

Replicated Agronomic Cotton Evaluation
Mixed Technology



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Location: Cone, TX (Crosby Co)
Replicates: 3
Plot Size: 8 rows x ~1130'
Row Spacing: 40"
Beds: No
Previous crop(s): Cotton
Soil type: Pullman Silty Clay Loam
Irrigation: Drip (40"; 2.5 - 3 gpm)

Planting Date: 5/22/2024
Seed Treatments: Various
Moist. @ planting: Adequate
Soil Temp @ planting: 2" 66.4F ; 6" 67.6F
Seed/Acre: 40,000
GPS Lat: 33.747492
GPS Long: -101.415655
Elevation: 3136
Harvest Date: 12/2/2024
Remainder of field planted to FM2498GLT

Crop Stage*	Avg High Temp (°F)	Avg Low Temp (°F)	DD60 (95°F max)	Long Term DD60	Rain (in)
Planting to PHS	88.8	64.8	511.5	449.0	4.94
PHS to First Bloom	94.4	70.0	491.5	483.0	1.02
First Bloom to Cutout	93.6	67.7	560.5	631.0	0.34
Cutout to Defoliation	89.6	60.0	926.5	935.0	2.13
Defoliation to Harvest	68.3	43.0	108.0	63.0	4.87
Total			2598.0	2561.0	13.30

*PHS @ ≥500DD60s; first bloom @ ≥1000 DD60s; Cutout = first bloom + 28 d
Due to station malfunction, precipitation from TAEX Verett station from 8/18/24 to harvest

Sorted by Total Crop Value

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)
FM765AX	862	38.3	4.66	1.05	33.6	28.0	80.6	31, 41, 31	3.7	0.5007	432	538
NG3434B3XF	757	38.9	4.67	1.08	34.6	27.6	80.2	31, 31, 31	3.3	0.5335	404	496
NG3457B3XF	744	36.7	4.78	1.07	34.1	26.8	81.4	31, 31, 31	3.3	0.5272	392	495
DP1822XF	699	36.2	4.60	1.05	33.7	28.5	80.2	31, 31, 31	3.0	0.5240	366	462
ST6000AXTP	730	38.5	4.62	1.03	32.9	28.3	79.2	31, 41, 31	3.3	0.4993	365	458
DP1820B3XF	689	37.5	4.74	1.06	33.9	28.0	79.8	31, 31, 31	3.0	0.5250	362	451
NG4409B3XF	698	37.4	4.84	1.06	33.8	27.1	80.5	31, 31, 32	3.7	0.5065	353	441
FM868AXTP	678	38.4	4.76	1.06	34.0	29.6	81.0	31, 31, 32	3.3	0.5195	352	438
DP2335B3XF	668	38.4	4.49	1.05	33.7	26.7	79.5	31, 31, 31	3.0	0.5058	339	422
DP2123B3XF	610	34.0	4.63	1.05	33.7	27.6	80.1	41, 41, 41	3.7	0.5102	311	404
Mean	713	37.4	4.68	1.06	33.9	27.8	80.3		3.3	0.5152	368	461
LSD	40	0.4	ns	ns	ns	0.9	ns		ns	ns	30	36
R-square	0.82	0.96	0.35	0.41	0.41	0.58	0.55		0.28	0.36	0.68	0.67
CV (%)	6.0	1.1	3.8	2.0	2.0	3.4	1.0		17.6	4.1	8.7	8.4
Prob>F, variety	0.0002	<0.0001	0.4359	0.3388	0.3388	0.0370	0.1049		0.7453	0.4937	0.0122	0.0177

Variety	Plant Population (#/A)	% Stand Establishment	Seed/lb	Warm Germ (%)	Cool Germ (%)	Storm Tolerance (1=very tight; 5=very loose)	Seed Yield (lbs/A)	Seed Turnout (%)	Seed Value (\$/A)
FM765AX	26499	66.2	5585	93	76	1.3	1042	46.4	107
NG3434B3XF	24394	61.0	5287	93	83	1.0	902	46.4	92
NG3457B3XF	20691	51.7	5750	93	91	3.7	1003	49.3	103
DP1822XF	30565	76.4	4612	93	69	2.5	934	48.4	96
ST6000AXTP	23595	59.0	5274	94	89	4.7	903	47.4	93
DP1820B3XF	26281	65.7	5500	86	63	2.0	874	47.4	90
NG4409B3XF	25991	65.0	4940	96	86	4.3	856	45.9	88
FM868AXTP	27443	68.6	4475	94	75	1.3	840	47.5	86
DP2335B3XF	29839	74.6	5768	96	77	2.5	816	46.9	84
DP2123B3XF	31000	77.5	5450	96	81	3.5	912	50.8	93
Mean	26630	66.6				2.7	908	47.6	93
LSD	1749	4.4				0.7	73	ns	7
R-square	0.84	0.84				0.82	0.67	0.57	0.67
CV (%)	7.0	7.0				27.9	8.5	4.1	8.5
Prob>F, variety	<0.0001	<0.0001				<0.0001	0.0471	0.1378	0.0471

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.

Seed value = seed yield x \$226/metric ton (Aug 2024 price, according to [US Cotton, Cottonseed Price Received Monthly Trends: USDA Farm Price Received | Ycharts](#))