

Replicated Agronomic Cotton Evaluation
Enlist-Only Location



Grower Cooperator: Greg Hughes
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Location: Seminole, TX (Gaines Co)
Replicates: 3
Plot Size: 8 rows x ~2640'
Row Spacing: 40"
Beds: No
Previous crop(s): Cotton
Soil type: Patricia/Arvana Fine Sand
Irrigation: None

Planting Date: 5/23/2024
Seed Treatments: TRI0
Moist. @ planting: Dry
Soil Temp @ planting: 96F @2"; 83F @6"
Seed/Acre: 26,138
GPS Lat: 32.72742
GPS Long: -102.818486
Elevation: 3426
Harvest Date: 12/19/2024

Crop Stage*	Avg High Temp (°F)	Avg Low Temp (°F)	DD60 (95°F max)	Long Term DD60	Rain (in)
Planting to PHS	94.7	66.5	510.0	427.0	2.21
PHS to First Bloom	94.3	71.3	495.0	504.0	1.06
First Bloom to Cutout	93.5	68.9	576.0	657.0	0.95
Cutout to Defoliation	84.8	58.6	1216.5	1093.0	5.80
Defoliation to Harvest	62.9	36.0	8.5	6.0	1.51
Total			2806.0	2687.0	11.53

*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	244	34.3	4.51	1.14	36.6	30.1	82.5	31, 21, 21	2.0	0.5717	139	175
PHY332W3FE	223	34.1	4.69	1.16	37.2	31.6	82.0	31, 21, 21	2.7	0.5683	127	158
PHY475W3FE	225	35.2	4.73	1.12	35.8	31.9	81.7	31, 31, 31	2.0	0.5630	127	158
PHY415W3FE	224	34.8	4.78	1.17	37.5	32.5	82.0	31, 31, 21	3.0	0.5685	127	158
PHY390W3FE	209	35.0	4.53	1.11	35.4	29.9	80.3	31, 31, 31	3.0	0.5515	115	142
PHY443W3FE	202	35.3	4.80	1.12	35.7	32.3	82.6	31, 21, 31	2.0	0.5605	113	140
Mean	221	34.8	4.67	1.14	36.5	31.4	81.9		2.4	0.5639	125	155
LSD	ns	ns	0.09	0.01	0.3	0.7	0.6		0.3	0.0069	11	14
R-square	0.77	0.63	0.84	0.91	0.91	0.87	0.82		0.88	0.76	0.79	0.80
CV (%)	7.0	1.5	1.5	0.9	0.9	1.7	0.6		9.6	1.0	6.9	6.9
Prob>F, variety	0.0917	0.0983	0.0011	<0.0001	<0.0001	0.0004	0.0020		0.0003	0.0109	0.0374	0.0255

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	7187	27.5	5084	96	69	1.7	349	49.2	36
PHY332W3FE	10164	38.9	5000	98	97	1.7	304	46.3	31
PHY475W3FE	8276	31.7	4511	92	77	3.3	306	47.8	31
PHY415W3FE	10164	38.9	4464	97	92	2.5	298	46.5	31
PHY390W3FE	8204	31.4	5450	96	87	2.2	262	43.9	27
PHY443W3FE	8857	33.9	4450	92	90	2.3	266	46.5	27
Mean	8809	33.7				2.3	298	46.7	31
LSD	1338	5.1				0.7	28	0.8	3
R-square	0.75	0.75				0.69	0.83	0.93	0.83
CV (%)	11.8	11.8				22.6	7.4	1.3	7.4
Prob>F, variety	0.0329	0.0329				0.0226	0.0071	<0.0001	0.0071

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](#))