

Table 6. Least square means for lint yield, yield components, and fiber quality traits in the 2015 RBTN trial conducted at Keiser, AR. (Cooperator: Fred Bourland)

Cultivar	Lint Yield	Lint Percent	Lint Index	Boll Size	Seed per Boll	Seed Index	MIC	UHM	UI	STRN	ELO	SFC	QS1 [†]	QS2 [†]
	lbs/a	%	grams	grams	#	grams	mic	inches	%	g/tex	%	%	%	%
Ark 0705-46	881	40.12	7.56	5.11	27.18	10.97	4.66	1.18	84.70	32.13	6.35	6.83	52.00	65.75
GA 2011004	793	44.06	7.47	5.95	35.03	9.20	4.72	1.23	85.00	33.83	5.65	6.85	65.50	70.25
MS 0045-14 -8	783	38.31	6.68	5.46	31.25	10.46	4.52	1.21	85.13	34.30	5.58	6.83	64.50	73.25
SG 105 CK	770	39.09	6.85	4.54	25.91	10.44	4.65	1.19	84.75	33.48	5.43	7.28	56.00	67.50
MS 0042-3 -7	742	38.21	6.72	5.84	33.16	10.55	4.16	1.22	84.43	31.90	5.60	7.33	65.25	67.50
MS 0043-28 -1	734	39.46	6.83	4.99	28.83	10.21	4.76	1.18	83.90	32.00	5.50	7.20	46.75	60.00
DP 491 CK	701	39.76	6.62	4.95	29.64	9.68	4.57	1.20	85.18	33.55	5.63	7.15	62.00	70.75
Ark 0701-17	701	40.05	7.64	4.98	26.18	11.09	4.45	1.24	84.83	33.08	5.23	7.00	72.25	71.25
DP 393 CK	692	40.75	6.63	4.22	25.97	9.32	4.50	1.16	84.78	33.15	6.50	7.13	50.75	68.25
Ark 0712-9	673	39.40	6.70	4.44	26.12	10.07	4.44	1.22	84.95	31.55	5.58	7.25	66.75	70.00
Ark 0707-33	670	39.85	8.07	5.32	26.35	11.72	4.55	1.21	85.48	33.23	6.58	6.90	64.00	73.00
GA 2011124	635	40.99	6.60	4.46	27.69	9.07	4.59	1.19	84.60	33.65	5.85	7.00	54.25	66.50
PD 07116	626	36.85	6.71	4.85	26.62	11.09	4.69	1.22	84.15	33.40	5.58	7.03	61.50	65.50
LA12306017	608	40.77	7.32	4.71	26.31	10.31	4.64	1.22	85.30	33.60	5.83	6.98	65.25	72.50
FM 958 CK	585	40.16	7.43	5.18	28.02	10.75	4.51	1.21	84.53	32.43	5.18	7.30	59.50	66.50
MS 0045-14 -5	583	38.61	7.29	4.92	26.04	11.24	4.68	1.22	85.30	33.95	4.80	7.03	65.00	73.25
UA 222 CK	551	38.21	7.68	4.68	23.23	11.80	4.37	1.25	84.33	33.28	6.20	7.00	74.00	69.50
LA12306028	543	37.98	7.14	4.19	22.28	11.27	4.63	1.23	84.50	34.30	5.65	7.20	68.00	70.50
LA12306010	537	40.72	7.41	4.87	26.70	10.47	4.49	1.23	85.83	34.40	5.60	6.70	71.50	77.50
PD 07040	536	38.52	6.80	4.31	24.67	10.38	4.40	1.16	84.43	32.53	6.68	7.10	48.75	64.50
NM 13W3007	516	37.58	6.52	4.66	26.91	10.37	4.47	1.23	85.40	33.30	5.75	6.78	67.75	73.25
GA 2010102	482	38.80	6.76	4.97	28.44	10.32	4.58	1.24	85.20	33.70	4.95	6.88	71.75	73.75
Ark 0711-2	479	38.85	6.95	4.58	25.79	10.58	4.45	1.19	84.20	31.70	5.48	7.55	54.00	63.75
PD 07105	469	36.51	6.34	4.38	25.30	10.71	4.42	1.24	85.13	33.83	4.88	7.05	75.00	74.00
PD 07092	406	36.51	6.89	5.08	26.91	11.63	4.54	1.25	85.63	34.90	5.00	6.73	75.75	79.00
Acala 1517-08	385	38.09	6.91	4.60	25.38	10.89	4.50	1.19	84.43	33.33	5.50	7.25	56.00	66.25
NM 13P1088	320	35.44	6.80	4.82	25.19	11.92	4.44	1.22	84.98	33.30	5.63	7.13	69.00	72.50
NM 13W3017	280	34.33	7.82	5.93	26.03	14.61	4.60	1.26	85.53	34.35	4.90	6.90	79.50	77.50
Mean	596	38.86	7.04	4.89	27.04	10.75	4.53	1.21	84.88	33.29	5.61	7.05	63.65	70.13
Cultivar LSD (.05)	154	1.67	0.65	ns	ns	1.21	ns	0.05	ns	ns	0.89	ns	19.26	ns
Cultivar (P>F)	<0.0001	<0.0001	<0.0001	0.0744	0.0592	<0.0001	0.6742	0.0176	0.4664	0.5823	0.0008	0.4020	0.0500	0.3324
CV(%)	18.42	3.05	6.53	15.81	15.72	7.41	6.04	3.22	1.15	5.45	11.31	5.61	21.50	12.02
R-Square	0.73	0.79	0.57	0.35	0.35	0.71	0.26	0.45	0.31	0.24	0.48	0.33	0.41	0.30
Reps	4	4	4	4	4	4	4	4	4	4	4	4	4	4

Values in bold are not significantly different from highest value according to LSD(0.05).

[†] QS1 & QS2 = Qscore, very similar to a selection index, adds the weighted values of selected fiber traits (length, mic, UI, strength) to provide a single measure (0-100) of desirable fiber qualities, and was calculated by weighting selected fiber traits as follows: QS1 - fiber length (0.5), mic (0.25), UI (0.1), and strength (0.15) ; QS2 - fiber length (0.1), mic (0.1), UI (0.3), and strength (0.5)

¹ Low yields at this location attributed to a late planting date (June 5, 2015).