210 W3FE	32.1	43.6	3295	1057	1438	0.5775	610	56	97	570 d
Test average	32.1	42.6	3644	1168	1553	0.5752	672	58	98	632
CV, %	--	--	3.9	3.9	3.9	--	3.8	4.1	--	4.5
OSL	--	--	0.0037	0.0031	0.0032	--	0.0064	0.0001	--	0.0099
LSD	--	--	209	67	90	--	38	4	--	42

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 0.05 level, NS - not significant.

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

Assumes:

\$3.30/cwt commercial ginning cost.

\$230/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 9. Harvest results for the center pivot irrigated Enlist cotton variety trial, Friemel Farm, Claude, TX, 2021.

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 400 W3FE	37.8	39.4	2202	833	867	0.5493	457	29	486 a
PHY 332 W3FE	35.8	43.4	2189	783	949	0.5574	436	39	476 a
PHY 350 W3FE	35.3	36.1	2197	775	793	0.5604	434	21	455 ab
PHY 250 W3FE	36.5	43.3	2022	739	875	0.5521	408	36	444 ab
PHY 205 W3FE	35.6	35.3	2143	763	755	0.5084	388	18	406 bc
PHY 210 W3FE	37.1	38.8	1816	674	704	0.5394	363	23	386 c
Test average	36.4	39.3	2095	761	824	0.5445	414	28	442
CV, %	--	--	7.9	7.9	8.3	--	7.9	9.4	8.0
OSL	--	--	0.0951	0.1203	0.0133	--	0.0484	0.0001	0.0381
LSD	--	--	243	NS	101	--	49	4	53

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.

\$235/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 10. 2021 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	Edmonson*	clean till	21-May	22-Nov
Gruhlkey	Wildorado	wheat silage/no-till	15-May	10-Nov
Sargent	Stinnett	sorghum/no-till	25-May	15-Nov
Friemel	Claude**	wheat/v-blade	2-May	29-Oct

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

Lint yield	Edmonson*	Wildorado	Stinnett	Claude**	Mean across sites
PHY 205 W3FE	1,164	1,336	1,259	763	1,131
PHY 210 W3FE	1,083	1,143	1,057	674	989
PHY 250 W3FE	837	1,161	1,112	739	962
PHY 332 W3FE	894	1,287	1,204	783	1,042
Mean	995	1,232	1,158	740	1,031
CV, %	4.6	1.4	3.9	7.9	--
Prob>F	0.0001	0.0001	0.0031	0.1203	--
LSD 0.10	63	24	67	NS	--

Loan value	Edmonson*	Wildorado	Stinnett	Claude**	Mean across sites
PHY 205 W3FE	0.4210	0.5400	0.5604	0.5084	0.5075
PHY 210 W3FE	0.4230	0.5731	0.5775	0.5394	0.5283
PHY 250 W3FE	0.3753	0.5705	0.5776	0.5521	0.5189
PHY 332 W3FE	0.4423	0.5699	0.5792	0.5574	0.5372
Mean	0.4154	0.5634	0.5737	0.5393	0.5229
CV, %	--	--	--	--	--
Prob>F	--	--	--	--	--
LSD 0.10	--	--	--	--	--

**Table 8 (continued). 2021 Enlist Variety Trials - Four Common Entries Across Four Panhandle Sites - Yield, Fiber Quality, and Storm Resistance.**

Net value	Edmonson*	Wildorado	Stinnett	Claude**	Mean across sites
PHY 205 W3FE	519	777	671	406	593
PHY 210 W3FE	512	709	570	386	544
PHY 250 W3FE	334	716	606	444	525
PHY 332 W3FE	410	794	663	476	586
Mean	444	749	628	428	562
CV, %	4.5	1.4	4.5	8.0	--
Prob>F	0.0001	0.0001	0.0099	0.0381	--
LSD 0.10	28	15	42	53	--

