Replicated Agronomic Cotton Evaluation
Mixed Technology

Crop Stage*	Avg High Temp (°F)	Avg Low Temp (°F)	DD60 (95°F max)	Long Term DD60	Rain (in)	Solar Radiation (W/m²)	Total ET (in)	# Hours>95F	Avg Dev>95F
Planting to PHS	88.4	69.1	506.0	631.0	4.73	156393	5.97	3	0.00
PHS to First Bloom	94.3	70.1	494.0	548.0	0.59	150565	6.65	54	2.05
First Bloom to Cutout	88.6	65.5	474.0	617.0	3.63	162636	5.64	10	2.00
Cutout to 1st Freeze	78.8	50.0	489.0	608.0	1.40	354733	11.69	0	
1st Freeze to Harvest	57.5	29.3	0.0	2.0	0.00	43139	1.15	0	
Total			*1963.0*	*2406.0*	*10.35*	*867466*	*31.10*	*67*	

**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*

Grower Cooperator:	Andrew Adams	Re-Planting Date:	6/23/2025 *(original planting 5/15/25 hailed out)*
County Agent:	Brant Baugh	Seed Treatments:	Various fungicide+insecticide
Texas A&M AgriLife:	Ken Legé, Ph.D.	Moist. @ planting:	Fair
Location:	Lubbock, TX (Lubbock Co.)	Soil Temp @ planting:	81.9F @2"; 80.7F @6"
Replicates:	3	Seed/Acre:	40,000
Plot Size:	8 rows x 1045-1764'	GPS Lat:	33.58184
Row Spacing:	40"	GPS Long:	-101.732560
Beds:	No	Elevation:	3164
Previous crop(s):	Cotton	Harvest Date:	12/9/2025
Soil type:	Amarillo Fine Sandy Loam/Acuff Loam		
Irrigation:	~~Drip (80"; 3 gpma)~~ None		

NOTE: Although this was a drip irrigated field, given the late planting date, the grower chose to not irrigate; this was essentially a dryland trial.

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)*
NG3576XF	441	27.2	**3.04**	1.22	39.0	31.3	**81.6**	23, 34, 24	2.7	**0.4160**	**183**	**249**	**184**
PHY415W3FE	**461**	26.8	2.71	1.11	35.4	29.7	79.9	23, 24, 23	**2.3**	0.3748	173	244	167
FM765AX	325	25.3	2.69	1.15	36.8	31.9	**81.6**	33, 33, 33	3.0	0.3917	129	180	120
NG3434B3XF	348	**29.1**	2.49	1.18	37.9	28.6	80.3	34, 33, 34	3.3	0.3372	118	166	90
PHY332W3FE	304	25.2	2.66	1.14	36.4	30.8	80.9	23, 24, 24	**2.3**	0.3732	114	165	89
DP2525B3XF	317	27.1	2.48	**1.25**	**40.0**	**33.8**	79.7	23, 33, 24	**2.3**	0.3367	108	156	82
FM814AXTP	294	28.0	2.64	1.16	37.1	30.4	**81.6**	33, 34, 33	2.7	0.3683	108	154	67
DP2335B3XF	260	25.7	2.29	1.14	36.6	30.3	79.8	**23, 23, 23**	2.7	0.3253	86	128	58
Mean	*344*	*26.8*	*2.63*	*1.17*	*37.4*	*30.9*	*80.7*		*2.7*	*0.3654*	*128*	*180*	*107*
LSD	*39*	*1.4*	*0.12*	*0.01*	*0.3*	*1.1*	*ns*		*ns*	*0.0249*	*18*	*23*	*23*
R-square	*0.90*	*0.67*	*0.87*	*0.96*	*0.96*	*0.79*	*0.58*		*0.58*	*0.76*	*0.90*	*0.90*	*0.91*
CV (%)	*10.5*	*5.0*	*4.2*	*1.0*	*1.0*	*3.3*	*1.2*		*17.6*	*6.3*	*13.5*	*12.1*	*20.4*
Prob>F, variety	*<0.0001*	*0.0341*	*<0.0001*	*<0.0001*	*<0.0001*	*0.0010*	*0.0804*		*0.1813*	*0.0040*	*<0.0001*	*<0.0001*	*<0.0001*

			Planting Seed Quality						
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)*
NG3576XF	28314	70.8	4994	95	85	65.22	591	36.0	67
PHY415W3FE	31654	79.1	4676	98	75	77.39	**632**	36.8	**71**
FM765AX	27298	68.3	5201	94	60	60.00	461	36.2	52
NG3434B3XF	25773	64.4	4938	93	75	76.52	426	35.6	48
PHY332W3FE	29330	73.3	5000	98	89	75.65	453	37.8	51
DP2525B3XF	**32017**	**80.0**	5400	93	71	73.91	425	36.5	48
FM814AXTP	25410	63.5	4472	93	61	87.27	405	**38.7**	46
DP2335B3XF	30637	76.6	6450	98	82	69.57	368	36.5	41
Mean	*28804*	*72.0*					*470*	*36.8*	*53*
LSD	*1905*	*4.8*					*59*	*ns*	*7*
R-square	*0.76*	*0.76*					*0.88*	*0.38*	*0.88*
CV (%)	*6.2*	*6.2*					*11.6*	*5.1*	*11.6*
Prob>F, variety	*0.0020*	*0.0020*					*0.0004*	*0.5386*	*0.0004*

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