



Replicated Agronomic Cotton Evaluation Mixed Technology Location

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Location: Amherst, TX (Lamb Co)
Replicates: 3
Plot Size: 8 rows x 2640'
Row Spacing: 40"
Beds: No
Previous crop(s): Cotton
Soil type: Amarillo Fine Sandy Loam
Irrigation: Drip (80"; 2 gpma)

Planting Date: 5/16/2025
Seed Treatments: Various fungicide+insecticide
Moist. @ planting: Very good
Soil Temp @ planting: 70F @ 6"
Seed/Acre: 45K Armor; 40K for others*
GPS Lat: 34.063891
GPS Long: -102.426466
Elevation: 3655
Harvest Date: 11/11/2025
*Grower driven decision.

Crop Stage*	Avg High Temp (°F)	Avg Low Temp (°F)	DD60 (95°F max)	Long Term DD60	Rain (in)	Total ET (in)	# Hours>95F	Avg Dev>95F
Planting to PHS	87.5	60.8	500.5	512.0	4.45	9.49	32	1.76
PHS to First Bloom	88.1	67.5	498.5	582.0	2.04	6.55	0	
First Bloom to Cutout	93.4	67.4	555.5	595.0	1.39	7.03	59	1.53
Cutout to Defoliation	84.3	58.1	760.5	772.0	3.78	11.66	0	
Defoliation to Harvest	72.0	38.9	12.0	40.0	0.29	2.52	0	
Total			2327.0	2501.0	11.95	37.25	91	

*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

2024 weather data from this same site:	2067.0	4.52	203
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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)
DP1822XF	1720	36.5	4.17	1.18	37.7	33.0	82.8	21, 11, 11	1.7	0.5787	995	1256	1191
DP2525B3XF	1689	39.5	4.09	1.24	39.7	34.9	82.4	11, 11, 11	2.0	0.5817	982	1210	1136
Armor9413XF	1679	37.8	4.24	1.13	36.3	30.0	81.6	11, 11, 11	2.0	0.5718	960	1198	1129
NG3434B3XF	1662	41.0	4.14	1.20	38.3	29.9	82.6	21, 11, 11	2.3	0.5768	958	1165	1088
FM765AX	1620	38.6	4.53	1.13	36.3	30.6	81.4	21, 21, 21	2.3	0.5717	926	1144	1084
Armor9371B3XF	1577	37.9	4.17	1.14	36.7	28.8	82.5	11, 11, 11	2.0	0.5738	905	1127	1041
NG3576XF	1526	37.8	4.17	1.22	39.0	31.5	83.4	11, 11, 11	2.7	0.5775	881	1092	1027
PHY332W3FE	1510	35.9	4.41	1.16	37.0	30.3	81.1	11, 11, 11	2.0	0.5737	867	1091	1015
PHY400W3FE	1490	36.7	4.20	1.12	36.3	31.2	81.0	11, 21, 11	2.3	0.5693	847	1061	984
FM814AXTP	1451	38.6	4.24	1.14	36.3	30.3	81.5	11, 11, 21	2.0	0.5682	825	1026	939
Mean	1592	38.0	4.24	1.17	37.4	31.1	82.0		2.1	0.5743	915	1137	1063
LSD	ns	0.8	ns	0.03	1.2	1.2	ns		ns	ns	ns	ns	ns
R-square	0.52	0.85	0.41	0.77	0.72	0.76	0.53		0.55	0.30	0.54	0.55	0.58
CV (%)	7.8	2.1	5.4	2.5	2.7	4.1	1.3		17.4	1.6	7.9	7.7	8.2
Prob>F, variety	0.1466	<0.0001	0.4658	0.0007	0.0029	0.0008	0.1788		0.1541	0.7255	0.1037	0.0995	0.0638

Variety	Plant Population (#/A @ 27 DAP)	% Stand Establishment @ 27 DAP	Plant Population (#/A @ 40 DAP)	% Stand Establishment @ 40 DAP	Planting Seed Quality			Planting Seed Cost (\$/A)	Seed Yield (lbs/A)	Seed Turnout (%)	Seed Value (\$/A)
					Seed/lb	Warm Germ (%)	Cool Germ (%)				
DP1822XF	19747	49.4	25410	56.5	4700	93	79	65.22	2319	49.2	261
DP2525B3XF	19602	49.0	24394	54.2	5400	93	71	73.91	2025	47.4	228
Armor9413XF	18005	40.0	20255	45.0	4475	94	84	68.48	2110	47.5	237
NG3434B3XF	13794	34.5	19529	43.4	4938	93	75	76.52	1834	45.3	206
FM765AX	16117	40.3	19166	42.6	5419	92	78	60.00	1939	46.1	218
Armor9371B3XF	14084	31.3	20038	44.5	5200	93	77	86.09	1977	47.5	222
NG3576XF	13068	32.7	16480	36.6	4994	95	85	65.22	1879	46.5	211
PHY332W3FE	18731	46.8	23087	51.3	5543	92	62	75.65	1991	47.2	224
PHY400W3FE	16988	42.5	19384	43.1	5020	91	86	77.39	1906	47.0	214
FM814AXTP	13649	34.1	18005	40.0	4472	93	78	87.27	1784	47.5	201
Mean	16379	40.1	20575	45.7					1976	47.1	222
LSD	ns	6.7	2013	4.5					136	0.7	15
R-square	0.66	0.69	0.81	0.81					0.68	0.72	0.68
CV (%)	18.2	17.8	10.4	10.4					7.3	1.7	7.3
Prob>F, variety	0.0653	0.0332	0.0014	0.0014					0.0141	0.0015	0.0141

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)

Planting seed costs from PCG Seed Cost Calculator