

Table 3. Least square means for lint yield, yield components, and fiber quality traits in the 2015 RBTN trial conducted at Alexandria, LA. (Cooperator: Gerald Myers)

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 0707-33	1183	43.16	8.33	5.38	27.90	10.81	5.00	1.15	84.60	32.65	7.98	6.68	54.75	71.25
LA12306010	1120	40.67	7.22	5.08	28.61	10.42	4.75	1.21	84.45	33.30	6.38	7.03	75.50	75.25
Ark 0701-17	1109	41.73	7.57	5.46	30.07	10.39	5.03	1.18	83.58	32.53	6.10	7.10	60.75	67.00
LA12306028	1070	38.85	6.68	4.83	28.08	10.37	4.90	1.22	85.40	36.30	5.90	6.65	79.50	87.50
GA 2010102	1049	39.47	6.62	4.69	28.01	10.00	5.15	1.19	84.65	33.08	5.40	6.70	63.50	73.00
GA 2011124	1045	43.82	6.44	4.40	29.98	8.11	5.48	1.09	81.55	31.65	6.53	7.88	22.25	49.25
MS 0043-28 -1	1029	41.70	6.90	4.89	29.58	9.50	5.03	1.12	83.30	32.05	5.93	7.50	41.75	61.25
DP 491 CK	1025	41.57	6.65	5.31	33.18	9.19	5.08	1.15	82.05	30.70	5.50	8.15	46.25	55.50
Ark 0711-2	1016	39.48	6.69	4.81	28.42	10.09	5.23	1.20	84.30	34.93	4.98	6.70	64.00	73.75
Ark 0705-46	1004	41.26	7.29	5.05	28.58	10.23	5.53	1.13	82.58	33.25	6.58	7.30	32.75	54.00
LA12306017	998	40.64	7.06	4.58	26.32	10.18	5.28	1.18	84.05	34.03	6.28	6.75	58.00	68.75
DP 393 CK	973	40.68	6.70	5.10	30.97	9.62	5.10	1.15	84.05	33.93	6.73	7.03	51.75	68.00
GA 2011004	963	43.43	6.81	4.60	29.33	8.74	5.18	1.16	83.60	31.50	6.55	7.25	52.00	64.50
UA 222 CK	962	40.72	7.02	4.87	28.24	10.02	5.05	1.19	83.00	32.00	7.85	7.35	61.50	63.75
FM 958 CK	938	41.23	7.34	5.39	30.32	10.31	5.30	1.16	83.95	32.28	4.85	6.70	50.50	65.75
PD 07116	937	39.02	6.44	5.14	31.17	9.94	5.25	1.15	81.73	31.68	4.90	8.10	43.00	56.50
MS 0045-14 -8	936	39.92	6.91	5.51	31.87	10.24	5.15	1.15	83.48	33.03	6.00	6.80	50.00	63.75
SG 105 CK	927	40.73	7.30	4.72	26.34	10.50	5.38	1.11	84.25	31.73	6.75	7.15	37.25	64.50
PD 07040	912	38.56	6.25	4.95	30.56	9.85	4.85	1.16	82.73	31.28	5.73	7.60	55.00	62.50
MS 0042-3 -7	902	39.29	6.58	5.09	30.38	10.02	4.85	1.14	82.88	32.28	5.88	7.65	48.25	61.00
MS 0045-14 -5	852	39.37	6.63	5.19	30.81	10.07	5.08	1.13	84.15	31.95	5.50	7.20	46.25	66.75
NM 13W3007	838	37.35	6.12	4.40	26.90	10.07	4.65	1.23	85.13	35.58	6.03	6.45	86.75	85.75
PD 07092	831	38.69	6.77	4.97	28.39	10.59	4.85	1.17	84.40	34.83	6.15	6.83	63.50	75.00
Ark 0712-9	829	40.21	6.78	4.91	29.16	9.95	5.30	1.18	83.63	30.30	6.80	7.50	56.25	65.00
Acala 1517-08	758	35.80	6.07	5.12	30.17	10.74	4.63	1.25	84.65	35.05	5.38	6.73	88.25	82.50
NM 13P1088	744	36.20	5.85	5.21	32.27	10.19	4.68	1.19	83.23	35.78	6.35	6.93	68.75	73.00
PD 07105	694	36.80	6.27	4.93	28.94	10.66	4.63	1.27	85.00	32.73	4.65	6.98	92.50	83.00
NM 13W3017	568	35.03	7.01	6.22	30.94	12.93	4.88	1.20	84.30	32.25	4.63	7.00	70.75	73.50
Mean	936	39.83	6.80	5.03	29.48	10.13	5.04	1.17	83.74	32.95	6.01	7.13	57.90	68.26
Cultivar LSD (.05)	191	1.60	0.46	0.42	2.07	0.50	0.20	0.04	1.67	1.55	0.74	0.82	13.72	10.89
Cultivar (P>F)	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.0002	<0.0001	<0.0001	0.0013	<0.0001	<0.0001
CV(%)	14.52	2.85	4.84	5.88	4.99	3.49	2.82	2.30	1.42	3.35	8.80	8.14	16.84	11.33
R-Square	0.67	0.83	0.76	0.70	0.66	0.87	0.82	0.77	0.49	0.74	0.80	0.47	0.80	0.67
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)