



Replicated Agronomic Cotton Evaluation Enlist Only

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 Texas A&M AgriLife: Ken Legé, Ph.D.
 Location: Hartley, TX (Hartley Co)
 Replicates: 3
 Plot Size: 8 rows x ~1/2 mi
 Row Spacing: 30"
 Beds: No
 Previous crop(s): Corn (2023 & 2024)
 Soil type: Dumas/Gruver Loam
 Irrigation: Pivot (5 gpma)

Planting Date: 5/15/2025
 Seed Treatments: TriO
 Moist. @ planting: Good
 Soil Temp @ planting: 70 F
 Seed/Acre: 65,000
 GPS Lat: 35.936172
 GPS Long: -102.376484
 Elevation: 3922
 Harvest Date: 11/6/2025

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	83.2	58.3	504.5	670.0	3.74	286906	10.95	13	1.6
PHS to First Bloom	87.3	64.7	496.5	681.0	2.85	195413	6.76	0	
First Bloom to Cutout	88.7	63.7	441.0	601.0	2.94	153950	5.33	29	2.6
Cutout to Defoliation	81.4	56.0	430.0	594.0	2.88	209915	7.01	0	
Defoliation to Harvest	69.0	38.7	3.5	71.0	0.04	70925	2.20	0	
Total			1875.5	2617.0	12.45	917109	32.25	42	

*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

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)
PHY400W3FE	1617	29.9	3.53	1.19	38.2	34.0	82.6	21, 11, 11	4.0	0.5407	874	1160	1035
PHY205W3FE	1520	30.1	3.98	1.17	37.3	33.2	82.9	21, 21, 21	3.3	0.5543	842	1096	974
PHY415W3FE	1522	29.9	3.76	1.23	39.5	32.8	83.3	21, 21, 21	4.0	0.5433	826	1092	966
PHY411W3FE	1406	29.6	3.75	1.14	36.5	33.5	82.6	21, 11, 11	3.7	0.5620	790	1021	895
Mean	1516	29.9	3.76	1.18	37.9	33.4	82.9		3.8	0.5501	833	1092	968
LSD	92	ns	ns	0.03	1.0	ns	ns		ns	ns	ns	ns	ns
R-square	0.80	0.34	0.55	0.90	0.90	0.30	0.23		0.33	0.18	0.47	0.71	0.71
CV (%)	3.5	1.8	7.8	1.5	1.5	4.6	1.1		18.3	5.8	6.2	4.2	4.7
Prob>F, variety	0.0169	0.7106	0.3890	0.0032	0.0032	0.7983	0.7817		0.6128	0.8317	0.3368	0.0530	0.0526

Planting Seed Quality

Variety	Plant Population (#/A)	% Stand Establishment	Seed/lb	Warm Germ (%)	Cool Germ (%)	Seed Yield (lbs/A)	Seed Turnout (%)	Seed Value (\$/A)	Planting Seed Cost (\$/A)
PHY400W3FE	46464	71	5020	91	86	2543	47.2	261	125.76
PHY415W3FE	46851	72	4676	98	75	2363	46.5	242	125.76
PHY205W3FE	46367	71	4285	92	87	2252	44.7	231	121.52
PHY411W3FE	39204	60	5578	91	67	2050	43.2	210	125.76
Mean	44722	69				2302	45.4	236	
LSD	2834	4				240	ns	25	
R-square	0.89	0.89				0.77	0.45	0.77	
CV (%)	3.7	3.7				6.0	6.5	6.0	
Prob>F, variety	0.0033	0.0033				0.0246	0.4059	0.0246	

Planting seed costs from PCG Seed Cost Calculator

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)