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2025 Oklahoma Replicated Agronomic Cotton Evaluation (RACE) Trial Report

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Participating seed companies

Americot/NexGen

Deltapine

FiberMax/Stoneville

Phytogen Cottonseed

2025 Season overview

Planted acreage in Oklahoma was expected to decline slightly in 2025, with growers reducing cotton acres by about 5% as they shifted some land to corn and sorghum. Early in the season, persistent wet conditions slowed planting progress, especially for dryland fields where producers waited for sufficient drying after repeated rain events. Irrigated acres were planted on schedule, though many dryland fields experienced delays or required replanting. As the season continued, weather patterns generally supported strong growth and yield development. Harvest results across Oklahoma were notably positive, with many producers reporting improved yields and greater optimism compared to recent years. Increases in both harvested acreage and yield per acre relative to 2024 contributed to a significantly larger statewide cotton crop.

Table 1. Monthly rainfall accumulation in inches and deviation from 30-year (1991–2020) rainfall average in inches

Location	May	June	July	August	September	October	Total
Jackson Co.	4.57 (+0.57)	5.43 (+1.63)	0.17 (-2.43)	1.91 (-0.99)	1.25 (-1.45)	0.32 (-2.18)	13.65 (-5.05)
Harmon Co.	2.38 (-1.32)	3.76 (+0.16)	2.00 (-0.2)	2.42 (-0.78)	3.09 (+0.29)	1.56 (-0.84)	15.21 (-2.69)
Caddo Co.	3.73 (-0.87)	7.81 (+3.71)	0.82 (-1.78)	5.41 (+2.21)	2.65 (-0.45)	0.91 (-2.19)	21.33 (+0.63)
Washita Co.	4.79 (-0.11)	7.69 (+3.99)	3.96 (+1.36)	5.03 (+1.73)	3.04 (+0.3)	1.69 (-1.41)	26.20 (+5.6)

Table 2. Monthly growing degree units (GDU) accumulation and deviation from 5-year (2021–2025) average

Location	May	June	July	August	September	October	Total
Jackson Co.	323.4 (-56.4)	636.3 (+2.6)	737 (-4.7)	669.4 (-70.9)	488.4 (-54.6)	305.2 (+47)	3159.7 (-137)
Harmon Co.	262.2 (-80.3)	602.6 (-6)	723.4 (-5.6)	672.8 (-57.1)	483.8 (-50.1)	282.3 (+38.8)	3027.1 (-160.3)
Caddo Co.	228.8 (-46.8)	535.7 (-14.5)	675.2 (+1.2)	595.9 (-57.8)	405.8 (-58.9)	248.7 (+38.1)	2690.1 (-138.7)
Washita Co.	241.5 (-57)	546.4 (-62.2)	683.1 (-13.3)	612.1 (-76.9)	432.3 (-65.7)	256.3 (+12.8)	2771.7 (-204.9)

2025 Caddo Co. Irrigated RACE Trial

Coordinates: 35.45930N, 98.60750W

Planted: 05/31/2025

Seeding Rate: 50,000; 36" row spacing; flat planted

Harvested: 12/12/2025, stripper harvested

Table 3. Caddo County irrigated RACE trial results

Variety	Lint Yield (lbs/a)	Turnout (%)	Micronaire	Length (inches)	Uniformity (%)	Strength (g/tex)	Loan Value ¹ (cents/lb)	Lint Value (\$/a)
DP 2525 B3XF	1655 a	0.46 a	3.02	1.228 a	81.67 cde	31.63 a	47.80 abc	792.94 a
DP 2333 B3XF	1397 b	0.45 ab	3.29	1.18 bc	81.73 b-e	28.20 ef	50.25 ab	703.35 ab
FM 814 AXTP	1367 bc	0.46 a	3.43	1.167 bc	83.07 ab	28.80 def	51.05 a	700.67 ab
DP 2335 B3XF	1359 bc	0.45 a	3.42	1.2273 a	82.03 a-e	30.33 bc	51.25 a	696.84 b
PHY 400 W3FE	1227 cd	0.42 d	2.69	1.158 c	83.10 a	30.73 ab	48.52 abc	596.47 c
PHY 415 W3FE	1173 d	0.44 bc	2.98	1.1923 abc	82.93 abc	29.43 cde	47.70 abc	558.82 c
DP 2131 B3TXF	1113 de	0.45 ab	3.14	1.1837 bc	80.70 e	27.97 f	48.67 abc	542.99 c
PHY 136 W3E1	1149 d	0.43 cd	2.88	1.1663 bc	82.67 a-d	30.00 bcd	46.73 bc	538.20 c
PHY 137 W3E1	1098 def	0.43 cd	3.17	1.1987 ab	81.40 de	29.63 bcd	46.03 bcd	505.75 cd
ST 6000 AXTP	953 f	0.46 a	2.95	1.1883 abc	81.73 b-e	29.27 cde	45.12 cd	431.48 d
PHY 411 W3FE	979 ef	0.43 cd	3.21	1.11 d	81.27 e	28.93 def	42.28 d	414.34 d
Average	1224.58	0.44	3.11	1.18	82.03	29.54	47.76	589.26
p-value	<0.0001	<0.0001	0.0906	0.0004	0.0142	0.0002	0.0089	<0.0001
LSD (P=0.05)	146.5194427	0.013544129	0.4796	0.03995	1.342	1.255	4.2512	95.06662638
CV	7.02	1.8	9.07	1.98	0.96	2.5	5.23	9.47

