

Table 16. Least square means for lint yield, yield components, and fiber quality traits in the 2015 RBTN trial conducted at West Side, CA. (Cooperator: Bob Hutmacher)

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	2348	42.24	8.80	5.85	28.23	11.95	5.53	1.17	85.20	32.58	5.60	6.80	31.00	60.00
Ark 0701-17	2334	42.96	8.98	6.69	32.04	11.84	4.98	1.23	84.10	32.00	5.18	7.25	52.75	60.50
DP 393 CK	2216	41.65	7.41	5.71	32.39	10.25	5.14	1.20	85.23	33.35	6.38	6.93	45.75	66.00
Ark 0707-33	2185	41.74	9.02	6.35	29.41	12.48	4.94	1.18	85.18	32.33	6.63	6.80	42.25	64.75
Ark 0711-2	2041	40.23	7.90	6.04	31.04	11.65	5.02	1.26	85.00	34.28	4.58	6.73	63.00	68.75
SG 105 CK	2030	42.09	8.17	5.48	28.09	11.24	5.05	1.21	85.80	32.60	5.58	6.73	50.25	69.00
MS 0045-14 -8	1957	39.81	8.06	6.63	32.69	12.12	5.07	1.20	84.75	33.13	5.10	7.00	46.00	63.00
Ark 0712-9	1948	41.44	8.20	5.79	29.30	11.51	5.02	1.23	84.30	31.40	5.20	7.38	54.25	62.00
MS 0043-28 -1	1934	42.83	8.63	5.93	29.36	11.53	5.18	1.17	84.83	31.70	5.73	6.75	34.00	60.00
PD 07040	1930	40.34	7.92	5.80	29.58	11.64	4.52	1.19	84.45	29.98	5.70	7.35	56.00	62.00
MS 0045-14 -5	1893	39.95	8.33	5.93	28.63	12.51	4.92	1.22	85.40	32.98	5.05	6.70	56.50	68.50
GA 2011004	1864	44.60	7.81	5.37	30.64	9.62	4.99	1.22	85.45	31.88	5.70	6.85	54.00	68.25
GA 2010102	1863	40.25	7.69	5.76	30.35	11.39	5.04	1.28	86.05	34.83	4.78	6.55	73.25	77.75
FM 958 CK	1807	41.88	8.67	5.84	28.23	12.05	4.87	1.18	84.43	32.78	4.63	6.95	42.50	60.75
MS 0042-3 -7	1804	40.78	7.50	5.75	31.27	10.85	4.74	1.22	84.35	31.95	5.80	6.93	54.75	63.00
UA 222 CK	1768	41.66	8.42	5.41	26.86	11.71	4.67	1.28	84.93	31.40	6.53	6.65	76.25	70.75
NM 13W3007	1728	37.94	6.90	5.07	27.89	11.20	4.60	1.27	85.60	35.35	5.08	6.65	75.25	77.75
Acala 1517-08	1715	36.59	6.92	5.45	28.88	11.93	4.39	1.28	85.25	36.38	5.03	6.55	78.00	78.25
GA 2011124	1698	43.50	7.77	5.62	31.56	10.02	4.96	1.22	84.93	32.50	5.35	6.83	54.25	65.25
DP 491 CK	1695	40.54	7.18	5.55	31.36	10.48	4.55	1.25	84.53	33.83	4.78	7.28	66.00	66.75
PD 07116	1689	38.66	7.68	6.55	33.01	12.09	5.20	1.24	85.50	34.48	4.15	6.90	55.25	69.50
LA12306010	1670	40.79	8.12	5.73	28.83	11.74	4.77	1.29	85.80	34.90	5.50	6.50	80.25	79.25
LA12306017	1532	41.27	8.75	6.06	28.57	12.38	5.15	1.26	85.20	34.03	5.30	6.70	60.50	68.00
LA12306028	1295	38.76	7.63	5.78	29.61	11.99	4.57	1.29	85.55	35.20	5.65	6.53	80.25	78.00
PD 07105	1292	37.16	7.58	6.39	31.37	12.74	4.62	1.30	84.73	35.33	4.28	6.45	78.50	73.50
PD 07092	1284	38.56	8.19	6.15	28.99	12.99	4.42	1.32	86.15	37.33	5.50	6.23	91.00	88.50
NM 13P1088	953	41.57	8.65	5.79	28.04	11.97	4.76	1.23	85.35	34.80	6.00	6.53	61.50	72.25
NM 13W3017	874	37.98	8.70	6.98	30.49	14.08	4.85	1.24	84.85	34.50	4.33	7.03	62.00	68.50
Mean	1762	40.63	8.06	5.91	29.88	11.71	4.87	1.24	85.10	33.49	5.32	6.80	59.83	68.95
Cultivar LSD (.05)	245	2.25	0.94	0.69	3.63	1.25	0.34	0.05	ns	1.76	0.63	0.52	17.69	11.07
Cultivar (P>F)	<0.0001	<0.0001	<0.0001	<0.0001	0.0520	<0.0001	<0.0001	<0.0001	0.1769	<0.0001	<0.0001	0.0022	<0.0001	<0.0001
CV(%)	9.87	3.93	8.26	8.31	8.64	7.60	5.03	3.04	1.10	3.75	8.46	5.42	21.01	11.42
R-Square	0.85	0.68	0.53	0.52	0.36	0.60	0.61	0.63	0.33	0.78	0.75	0.48	0.66	0.53
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)