

Table 9. Least square means for lint yield, yield components, and fiber quality traits in the 2015 RBTN trial conducted at Maricopa, AZ. (Cooperator: Alison Thompson)

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	1405	43.40	8.20	4.48	23.73	10.47	5.77	1.06	82.73	28.87	5.03	8.60	26.00	49.67
LA12306017	1314	40.93	7.01	3.96	23.14	10.04	5.13	1.17	83.63	32.43	5.00	8.30	72.67	76.00
Ark 0701-17	1296	41.63	7.69	4.65	25.19	10.52	5.25	1.14	82.43	29.77	4.50	8.63	58.67	65.00
SG 105 CK	1291	41.71	7.23	3.88	22.43	9.99	5.29	1.07	82.83	29.07	5.30	8.87	40.33	63.33
GA 2011004	1288	42.41	7.02	4.12	24.91	9.11	5.17	1.11	82.00	29.00	4.90	9.27	49.00	60.00
LA12306028	1245	40.65	7.58	4.04	21.69	10.83	5.31	1.17	83.83	34.20	4.97	8.03	71.33	78.33
Ark 0707-33	1235	41.68	7.01	4.34	25.90	9.51	5.17	1.09	83.43	29.73	6.27	8.40	49.00	68.67
MS 0043-28 -1	1186	41.68	6.94	4.13	24.81	9.53	5.48	1.08	82.03	29.00	4.83	9.17	35.33	56.00
FM 958 CK	1147	40.49	6.58	4.47	27.59	9.43	5.09	1.09	82.13	29.60	4.10	9.50	47.33	61.67
Ark 0712-9	1140	40.39	6.28	3.93	25.22	9.05	5.05	1.10	80.97	27.87	4.80	10.10	45.00	43.33
PD 07040	1137	39.14	6.47	4.47	26.95	9.80	5.18	1.09	81.50	27.77	4.77	9.73	42.00	46.00
DP 491 CK	1120	42.90	6.74	4.05	25.95	8.72	4.91	1.11	81.63	29.63	4.30	9.70	53.00	57.00
GA 2011124	1112	43.40	6.68	4.02	26.18	8.40	5.44	1.08	80.87	27.13	4.53	9.20	29.00	26.67
MS 0045-14 -8	1075	40.66	6.71	4.50	27.20	9.57	5.11	1.09	83.13	29.93	4.83	8.23	48.33	67.00
Ark 0711-2	1070	39.93	6.82	3.86	22.61	10.04	5.17	1.13	82.77	31.53	4.27	8.73	59.33	67.33
DP 393 CK	1064	43.35	7.31	4.11	24.34	9.39	5.19	1.07	82.17	29.90	5.70	8.97	40.00	60.00
UA 222 CK	1060	41.29	7.10	3.93	22.82	9.84	5.18	1.09	81.80	30.10	5.97	9.33	44.00	58.67
PD 07092	1049	39.15	7.10	4.19	23.15	10.77	4.82	1.17	83.70	33.47	4.57	7.77	78.33	79.67
MS 0045-14 -5	1027	40.46	6.70	4.39	26.51	9.68	5.20	1.06	82.03	28.57	4.43	9.63	35.67	53.00
GA 2010102	1024	39.36	6.55	4.11	24.70	9.85	5.17	1.13	82.20	30.27	4.30	9.03	55.67	63.33
MS 0042-3 -7	997	40.10	6.38	4.14	26.10	9.25	5.04	1.09	81.97	29.30	4.90	9.17	47.67	61.00
NM 13W3007	995	37.65	5.87	3.91	25.05	9.52	4.72	1.18	84.16	33.64	4.92	7.63	85.92	82.36
PD 07105	987	37.97	6.41	4.33	25.82	10.33	4.67	1.19	82.73	31.50	3.50	8.47	83.33	73.33
Acala 1517-08	945	37.82	6.12	4.13	25.53	9.92	4.60	1.14	82.50	32.57	4.33	8.77	68.00	69.33
LA12306010	850	41.17	7.11	4.22	24.49	9.97	4.73	1.15	82.97	31.33	5.23	8.43	71.00	72.00
PD 07116	847	38.36	6.27	4.51	27.68	9.77	5.15	1.10	81.90	29.23	3.63	9.37	45.33	52.67
NM 13P1088	357	42.69	7.28	3.49	20.66	9.44	5.36	1.10	82.07	30.23	4.93	9.07	45.33	59.67
NM 13W3017	262	40.71	6.71	3.80	23.28	9.61	5.05	1.13	82.47	32.17	4.83	8.57	56.67	65.00
Mean	1054	40.75	6.85	4.15	24.77	9.73	5.12	1.11	82.45	30.28	4.77	8.88	52.97	62.00
Cultivar LSD (.05)	361	2.20	0.85	0.51	3.31	0.95	0.41	0.04	ns	2.20	0.54	1.19	18.29	20.30
Cultivar (P>F)	<0.0001	<0.0001	0.0007	0.0088	0.0033	0.0006	0.0003	<0.0001	0.0682	<0.0001	<0.0001	0.0146	<0.0001	0.0009
CV(%)	20.45	3.30	7.62	7.56	8.17	5.98	4.87	2.30	1.32	4.41	6.79	8.07	21.07	19.91
R-Square	0.70	0.70	0.59	0.59	0.59	0.60	0.62	0.76	0.47	0.74	0.84	0.52	0.75	0.59
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)