



Replicated Agronomic Cotton Evaluation Mixed Technology

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 Location: Cone, TX (Crosby Co)
 Replicates: 3
 Plot Size: 4 rows x ~1260'
 Row Spacing: 40"
 Beds: Yes
 Previous crop(s): Cotton
 Soil type: Pullman Silty Clay Loam
 Irrigation: Drip (80"; ~4 gpm)

Planting Date: 5/28/2025
 Seed Treatments: Various fungicide+insecticide
 Moist. @ planting: Good
 Soil Temp @ planting: 88F @2"; 83F @6"
 Seed/Acre: 40,000
 GPS Lat: 33.769436
 GPS Long: -101.343612
 Elevation: 3109
 Harvest Date: 11/18/2025



Crop Stage*	Avg High Temp (°F)	Avg Low Temp (°F)	DD60 (95°F max)	Long Term DD60	Rain (in)	Solar Radiation (W/m ²)	Total ET (in)	# Hours >95°F	Avg Dev>95°F
Planting to PHS	87.6	66.0	500.5	519.0	3.37	184545	7.79	10	0.15
PHS to First Bloom	88.8	69.1	510.5	586.0	4.32	156527	5.95	14	0.05
First Bloom to Cutout	91.5	68.7	558.5	628.0	0.88	169551	6.33	21	0.17
Cutout to Defoliation	83.1	57.9	742.0	800.0	3.67	317448	11.15	6	0.02
Defoliation to Harvest	74.7	40.4	26.5	24.0	0.00	78925	2.81	0	
Total			2338.0	2557.0	12.24	906996	34.03	51	

*PHS @ ≥500DD60s; first bloom @ ≥1000 DD60s; Cutout = first bloom + 28 d; ET=evapotranspiration; Avg Dev>95°F=average degrees above 95F when the daily high was ≥95F

Sorted by Net Return

Variety	Lint Yield (lbs/A)	Turnout (%)	Micronaire	Length (in)	Staple (1/32 in)	Strength (g/tex)	Uniformity (%)	Color Grades	Leaf Grade	Loan Value (\$/lb)	Lint Value (\$/A)	Total Crop Value (\$/A)	Net Return (\$/A)
DP2525B3XF	1491	39.6	3.96	1.21	38.9	35.0	82.4	11, 11, 21	2.0	0.5820	868	1059	985
DP1822XF	1410	33.1	3.85	1.18	37.8	33.9	82.9	21, 21, 21	2.0	0.5812	820	1048	983
NG3434B3XF	1505	40.2	4.09	1.20	38.4	29.6	82.6	21, 21, 21	3.0	0.5747	865	1052	976
FM765AX	1389	37.0	3.91	1.14	36.6	31.9	82.3	31, 21, 31	3.0	0.5730	796	981	921
NG3457B3XF	1320	37.8	4.15	1.13	36.0	29.9	81.9	11, 21, 21	2.0	0.5722	755	942	866
FM814AXTP	1334	37.9	3.89	1.14	36.5	29.8	81.3	21, 21, 21	2.7	0.5740	766	947	859
Mean	1408	37.6	3.97	1.17	37.4	31.7	82.2		2.44	0.5762	812	1005	932
LSD	38	0.8	0.11	0.02	0.5	1.2	ns		0.3	0.0035	22	29	29
R-square	0.92	0.96	0.83	0.93	0.93	0.90	0.40		0.88	0.80	0.92	0.90	0.91
CV (%)	2.1	1.7	2.2	1.1	1.1	2.9	1.0		9.6	0.5	2.1	2.3	2.4
Prob>F, variety	<0.0001	<0.0001	0.0108	<0.0001	<0.0001	0.0002	0.3571		0.0003	0.0040	<0.0001	0.0001	<0.0001

Variety	Plant Population (#/A)	% Stand Establishment	Seed/lb	Warm Germ (%)	Cool Germ (%)	Planting Seed Cost (\$/A)	Seed Yield (lbs/A)	Seed Turnout (%)	Seed Value (\$/A)
DP2525B3XF	33977	87.1	5400	93	71	73.91	1699	45.1	191
DP1822XF	34630	88.8	4938	93	75	76.52	1663	44.5	187
NG3434B3XF	29693	76.1	4472	93	61	87.27	1614	45.8	182
FM765AX	32815	84.1	4700	93	79	65.22	2033	47.6	229
NG3457B3XF	28750	73.7	4922	93	73	76.52	1663	47.7	187
FM814AXTP	27588	70.7	5201	94	60	60.00	1650	44.0	186
Mean	29718	76.2					1720	45.8	194
LSD	ns	ns					74	0.5	8
R-square	0.59	0.59					0.92	0.96	0.92
CV (%)	9.7	9.7					3.3	0.9	3.3
Prob>F, variety	0.0768	0.0768					<0.0001	<0.0001	<0.0001

Planting seed costs from PCG Seed Cost Calculator

* FM823AXTP cost substituted for FM814AXTP

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; net return = total crop value - seed cost.

Seed value = seed yield x \$248/metric ton (Feb 2025 price, according to US Cotton, Cottonseed Price Received Monthly Trends: USDA Farm Price Received | Ycharts)