



Replicated Agronomic Cotton Evaluation Mixed Technology

Grower Cooperator: Jonathan James
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 Location: Mt. Blanco, TX (Crosby Co)
 Replicates: 3
 Plot Size: 12 rows x ~1/2 mi
 Row Spacing: 40"
 Beds: No
 Previous crop(s): Wheat fallow
 Soil type: Pullman Silty Clay Loam
 Irrigation: None

Re-Planting Date: 6/20/2025 (orig. 5/19/25; hailed out)
 Seed Treatments: Various fungicide+insecticide
 Moist. @ planting: Fair-Good
 Soil Temp @ planting: Warm
 Seed/Acre: 25,000
 GPS Lat: 33.786906
 GPS Long: -101.160051
 Elevation: 3050
 Harvest Date: 11/12/2025



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	88.8	69.1	511.5	586.0	1.95	162675	5.99	0	
PHS to First Bloom	94.7	71.2	510.0	520.0	0.58	152348	6.09	70	1.6
First Bloom to Cutout	91.1	67.6	532.5	584.0	2.93	155170	6.00	22	2.0
Cutout to Defoliation	84.0	59.1	543.0	498.0	1.05	222949	8.07	3	0.7
Defoliation to Harvest	71.6	42.7	27.5	51.0	0.14	76682	2.67	0	
Total			2124.5	2239.0	6.65	769824	28.82	95	

*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 same site: 1724.5 5.64 220

Lint yield average from 2024 trial at this same site: 336 lbs/A

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)
PHY332W3FE	987	35.7	4.15	1.15	36.9	31.3	82.6	21, 11, 12	2.3	0.5707	563	705	658
FM765AX	984	37.3	4.34	1.14	36.5	30.3	82.2	21, 21, 21	2.7	0.5673	559	691	653
DP2123B3XF	937	32.1	4.13	1.10	35.3	30.4	81.5	11, 21, 11	2.3	0.5575	521	678	639
DP2239B3XF	953	38.3	4.03	1.20	38.3	31.0	81.4	11, 11, 11	2.0	0.5803	553	683	638
FM868AXTP	907	35.8	4.11	1.14	36.6	32.3	82.9	11, 11, 11	2.0	0.5802	526	660	621
PHY415W3FE	914	33.9	4.37	1.15	36.8	32.0	82.3	21, 21, 11	3.0	0.5750	526	664	616
Mean	947	35.5	4.19	1.15	36.8	31.2	82.2		2.4	0.5718	541	680	638
LSD	ns	ns	0.16	0.03	1.0	0.8	ns		ns	ns	ns	ns	ns
R-square	0.47	0.66	0.75	0.69	0.69	0.80	0.45		0.56	0.56	0.40	0.46	0.46
CV (%)	6.5	6.2	2.9	2.1	2.1	1.9	1.3		18.2	1.9	6.7	5.6	5.9
Prob>F, variety	0.5124	0.0607	0.0391	0.0215	0.0215	0.0082	0.4992		0.1107	0.1753	0.5658	0.7025	0.7011

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)
PHY332W3FE	19675	78.7	5000	98	89	47.28	1264	45.4	142
FM765AX	20473	81.9	5201	94	60	37.50	1177	44.6	132
DP2123B3XF	22724	90.9	4915	97	85	38.59	1393	47.6	157
DP2239B3XF	20836	83.4	6250	94	88	44.57	1155	46.4	130
FM868AXTP	20909	83.7	4825	95	81	39.20	1187	46.9	133
PHY415W3FE	21490	86.0	4676	98	75	48.37	1232	45.7	139
Mean	21708	86.8					1235	46.1	139
LSD	ns	ns					51	1.3	6
R-square	0.54	0.54					0.92	0.65	0.92
CV (%)	6.2	6.2					3.2	2.1	3.2
Prob>F, variety	0.1842	0.1850					0.0002	0.0382	0.0002

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)