



Replicated Agronomic Cotton Evaluation Mixed Technology

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 Location: Hale Center, TX (Hale Co.)
 Replicates: 3
 Plot Size: 8 rows x ~1/2 mi
 Row Spacing: 40"
 Beds: No
 Previous crop(s): Cotton/light wheat cover
 Soil type: Pullman Clay Loam
 Irrigation: Drip (80"; 3 gpma)

Planting Date: 5/19/2025
 Seed Treatments: Various fungicide+insecticide
 Moist. @ planting: Fair-Good
 Soil Temp @ planting: 74F @2"; 71F @6"
 Seed/Acre: 40,000
 GPS Lat: 33.968462
 GPS Long: -101.817979
 Elevation: 3371
 Harvest Date: 11/13/2025



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>95F	Avg Dev>95F
Planting to PHS	88.0	62.2	504.5	504.0	1.43	220327	8.50	32	1.44
PHS to First Bloom	87.9	67.4	493.5	605.0	0.00	164370	5.86	2	0
First Bloom to Cutout	92.7	67.2	547.0	609.0	0.34	178528	6.78	42	1.82
Cutout to Defoliation	85.5	58.4	791.5	790.0	2.79	312687	10.74	12	1.29
Defoliation to Harvest	74.3	39.3	16.5	48.0	0.07	79760	2.55	0	
Total			2353.0	2556.0	4.63	955672	34.43	88	

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

NOTE: Site was damaged by hail on June 5 which caused crop injury and thinned stands of emerged seedlings; however, the associated precipitation also facilitated the emergence of the remainder of the seedlings.

Sorted by Net Return

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)	Net Return (\$/A)
DP2525B3XF	1813	38.6	4.17	1.24	39.6	33.3	82.8	11, 11, 11	2.0	0.5817	1054	1283	1212
DP1822XF	1674	33.8	4.41	1.18	37.9	31.4	82.1	21, 11, 21	1.7	0.5797	970	1221	1159
NG3434B3XF	1754	39.3	4.25	1.21	38.8	28.4	82.1	21, 11, 21	2.0	0.5768	1012	1224	1151
NG3576XF	1647	34.9	4.23	1.22	39.0	30.5	83.7	11, 11, 11	3.0	0.5760	948	1172	1110
FM765AX	1649	35.5	3.89	1.17	37.4	30.8	82.0	21, 21, 21	2.3	0.5777	952	1165	1108
PHY332W3FE	1493	33.4	4.20	1.15	36.9	29.0	80.3	11, 11, 21	2.3	0.5728	855	1078	1006
PHY400W3FE	1498	34.5	4.10	1.11	35.5	28.6	79.3	21, 21, 11	2.7	0.5557	833	1044	971
FM868AXTP	1410	34.2	3.67	1.10	35.3	29.8	80.4	11, 21, 11	2.0	0.5588	788	1012	953
Mean	1617	35.5	4.12	1.17	37.4	30.2	81.6		2.2	0.5724	927	1150	1084
LSD	42	0.5	0.20	0.03	1.0	1.0	1.2		0.4	ns	32	34	34
R-square	0.95	0.97	0.72	0.82	0.82	0.82	0.72		0.74	0.58	0.94	0.94	0.94
CV (%)	2.4	1.4	4.6	2.4	2.4	3.1	1.4		15.3	1.8	3.2	2.7	2.9
Prob>F, variety	<0.0001	<0.0001	0.0086	0.0003	0.0003	0.0002	0.0047		0.0074	0.0646	<0.0001	<0.0001	<0.0001

Variety	Plant Population (#/A)	% Stand Establishment	Planting Seed Quality			Planting Seed Cost (\$/A)	Seed Yield (lbs/A)	Seed Turnout (%)	Seed Value (\$/A)
			Seed/lb	Warm Germ (%)	Cool Germ (%)				
DP2525B3XF	27733	69.3	5400	93	71	70.22	2029	43.2	228
DP1822XF	24829	62.1	4700	93	79	61.96	2230	45.0	251
NG3434B3XF	25628	64.1	4938	93	75	72.70	1883	42.2	212
NG3576XF	23740	59.4	4994	95	85	61.96	1988	42.2	224
FM765AX	27951	69.9	5201	94	60	57.00	1888	40.7	212
PHY332W3FE	23232	58.1	5543	92	62	71.87	1977	44.3	222
PHY400W3FE	24829	62.1	5020	91	86	73.52	1877	43.2	211
FM868AXTP	26281	65.7	4825	95	81	59.59	1993	48.2	224
Mean	24742	61.9					1983	43.6	223
LSD	ns	ns					111	2.3	12
R-square	0.57	0.57					0.70	0.62	0.70
CV (%)	8.8	8.8					5.2	5.0	5.2
Prob>F, variety	0.1762	0.1762					0.0167	0.0278	0.0167

Planting seed costs from PCG Seed Cost Calculator; * NG4792XF cost substituted for NG3576XF

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)