¹Value calculated using the 2025 Upland Cotton Loan Valuation Model from Cotton Incorporated. Color and leaf grades set to base levels (41 and 4, respectively) due to utilizing a tabletop gin and lack of lint cleaner.

DP= DeltaPine, FM= FiberMax, NG= NexGen, PHY= Phytogen, ST= Stoneville

2025 Jackson Co. Irrigated RACE Trial

Coordinates: 34.6222778N, 99.2448889W

Planted: 05/15/2025

Seeding Rate: 42,000; 40" row spacing; bed planted

Harvested: 11/06/2025, picker harvested

Table 4. Jackson County irrigated RACE trial results

Variety	Lint Yield (lbs/a)	Turnout (%)	Micro-naire	Length (inches)	Uniformity (%)	Strength (g/tex)	Loan Value ¹ (cents/lb)	Lint Value (\$/a)
DP 2541 B3XF	2890 a	0.48 a-d	4.39	1.21 ab	82.16	32.90 ab	54.23	1567.54 a
DP 2333 B3XF	2685 ab	0.49 ab	4.37	1.16 b	82.7	29.7 b	54.13	1453.50 ab
ST 6000 AXTF	2591 ab	0.50 a	4.44	1.19 ab	82.2	32.97 ab	54.3	1407.04 ab
NG 5430 B3XF	2569 ab	0.45 de	4.49	1.20 ab	83.3	31.53 b	54.3	1395.28 ab
DP 2525 B3XF	2541 ab	0.49 abc	4.65	1.24 a	82.83	35.13 a	54.38	1381.72 ab
DP 2131 B3TXF	2493 ab	0.46 cde	4.38	1.21 ab	82.6	30.23 b	54.15	1350.08 ab
DP 2328 B3TXF	2495 ab	0.47 b-e	4.17	1.17 b	81.43	30.30 b	54.03	1348.18 ab
NG 4409 B3XF	2482 ab	0.46 cde	4.62	1.19 ab	82.66	30.53 b	54.18	1344.7 ab
NG 3434 B3XF	2465 ab	0.48 a-e	4.59	1.20 ab	82.43	30.27 b	54	1331.12 ab
FM 814 AXTF	2437 b	0.47 b-e	4.21	1.17 b	82.56	30.33 b	54.1	1318.69 b
NG 4507 B3TXF	2426 b	0.45 e	4.04	1.20 ab	83.13	30.57 b	54.16	1314.25 b
NG 3457 B3XF	2419 b	0.46 cde	4.49	1.18 ab	82.33	30.00 b	53.93	1304.53 b
Average	2541	0.47	4.40	1.19	82.53	31.21	54.16	1376.39
p-value	0.0343	<0.0001	0.291	0.0018	0.2217	<0.0001	0.1199	0.0336
LSD (P=0.05)	250.9658068	0.017883615	0.4838	0.03069	1.184	1.777	0.2907	138.3413087
CV	5.83	2.24	6.49	1.52	0.85	3.36	0.32	5.94

¹Value calculated using the 2025 Upland Cotton Loan Valuation Model from Cotton Incorporated. Color and leaf grades set to base levels (41 and 4, respectively) due to utilizing a tabletop gin and lack of lint cleaner.