Micronaire	Edmonson*	Wildorado	Stinnett	Claude**	Mean across sites
PHY 205 W3FE	2.9	4.4	4.6	4.8	4.2
PHY 210 W3FE	2.8	4.1	4.2	4.5	3.9
PHY 250 W3FE	2.6	3.9	4.0	4.4	3.7
PHY 332 W3FE	2.7	3.7	4.1	4.6	3.8
Mean	2.8	4.0	4.2	4.6	3.9
CV, %	--	--	--	--	--
Prob>F	--	--	--	--	--
LSD 0.10	--	--	--	--	--

Staple	Edmonson*	Wildorado	Stinnett	Claude**	Mean across sites
PHY 205 W3FE	33.6	34.1	35.1	32.8	33.9
PHY 210 W3FE	34.3	36.0	37.0	34.2	35.4
PHY 250 W3FE	34.2	36.1	37.1	34.9	35.6
PHY 332 W3FE	34.8	36.5	37.6	35.9	36.2
Mean	34.2	35.7	36.7	34.5	35.3
CV, %	--	--	--	--	--
Prob>F	--	--	--	--	--
LSD 0.10	--	--	--	--	--

**Table 8 (continued). 2021 Enlist Variety Trials - Four Common Entries Across Four Panhandle Sites - Yield, Fiber Quality, and Storm Resistance.**

Leaf grade	Edmonson*	Wildorado	Stinnett	Claude**	Mean across sites
PHY 205 W3FE	4.1	1.4	1.7	1.7	2.2
PHY 210 W3FE	3.0	1.1	1.7	1.5	1.8
PHY 250 W3FE	3.7	1.3	2.1	2.0	2.3
PHY 332 W3FE	3.2	1.0	1.9	1.6	1.9
Mean	3.5	1.2	1.9	1.7	2.1
CV, %	--	--	--	--	--
Prob>F	--	--	--	--	--
LSD 0.10	--	--	--	--	--

Storm resistance (1-9 scale, 9 tightest)	Edmonson*	Wildorado	Stinnett	Claude**	Mean across sites
PHY 205 W3FE	8.5	8.2	8.3	7.8	8.2
PHY 210 W3FE	8.5	8.2	8.0	7.3	8.0
PHY 250 W3FE	7.5	7.2	7.0	6.5	7.1
PHY 332 W3FE	6.3	6.2	6.0	5.8	6.1
Mean	7.7	7.5	7.3	6.9	7.3
CV, %	3.0	4.5	4.3	2.3	--
Prob>F	0.0001	0.0001	0.0001	0.0001	--
LSD 0.10	0.3	0.5	0.5	0.2	--

\* Edmonson trial had high *Verticillium* wilt infection rate.

\*\* Claude trial experienced hail damage in late June and had low irrigation input.

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



Table 11. Harvest results for the center pivot irrigated PhytoGen 210 W3FE nitrogen rate trial, Cartrite Farm, Sunray, TX, 2021.

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	32.6	41.8	3575	1165	1494	0.5469	637	54	0	691 a
50	32.2	41.1	3757	1209	1546	0.5211	630	54	29	655 a
100	31.4	40.8	4037	1266	1649	0.5079	643	57	59	641 a
150	31.2	41.1	4135	1290	1698	0.5131	662	59	88	633 a
Test average	31.8	41.2	3876	1233	1597	0.5223	643	56	44	655
CV, %	--	--	4.5	4.5	4.5	--	4.5	4.9	--	4.8
OSL	--	--	0.0051	0.0408	0.0112	--	0.4784	0.0797	--	0.1099
LSD	--	--	226	71	93	--	NS	4	--	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.

\$230/ton for seed.

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

N cost was determined based on \$375/ton of 32-0-0.

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 12. Harvest results for the center pivot irrigated PhytoGen 210 W3FE nitrogen rate trial, Cartrite Farm, Sunray, TX, 2021.

