

Replicated Agronomic Cotton Evaluation
XtendFlex only



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County Extension Agent: Reid Lovorn
Location: Welch, TX (Terry Co)
Replicates: 3
Plot Size: 8 rows x ~1/2 mi
Row Spacing: 40"
Beds: No
Previous crop(s): Cotton
Soil type: Patricia/Amarillo Fine Sandy Loam
Irrigation: Pivot (~4.2 gpma)

Planting Date: 5/18/2024
Seed Treatments: Various fungicide+insecticide
Moist. @ planting: Very Good
Soil Temp @ planting: 68F @2"; 66.9F @6"
Seed/Acre: 41,500*
GPS Lat: 32.993918
GPS Long: -102.096730
Elevation: 3133
Harvest Date: 11/21/2024

Crop Stage*	Avg High Temp (°F)	Avg Low Temp (°F)	DD60 (95°F max)	Long Term DD60	Rain (in)
Planting to PHS	94.2	63.8	521.5	454.0	1.20
PHS to First Bloom	94.4	70.3	485.0	501.0	1.23
First Bloom to Cutout	92.4	67.2	548.5	648.0	0.92
Cutout to Defoliation	89.9	59.7	1029.5	1159.0	1.63
Defoliation to Harvest	73.1	46.0	123.5	125.0	3.79
Total			2708.0	2887.0	8.77

*PHS @ ≥ 500DD60s; first bloom @ ≥ 1000 DD60s; Cutout = first bloom + 28 d

Remainder of field planted to FM868AXTP

Sorted by Total Crop Value

Variety	Lint Yield (lbs/A)	Turnout (%)	Mic	Length (in)	Staple (1/32 in)	Strength (g/tex)	Uniformity (%)	Color Grades	Leaf Grade	Loan Value (\$/lb)	Lint Value (\$/A)	Total Crop Value (\$/A)
FM765AX	667	36.1	3.94	1.07	34.2	28.7	80.6	31, 31, 31	4.3	0.5218	348	431
DP2335B3XF	624	36.8	4.22	1.07	34.3	27.8	79.0	31, 31, 31	3.3	0.5302	331	408
Armor9413XF	645	36.8	4.46	1.05	33.7	25.6	79.4	31, 21, 31	3.0	0.4828	311	394
FM868AXTP	573	35.8	4.05	1.08	34.5	29.5	80.4	31, 31, 31	3.7	0.5338	306	382
DP2436NRB3XF	508	34.8	4.21	1.12	36.0	30.2	80.2	31, 31, 31	4.0	0.5473	278	341
Armor9371B3XF	482	38.0	4.65	1.08	34.5	26.3	79.7	31, 31, 31	3.0	0.5217	253	316
DP2349NRB3XF	458	37.9	4.92	1.03	33.1	27.2	79.6	31, 21, 21	2.7	0.5057	231	288
Mean	565	36.6	4.35	1.07	34.2	27.9	79.8		3.4	0.5205	294	366
LSD	33	0.5	0.13	0.02	0.6	0.7	ns		0.5	ns	22	25
R-square	0.93	0.91	0.94	0.78	0.78	0.92	0.57		0.74	0.63	0.90	0.91
CV (%)	5.1	1.3	2.6	1.8	1.8	2.2	0.8		13.0	4.6	6.5	5.9
Prob>F, variety	<0.0001	<0.0001	<0.0001	0.0043	0.0043	<0.0001	0.0950		0.0063	0.0985	<0.0001	<0.0001

Variety	Plant Population (#/A)	% Stand Establishment	Seed/lb	Warm Germ (%)	Cool Germ (%)	Storm Tolerance (1=very tight; 5=very loose)	Seed Yield (lbs/A)	Seed Turnout (%)	Seed Value (\$/A)
FM765AX	27661	66.7	5585	93	76	2.2	808	43.8	83
DP2335B3XF	33033	79.6	5768	96	77	2.3	754	44.5	77
Armor9413XF	29839	70.0	5000	93	81	2.3	808	46.2	83
FM868AXTP	25918	62.5	4475	94	75	2.8	745	46.5	76
DP2436NRB3XF	24539	59.1	6250	92	74	4.3	612	41.9	63
Armor9371B3XF	28967	69.0	5575	98	72	3.3	615	48.5	63
DP2349NRB3XF	24829	59.8	6100	89	75	4.0	550	45.6	56
Mean	27827	66.7				3.0	699	45.3	72
LSD	2900	7.2				0.4	36	1.8	4
R-square	0.71	0.68				0.89	0.95	0.75	0.95
CV (%)	8.9	9.2				12.6	4.4	3.4	4.4
Prob>F, variety	0.0128	0.0191				<0.0001	<0.0001	0.0051	<0.0001

Values in bold are best within each column; values in green-shaded cells are not significantly different from the best value; total crop value = seed value + lint value.

Seed value = seed yield x \$226/metric ton (Aug 2024 price, according to

[US Cotton, Cottonseed Price Received Monthly Trends: USDA Farm Price Received | Ycharts |](#)