

Replicated Agronomic Cotton Evaluation Mixed Technology

Grower Cooperator: Landon Mires
County Agent: Sierra Stephens
Texas A&M AgriLife: Ken Legé, Ph.D.
Location: O'Donnell, TX (Lynn Co)
Replicates: 3
Plot Size: 8 rows x ~4340'
Row Spacing: 40"
Beds: No
Previous crop(s): Cotton
Soil type: Estacado/Pep, Acuff Loams
Irrigation: None

Planting Date: 6/2/2025
Seed Treatments: Various fungicide+insecticide
Moist. @ planting: Adequate
Soil Temp @ planting: 80F @2"; 78F @6"
Seed/Acre: 30,000
GPS Lat: 32.976915
GPS Long: -101.745634
Elevation: 3015
Harvest Date: 10/20/2025



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	90.5	69.0	508.5	528.0	1.69	7.74	24	1.5
PHS to First Bloom	89.1	69.4	498.5	589.0	5.09	6.16	19	0.6
First Bloom to Cutout	94.9	69.9	606.0	652.0	1.53	7.82	72	1.9
Cutout to Defoliation	87.1	63.5	626.0	658.0	2.49	8.29	14	0.8
Defoliation to Harvest	84.2	59.7	238.5	146.0	0.10	3.64	0	n/a
Total			2477.5	2573.0	10.9	33.65	129	

*PHS @ ≥500DD60s; first bloom @ ≥1000 DD60s; Cutout = first bloom + 28 d

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)
DP2335B3XF	260	35.7	4.28	1.16	37.0	33.6	80.9	21, 21, 21	3.0	0.5750	149	189	137
DP2239B3XF	256	36.6	4.65	1.23	39.2	34.0	83.6	11, 21, 31	2.6	0.5787	148	185	132
FM765AX	239	39.7	5.02	1.20	38.3	32.6	83.4	31, 31, 21	2.7	0.5472	131	163	118
FM868AXTP	230	38.6	5.03	1.17	37.4	32.0	82.1	21, 21, 21	2.7	0.5582	129	161	114
Mean	244	37.8	4.77	1.18	37.8	32.9	82.5		2.7	0.5631	138	172	123
LSD	ns	0.6	0.35	ns	ns	ns	ns		ns	0.0154	ns	ns	ns
R-square	0.66	0.98	0.87	0.70	0.70	0.61	0.71		0.32	0.83	0.76	0.77	0.71
CV (%)	7.2	0.9	4.1	2.4	2.4	3.3	1.8		20.0	1.5	6.9	7.1	9.9
Prob>F, variety	0.2747	0.0001	0.0144	0.1528	0.1528	0.2760	0.2448		0.8274	0.0243	0.1015	0.0904	0.2071

Planting Seed Quality

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)
DP2335B3XF	24466	82	6450	98	82	52.17	351	48.3	40
DP2239B3XF	27152	91	6250	94	88	53.48	328	46.9	37
FM765AX	23813	79	5201	94	60	45.00	284	47.1	32
FM868AXTP	25773	86	4825	95	81	47.05	289	48.4	33
Mean	25301	84					310	assumed	35
LSD	ns	ns					ns	from	ns
R-square	0.45	0.45					0.80	2024 RACE	0.80
CV (%)	8.2	8.2					7.9	data from	7.9
Prob>F, variety	0.2979	0.2982					0.0581	nearby site	0.0581

Planting seed costs from PCG Seed Cost Calculator.

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)

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.