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	32.6	41.8	3575	1165	1494	0.5469	637	54	0	691 a
50	32.2	41.1	3757	1209	1546	0.5211	630	54	51	633 b
100	31.4	40.8	4037	1266	1649	0.5079	643	57	101	598 bc
150	31.2	41.1	4135	1290	1698	0.5131	662	59	152	569 c
Test average	31.8	41.2	3876	1233	1597	0.5223	643	56	76	623
CV, %	--	--	4.5	4.5	4.5	--	4.5	4.9	--	5.0
OSL	--	--	0.0051	0.0408	0.0112	--	0.4784	0.0797	--	0.0021
LSD	--	--	226	71	93	--	NS	4	--	41

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.

\$230/ton for seed.

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

N cost was determined based on \$650/ton of 32-0-0.

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 13. Harvest results for the center pivot irrigated foliar fertilizer trial, McCloy Farm, Pringle, TX, 2021.

N rate	Lint turnout	Seed turnout	Bur cotton yield	Lint yield	Seed yield	Lint loan value	Lint loan value	Net gin credit	Fertilizer cost	Net value
lb/acre ----- % ----- ----- lb/acre ----- \$/lb ----- \$/acre -----										
Untreated check	35.7	41.2	4312	1540	1778	0.5617	866	62	0	928 a
Foliar blend	36.6	41.7	4305	1574	1794	0.5576	878	64	14	928 a
Test average	36.1	41.5	4309	1557	1786	0.5597	872	63	7	928
CV, %	0.3	0.6	1.9	2.2	1.6	0.3	2.4	2.2	--	2.3
OSL	0.0143	0.1696	0.9261	0.3486	0.5793	0.1165	0.5471	0.2254	--	0.9866
LSD	0.3	NS	NS	NS	NS	NS	NS	NS	--	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.

\$230/ton for seed.

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

Foliar fertilizer blend cost was \$14.00/acre.

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

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



Table 14. Harvest results for the dryland nitrogen fertilizer trial, Evans Farm, Kress, TX, 2021.

N rate	Lint turnout	Seed turnout	Bur cotton yield	Lint yield	Seed yield	Lint loan value	Lint loan value	Net gin credit	Fertilizer cost	Net value
Ib/acre	-----%	-----	-----lb/acre-----	-----	-----	\$/lb	-----	-----\$/acre-----	-----	-----
Untreated check	33.6	41.7	1553	522	648	0.5198	272	27	0	298 a
Fertilizer blend	33.4	42.2	1646	549	694	0.5170	284	29	22	292 a
35 lb N/acre (32-0-0)	33.7	42.4	1613	543	683	0.5225	284	29	21	291 a
Test average	33.6	42.1	1604	538	675	0.5198	280	28	14	294
CV, %	--	--	6.8	6.9	6.9	--	6.9	6.1	--	7.2
OSL	--	--	0.4345	0.5114	0.3126	--	0.5399	0.1185	--	0.8598
LSD	--	--	NS	NS	NS	--	NS	NS	--	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.

\$240/ton for seed.

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

Fertilizer cost estimated with coulter application cost of \$8.00/acre, fertilizer blend cost of \$13.60/acre, and 32-0-0 cost of \$13.00/acre.

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

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



Table 15. Harvest results for the dryland foliar fertilizer trial, Evans Farm, Kress, TX, 2021.

N rate	Lint turnout	Seed turnout	Bur cotton yield	Lint yield	Seed yield	Lint loan value	Lint loan value	Net gin credit	Fertilizer cost	Net value
lb/acre ----- % ----- ----- lb/acre ----- \$/lb ----- \$/acre -----										
Untreated check	32.4	41.6	1800	583	748	0.5214	304	30	0	335 a
Foliar blend	33.0	39.7	1738	573	691	0.5254	301	26	9	318 a
Test average	32.7	40.6	1769	578	720	0.5234	303	28	4	327
CV, %	--	--	4.4	4.4	4.5	--	4.3	4.3	--	4.4
OSL	--	--	0.3407	0.6146	0.0860	--	0.7660	0.0115	--	0.2031
LSD	--	--	NS	NS	53	--	NS	2	--	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.

\$240/ton for seed.

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

Fertilizer cost estimated with ground rig application cost of \$6.00/acre and foliar fertilizer blend cost of \$2.65/acre.

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

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