



## Replicated Agronomic Cotton Evaluation Mixed Technology



Grower Cooperator: Matt Hogue  
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 County Extension Agent: Reid Lovorn  
 Location: Brownfield, TX (Terry Co)  
 Replicates: 3  
 Plot Size: 8 rows x ~2648'  
 Row Spacing: 40"  
 Beds: No  
 Previous crop(s): Cotton/wheat cover  
 Soil type: Patricia/ Amarillo Loamy Fine Sand  
 Irrigation: LEPA (3.1 gpm)

Planting Date: 5/16/2024  
 Seed Treatments: Various fungicide+insecticide  
 Moist. @ planting: Fair-Good  
 Soil Temp @ planting: 69F @2"; 70F @6"  
 Seed/Acre: 32,000  
 GPS Lat: 33.257944  
 GPS Long: -102.355306  
 Elevation: 3389  
 Harvest Date: 10/28/2024

Crop Stage*	Avg High Temp (°F)	Avg Low Temp (°F)	DD60 (95°F max)	Long Term DD60	Rain (in)
Planting to PHS	91.9	62.3	508.5	456.0	3.67
PHS to First Bloom	93.5	70.0	498.0	509.0	1.63
First Bloom to Cutout	92.1	66.9	540.0	652.0	0.60
Cutout to Defoliation	89.3	61.2	879.0	1029.0	0.93
Defoliation to Harvest	83.7	51.3	189.5	118.0	0.00
<i>Total</i>			2615.0	2764.0	6.83

\*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)
PHY415W3FE	800	39.8	4.24	1.07	34.2	29.9	80.7	21, 11, 21	2.3	0.5370	431	525
PHY332W3FE	789	39.0	4.21	1.07	34.3	28.1	80.4	11, 21, 11	2.3	0.5383	425	524
FM868AXTP	816	41.7	4.31	1.05	33.5	28.2	79.4	22, 11, 11	1.7	0.5137	420	514
DP2335B3XF	812	41.4	4.10	1.04	33.4	26.8	79.1	11, 11, 11	2.0	0.5058	411	507
ST6000AXTP	758	43.6	4.17	1.07	34.3	29.9	80.6	11, 21, 11	2.0	0.5400	409	492
DP2436NRB3XF	732	42.0	4.08	1.05	33.7	28.4	79.9	11, 11, 11	2.3	0.5248	384	465
Mean	784	41.3	4.18	1.06	33.9	28.6	80.0		2.1	0.5266	413	505
LSD	ns	ns	ns	ns	ns	1.4	0.7		ns	ns	ns	ns
R-square	0.56	0.53	0.48	0.49	0.49	0.70	0.83		0.32	0.55	0.52	0.57
CV (%)	5.3	4.7	4.3	2.3	2.3	3.8	0.6		23.9	4.5	7.9	7.0
Prob>F, variety	0.1833	0.1400	0.6413	0.5490	0.5490	0.0368	0.0155		0.5340	0.4158	0.6046	0.3587

Variety	Plant Population (#/A)	% Stand Establishment	Seed/lb	Warm Germ (%)	Cool Germ (%)	Seed Yield (lbs/A)	Seed Turnout (%)	Seed Value (\$/A)
PHY415W3FE	27443	85.8	4464	97	92	917	45.6	94
PHY332W3FE	28822	90.1	5000	98	97	966	47.7	99
FM868AXTP	24248	75.8	4475	94	75	918	47.0	94
DP2335B3XF	28459	88.9	5786	96	77	941	47.9	96
ST6000AXTP	25918	81.0	5274	94	89	810	46.6	83
DP2436NRB3XF	21417	66.9	6250	92	74	786	45.1	81
Mean	26051	81.4				890	46.7	91
LSD	1889	5.9				58	ns	6
R-square	0.87	0.87				0.82	0.39	0.82
CV (%)	5.6	5.6				5.1	4.1	5.1
Prob>F, variety	0.0008	0.0008				0.0028	0.4495	0.0028

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.](#))