

**Replicated Agronomic Cotton Evaluation
Mixed Technology**



Grower Cooperator: Regan Ware
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Location: Cone, TX (Crosby Co)
Replicates: 3
Plot Size: 4 rows x ~1260'
Row Spacing: 40"
Beds: Yes
Previous crop(s): Cotton
Soil type: Pullman Silty Clay Loam
Irrigation: Drip (80"; ~4 gpma)

Planting Date: 5/29/2024
Seed Treatments: Various fungicide+insecticide
Moist. @ planting: Adequate
Soil Temp @ planting: 2" 90 F 6" 85F
Seed/Acre: 39K
GPS Lat: 33.769436
GPS Long: -101.343612
Elevation: 3109
Harvest Date: 12/8/2024
Remainder of field planted to FM1730GLTP

Crop Stage*	Avg High Temp (°F)	Avg Low Temp (°F)	DD60 (95°F max)	Long Term DD60	Rain (in)
Planting to PHS	90.6	67.6	520.5	458.0	4.97
PHS to First Bloom	94.7	70.4	495.0	495.0	0.35
First Bloom to Cutout	93.5	68.3	571.5	626.0	0.36
Cutout to Defoliation	84.3	56.5	941.5	902.0	6.37
Defoliation to Harvest	61.3	37.0	4.0	9.0	1.54
Total			2532.5	2490.0	13.59

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

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)
PHY350W3FE	1211	34.3	4.29	1.10	35.1	28.0	81.0	31, 31, 31	3.3	0.5435	658	843
DP1820B3XF	1190	37.4	4.15	1.15	36.9	29.8	81.3	31, 31, 31	3.3	0.5593	666	826
NG3434B3XF	1199	39.3	4.42	1.14	36.4	27.5	81.4	31, 31, 31	3.7	0.5528	663	815
PHY332W3FE	1157	34.6	4.29	1.11	35.6	28.3	80.6	31, 31, 31	3.7	0.5490	635	808
NG3457B3XF	1171	36.7	4.02	1.11	35.4	27.9	80.9	31, 31, 31	3.3	0.5442	638	807
FM765AX	1177	37.1	3.97	1.13	36.1	29.7	81.3	31, 31, 31	4.0	0.5465	643	803
DP2335B3XF	1171	37.8	3.52	1.14	36.4	29.3	79.3	31, 31, 31	3.0	0.5375	630	786
FM868AXTP	1125	36.6	3.83	1.11	35.6	30.3	81.3	31, 31, 31	4.0	0.5440	612	775
Mean	1175	36.7	4.06	1.12	35.8	28.9	82.4		3.5	0.5471	643	808
LSD	ns	0.5	0.21	0.02	0.6	0.7	ns		ns	ns	ns	ns
R-square	0.51	0.95	0.78	0.65	0.65	0.81	0.63		0.62	0.52	0.42	0.44
CV (%)	4.4	1.2	4.8	1.7	1.7	2.3	1.0		11.3	1.6	5.6	4.9
Prob>F, variety	0.6027	<0.0001	0.0012	0.0455	0.0455	0.0009	0.1071		0.0840	0.2008	0.6083	0.5565

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)
PHY350W3FE	33106	84.9	5084	96	69	4.5	1801	51.0	185
DP1820B3XF	27806	71.3	5500	96	63	1.8	1562	49.1	160
NG3434B3XF	27370	70.2	5287	93	83	2.7	1478	48.4	152
PHY332W3FE	33396	85.6	5000	98	97	3.8	1683	50.3	173
NG3457B3XF	26281	67.4	5750	93	91	2.8	1648	51.6	169
FM765AX	27878	71.5	5585	93	76	1.7	1556	49.1	160
DP2335B3XF	27733	71.1	5768	96	77	1.8	1526	49.2	156
FM868AXTP	30274	77.6	4475	94	75	3.0	1591	51.9	163
Mean	29231	75.0				2.8	1606	50.1	165
LSD	1436	3.7				0.5	52	ns	5
R-square	0.87	0.87				0.86	0.88	0.60	0.88
CV (%)	4.6	4.6				18.0	3.0	3.3	3.0
Prob>F, variety	<0.0001	<0.0001				<0.0001	<0.0001	0.1526	<0.0001

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](#))