



Replicated Agronomic Cotton Evaluation Mixed Technology

Grower Cooperator: Craig McCloy
 County Agents: Kristy Slough
 Texas A&M Agrilife: Ken Legé, Ph.D.
 Location: Pringle, TX (Hutchinson Co.)
 Replicates: 3
 Plot Size: 4 rows x ~1/2 mi
 Row Spacing: 40"
 Beds: No
 Previous crop(s): Corn for grain, strip tilled
 Soil type: Sherman Clay Loam
 Irrigation: Pivot (2.7 gpm)

Planting Date: 5/14/2025
 Seed Treatments: Various fungicide+insecticide
 Moist. @ planting: Good
 Soil Temp @ planting: 77F @2"; 72F @6"
 Seed/Acre: 60,000
 GPS Lat: 35.946044
 GPS Long: -101.405708
 Elevation: 3328
 Harvest Date: 11/14/2025

Slight to moderate injury from off-site 2,4-D; see damage ratings below recorded near pinhead square and early bloom stages.

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	83.7	59.8	504.5	595.0	5.27	275515	10.46	14	0.06
PHS to First Bloom	89.2	66.4	496.0	570.0	2.75	182678	6.85	13	0.31
First Bloom to Cutout	91.1	67.0	523.0	588.0	1.80	181435	6.89	30	0.35
Cutout to Defoliation	81.8	57.2	638.5	780.0	3.24	298527	10.92	0	
Defoliation to Harvest	66.6	38.5	6.0	27.0	0.00	71153	2.27	0	
Total			2168.0	2560.0	13.06	1009308	37.39	57	

*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



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)
DP1822XF	1526	31.1	2.92	1.23	39.5	34.3	82.8	11, 21, 21	3.0	0.4992	761	1010	912
FM765AX	1591	34.9	3.05	1.16	37.1	33.3	82.5	21, 21, 21	3.3	0.4997	795	990	900
DP2525B3XF	1561	36.4	3.03	1.25	40.1	35.5	82.5	11, 11, 11	2.0	0.5112	798	1007	897
PHY137W3E1	1448	30.6	3.04	1.18	37.8	33.3	82.7	21, 21, 21	3.3	0.5052	731	969	879
PHY136W3E1	1490	32.3	2.75	1.15	36.8	32.1	80.6	21, 21, 11	2.7	0.4737	705	935	845
NG3434B3XF	1413	36.0	2.96	1.19	38.2	30.0	81.6	21, 21, 21	3.0	0.5035	712	890	775
NG3576XF	1262	34.3	3.03	1.23	39.3	31.7	82.7	21, 11, 11	3.7	0.4983	629	809	711
FM757AXTP	1069	32.5	2.59	1.17	37.6	30.1	79.6	21, 21, 11	3.0	0.4505	482	640	510
Mean	1420	33.5	2.92	1.20	38.3	32.5	81.9		3.0	0.4926	702	906	804
LSD	50	0.8	ns	0.02	0.6	0.8	0.8		0.5	ns	40	49	49
R-square	0.96	0.92875	0.502903	0.90	0.90	0.93	0.81		0.70	0.51	0.92	0.92	0.93
CV (%)	3.3	2.2	7.4	1.3	1.3	2.2	0.9		13.8	5.5	5.3	5.0	5.7
Prob>F, variety	<0.0001	<0.0001	0.1580	<0.0001	<0.0001	<0.0001	0.0009		0.0088	0.1891	<0.0001	<0.0001	<0.0001

Variety	Plant Population (#/A)	% Stand Establishment	Herbicide Damage Rating (1 = no damage; 5 = very severe damage)	Herbicide Damage Rating (1 = no damage; 5 = very severe damage)	Planting Seed Quality			Seed Yield (lbs/A)	Seed Turnout (%)	Seed Value (\$/A)	Planting Seed Cost (\$/A)
					Seed/lb	Warm Germ (%)	Cool Germ (%)				
DP1822XF	43850	73.1	3.4	3.1	4700	93	79	2211	45.1	249	97.83
FM765AX	43705	72.8	1.8	1.5	5201	94	60	1739	38.2	196	90.00
DP2525B3XF	45593	76.0	2.8	2.3	5400	93	71	1861	43.4	209	110.87
PHY137W3E1	44068	73.4	1.0	1.0	4841	94	88	2111	44.7	237	90.00
PHY136W3E1	45230	75.4	1.0	1.0	5161	93	88	2037	44.2	229	90.00
NG3434B3XF	40366	67.3	2.9	1.9	4938	93	75	1583	40.4	178	114.78
NG3576XF	38768	64.6	2.8	2.2	4994	95	85	1598	43.5	180	97.83
FM757AXTP	29403	49.0	2.6	2.2	5419	92	49	1405	42.7	158	130.91
Mean	38768	64.6	2.8	2.2				1818	42.8	205	
LSD	3188	5.3	0.3	0.2				111	2.5	13	
R-square	0.85	0.85	0.95	0.97				0.92	0.60	0.92	
CV (%)	7.2	7.2	11.4	7.6				5.7	5.5	5.7	
Prob>F, variety	0.0002	0.0002	<0.0001	<0.0001				<0.0001	0.0379	<0.0001	

Planting seed costs from PCG Seed Cost Calculator; * NG4792XF cost substituted for NG3576XF; * FM823AXTP cost substituted for FM757AXTP. 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)