DP= DeltaPine, FM= FiberMax, NG= NexGen, PHY= Phytogen, ST= Stoneville

2025 Harmon Co. Irrigated RACE Trial

Coordinates: 34.6297692N, 99.8580955W

Planted: 05/15/2025

Seeding Rate: 38,000; 40" row spacing; flat planted

Harvested: 10/20/2025, picker harvested

Table 5. Harmon County irrigated RACE trial results

Variety	Lint Yield (lbs/a)	Turnout (%)	Micro-naire	Length (inches)	Uniformity (%)	Strength (g/tex)	Loan Value ¹ (cents/lb)	Lint Value (\$/a)
DP 2525 B3XF	1666	0.45 bcd	4.1	1.24	82.27 de	34.90 a	54.4	906.53
DP 2131 B3TXF	1618	0.46 b	3.88	1.2	82.33 cde	30.23 b	54.12	875.72
NG 3457 B3XF	1545	0.46 b	3.82	1.18	82.8 b-e	32.03 b	52.7	869.43
NG 5430 B3XF	1590	0.42 e	4.19	1.17	82.77 b-e	31.53 b	54.15	861.16
NG 4409 B3XF	1541	0.43 de	4.08	1.2	83.37 abc	31.67 b	54.37	860.87
DP 2333 B3XF	1586	0.45 bc	3.9	1.19	81.87 e	31.17 b	54.15	858.78
NG 4507 B3TXF	1632	0.44 cde	3.93	1.17	83.4 ab	31.90 b	52.68	837.71
DP 2328 B3TXF	1518	0.46 ab	4.01	1.19	82.87 a-e	30.07 b	54.07	820.97
NG 3434 B3XF	1635	0.48 a	4.56	1.17	82.97 a-d	30.4 b	53.2	814.12
DP 2541 B3XF	1454	0.46 ab	4.24	1.19	82.33 cde	29.87 b	54.03	785.7
FM 814 AXTP	1400	0.46 b	4.08	1.19	82.87 a-e	31.10 b	54.27	759.43
ST 6000 AXTP	1386	0.47 ab	4.05	1.18	84.04 a	30.73 b	54.25	749.04
Average	1548	0.46	4.07	1.19	82.82	31.30	53.87	833.29
p-value	0.1375	<0.0001	0.5942	0.2956	0.0354	0.0167	0.7659	0.2498
LSD (P=0.05)	198.122873	0.0190861	0.632	0.0503	1.057	2.299	2.2746	114.8415387
CV	7.52	2.48	9.14	2.49	0.75	4.32	2.49	8.09

¹Value calculated using the 2025 Upland Cotton Loan Valuation Model from Cotton Incorporated. Color and leaf grades set to base levels (41 and 4, respectively) due to utilizing a tabletop gin and lack of lint cleaner.

DP= DeltaPine, FM= FiberMax, NG= NexGen, PHY= Phytogen, ST= Stoneville

2025 Washita Co. Dryland RACE Trial

Coordinates: 35.376278N, 99.318167W

Planted: 05/26/2025

Seeding Rate: 28,000 seeds; 40" row spacing; flat planted

Harvested: 12/30/2025, picker harvested

Table 6. Washita County dryland RACE trial results

Variety	Lint Yield (lbs/a)	Turnout (%)	Micro-naire	Length (inches)	Uniformity (%)	Strength (g/tex)	Loan Value ¹ (cents/lb)	Lint Value (\$/a)
ST 6000 AXTP	1755	0.47 a	4.07	1.24 a	81.97	32.8 a	54.22	969.12
FM 814 AXTP	1756	0.45 ab	4.04	1.19 abc	81.63	31.23 ab	54.15	951.48
DP 1948 B3XF	1691	0.44 b	3.68	1.22 a	80.83	29.27 b	53.92	911.76
DP 2349NR B3XF	1621	0.44 b	3.94	1.17 bc	80.7	30.97 ab	53.93	874.51
DP 2141NR B3XF	1472	0.43 b	4	1.19 abc	81.73	29.07 b	51.8	766.01
DP 2131 B3TXF	1398	0.45 ab	3.83	1.22 ab	81.57	29.3 b	53.95	753.97
DP 2525 B3XF	1440	0.44 b	3.41	1.14 c	81.1	29.67 b	49.42	708.02
Average	1590	0.45	3.85	1.20	81.36	30.33	53.05	847.84
p-value	0.279	0.0466	0.5222	0.0202	0.6975	0.0335	0.0935	0.1031
LSD (P=0.05)	391.7826665	0.022151529	0.7677	0.0509	1.864	2.315	3.6069	211.8476439
CV	13.85	2.78	11.2	2.39	1.29	4.29	3.82	14.05

¹Value calculated using the 2025 Upland Cotton Loan Valuation Model from Cotton Incorporated. Color and leaf grades set to base levels (41 and 4, respectively) due to utilizing a tabletop gin and lack of lint cleaner.

DP= DeltaPine, FM= FiberMax, ST= Stoneville

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- It provides practical, problem-oriented education for people of all ages. It is designated to take the knowledge of the university to those persons who do not or cannot participate in the formal classroom instruction of the university.
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