



Replicated Agronomic Cotton Evaluation
Enlist-Only Location

Grower Cooperator: Sawyer Jenkins
 County Agents: Terry Millican, Keegan McCollum
 Texas A&M AgriLife: Ken Legé, Ph.D.
 Location: Seminole, TX (Gaines Co)
 Replicates: 3
 Plot Size: 8 rows x ~2640'
 Row Spacing: 40"
 Beds: No
 Previous crop(s): Wheat fallow, strip tilled
 Soil type: Amarillo Loamy Fine Sand/Patricia Fine Sand
 Irrigation: LEPA (1-2 gpm/ft) None

Planting Date: 5/16/2025
 Seed Treatments: TRiO
 Moist. @ planting: Fair-Good
 Soil Temp @ planting: 72F @2"; 68F @6"
 Seed/Acre: 30,000
 GPS Lat: 32.809993
 GPS Long: -102.797535
 Elevation: 3442
 Harvest Date: 11/17/2025



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 >95°F	Avg Dev>95°F
Planting to PHS	90.2	62.2	518.5	563.0	1.97	220761	9.28	55	0.6
PHS to First Bloom	88.3	68.5	496.5	618.0	1.89	156070	6.20	2	0.0
First Bloom to Cutout	95.3	67.7	579.0	659.0	0.70	183232	7.79	71	1.1
Cutout to Defoliation	86.4	59.7	1003.0	1079.0	3.32	381308	14.36	21	0.1
Defoliation to Harvest	76.6	38.4	27.0	36.0	0.00	83136	2.91	0	
Total			2624.0	2955.0	7.88	1024507	40.54	149	1.9

*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

*crop was irrigated to establish stand only; no in-season irrigation.

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	546	32.9	4.10	1.05	33.6	28.2	78.7	21, 21, 21	3.0	0.5203	284	363	305
PHY415W3FE	501	31.6	4.17	1.08	34.7	28.7	80.5	21, 21, 21	3.0	0.5468	274	338	280
PHY332W3FE	479	30.9	4.41	1.06	33.8	27.8	79.6	21, 21, 21	3.0	0.5298	254	321	264
PHY411W3FE	490	32.2	4.74	1.03	33.0	29.2	80.2	21, 21, 21	3.0	0.5163	253	316	258
Mean	504	31.9	4.36	1.06	33.8	28.5	79.74		3.00	0.5283	266.23	334.34	276.63
LSD	39	ns	0.14	0.02	0.6	ns	ns		ns	0.0180	ns	ns	ns
R-square	0.75	0.70	0.96	0.80	0.80	0.52	0.65		non-est	0.76	0.75	0.66	0.66
CV (%)	4.5	2.1	1.8	1.3	1.3	3.7	1.0		non-est	2.0	4.7	5.8	7.0
Prob>F, variety	0.0426	0.0562	0.0002	0.0178	0.0178	0.4333	0.1274		non-est	0.0431	0.0567	0.0860	0.0901

Variety	Plant Population (#/A)	% Stand Establishment	Seed/lb	Warm Germ (%)	Cool Germ (%)	Planting Seed Cost (\$/A)	Seed Value (\$/A)	Seed Yield (lbs/A)	Seed Turnout (%)
PHY400W3FE	24176	80.6	5020	91	86	58.04	67	595	38.4
PHY415W3FE	24902	83.0	4676	98	75	58.04	79	700	42.1
PHY332W3FE	22070	73.6	5543	92	62	56.74	63	562	37.2
PHY411W3FE	16117	53.7	5578	91	67	58.04	64	565	35.6
Mean	21816	72.7					68	605	38.3
LSD	3257	10.9					ns	ns	ns
R-square	0.88	0.88					0.36	0.36	0.32
CV (%)	8.63	8.65					20.2	20.2	18.9
Prob>F, variety	0.0045	0.0046					0.0522	0.0522	0.7393

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)