

Replicated Agronomic Cotton Evaluation  
Mixed Technology



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Location: Mt. Blanco, TX (Crosby Co)  
Replicates: 3  
Plot Size: 12 rows x ~1/2 mi  
Row Spacing: 40"  
Beds: No  
Previous crop(s): Cotton  
Soil type: Pullman Silty Clay Loam  
Irrigation: Drip (80"; ~3.7 gpma)

Planting Date: 5/22/2024  
Seed Treatments: Various fungicide+insecticide  
Moist. @ planting: Fair-Good  
Soil Temp @ planting: 71F @2"; 70F @6"  
Seed/Acre: 45,000  
GPS Lat: 33.804379  
GPS Long: -101.160784  
Elevation: 3056  
Harvest Date: 10/24/2024

Crop Stage*	Avg High Temp (°F)	Avg Low Temp (°F)	DD60 (95°F max)	Long Term DD60	Rain (in)
Planting to PHS	88.7	65.7	507.0	448.0	4.92
PHS to First Bloom	93.7	69.9	505.5	516.0	0.60
First Bloom to Cutout	91.9	68.9	563.0	638.0	0.29
Cutout to Defoliation	89.4	63.2	830.0	863.0	2.45
Defoliation to Harvest	84.3	54.2	202.0	131.0	0.00
<i>Total</i>			2607.5	2596.0	8.26

\*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)
FM765AX	<b>1647</b>	<b>39.7</b>	4.48	1.09	34.8	30.7	81.3	21, 31, 21	3.0	0.5467	<b>900</b>	<b>1077</b>
PHY332W3FE	1503	36.7	4.64	1.10	35.2	31.0	81.7	21, 21, 11	2.3	0.5610	843	1024
PHY350W3FE	1515	37.0	4.78	1.10	35.1	30.2	<b>81.9</b>	21, 11, 21	2.3	0.5505	834	1022
DP1822XF	1437	37.3	4.61	<b>1.11</b>	<b>35.6</b>	<b>32.2</b>	80.9	21, 21, 21	<b>2.0</b>	<b>0.5633</b>	810	986
DP2335B3XF	1409	39.5	4.64	1.09	34.8	30.1	81.1	<b>11, 21, 11</b>	2.3	0.5497	775	928
FM868AXTP	1308	39.5	<b>4.39</b>	1.09	34.9	31.5	81.5	31, 21, 21	<b>2.0</b>	0.5562	728	884
<i>Mean</i>	1470	38.3	4.59	1.10	35.1	31.0	81.4		2.3	0.5546	815	987
<i>LSD</i>	68	1.0	ns	ns	ns	ns	ns		ns	ns	41	45
<i>R-square</i>	0.90	0.85	0.53	0.23	0.23	0.61	0.40		0.58	0.40	0.88	0.89
<i>CV (%)</i>	3.6	2.0	3.5	1.9	1.9	3.2	0.9		17.5	2.2	3.9	3.5
<i>Prob&gt;F, variety</i>	0.0003	0.0010	0.1359	0.7450	0.7450	0.1711	0.5374		0.1119	0.5018	0.0010	0.0005

Planting Seed Quality

Variety	Plant Population (#/A)	% Stand Establishment	Seed/lb	Warm Germ (%)	Cool Germ (%)	Seed Yield (lbs/A)	Seed Turnout (%)	Seed Value (\$/A)
FM765AX	35792	80	5585	93	76	1725	41.6	177
PHY332W3FE	<b>39494</b>	<b>88</b>	5000	98	97	1765	43.1	181
PHY350W3FE	34775	77	5084	96	69	<b>1831</b>	44.7	<b>188</b>
DP1822XF	35501	79	4612	93	69	1724	44.8	177
DP2335B3XF	38478	86	5768	96	77	1498	42.0	154
FM868AXTP	34993	78	4475	94	75	1519	<b>45.8</b>	156
<i>Mean</i>	36506	81				1677	43.7	172
<i>LSD</i>	2085	5				62	1.6	6
<i>R-square</i>	0.70	0.70				0.93	0.76	0.93
<i>CV (%)</i>	4.4	4.4				2.9	2.8	2.9
<i>Prob&gt;F, variety</i>	0.0210	0.0210				<0.0001	0.0081	<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](#))