

Table 1. Least square means for lint yield, yield components, and fiber quality traits over 11 locations¹ in the 2013 RBTN.

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	%	%	%	%
LA10307140	1614	42.26	7.72	5.87	31.60	10.35	4.66	1.19	84.61	33.04	5.93	7.21	62.58	73.32
OA-33	1591	41.52	6.89	5.30	31.66	9.46	5.00	1.19	83.72	31.59	5.33	7.63	53.78	64.70
MD 10-5	1588	43.40	7.46	5.57	31.85	9.51	4.77	1.18	83.58	32.36	5.50	7.27	55.30	65.56
DP 393 ck	1585	41.58	7.37	5.44	29.89	10.16	5.00	1.16	83.91	31.52	6.23	7.24	47.55	64.91
AU51038	1582	42.57	6.89	5.47	33.19	9.08	4.50	1.20	83.07	32.11	5.04	7.70	63.05	64.90
MD 10-6	1576	43.76	7.34	5.56	32.59	9.24	4.72	1.14	83.59	31.91	5.61	7.24	46.99	63.77
LA10307108	1575	41.28	6.96	5.37	31.32	9.66	4.68	1.18	83.76	30.73	5.37	7.75	56.76	66.27
GA 2008016	1558	42.14	7.19	5.35	30.77	9.68	4.89	1.19	83.40	31.69	4.40	7.71	54.75	63.73
Ark 0502-37	1554	41.76	7.00	5.46	32.08	9.61	5.04	1.18	83.85	32.15	5.48	7.38	51.45	65.13
LA09309116	1553	42.08	7.94	5.94	30.85	10.71	4.82	1.21	84.86	32.14	6.34	7.05	67.83	73.63
GA 2009037	1536	41.39	7.32	5.54	30.88	10.13	4.76	1.17	83.60	30.85	5.48	7.56	49.70	63.51
Ark 0517-54	1526	41.60	7.50	5.48	29.76	10.29	4.68	1.16	83.28	29.30	5.20	7.81	47.19	56.02
MD 25-26ne	1518	40.66	7.47	6.03	32.18	10.71	4.60	1.25	85.10	33.24	5.29	6.92	80.62	78.95
LA10307021	1512	41.92	7.91	5.78	30.13	10.67	4.37	1.19	84.04	32.00	4.22	7.42	62.86	70.12
MD-DC	1512	39.93	7.10	5.53	30.48	10.45	4.96	1.18	83.85	31.57	5.44	7.41	51.07	64.98
SG 105 ck	1503	40.98	7.54	5.40	28.84	10.63	5.05	1.15	84.31	30.38	5.78	7.34	45.86	66.06
GA 2009100	1499	39.32	6.98	5.77	32.12	10.55	5.07	1.19	83.60	32.44	4.48	7.67	52.16	63.65
NM1301	1482	41.41	6.73	5.12	31.02	9.37	5.00	1.16	82.59	31.06	5.57	8.17	45.17	57.34
PD06078	1476	40.96	7.22	5.37	30.10	10.21	4.89	1.19	84.12	32.42	5.41	7.08	59.73	69.11
PX06520-42-2-1	1476	40.85	7.91	5.76	29.12	11.24	4.84	1.25	84.94	35.69	5.38	7.01	80.06	83.57
AU68036	1464	41.74	7.22	5.36	30.40	9.86	4.89	1.18	83.79	31.98	5.03	7.41	54.02	65.53
AU10090	1456	42.20	7.04	5.42	31.91	9.46	4.68	1.22	83.98	31.71	4.83	7.35	70.83	70.82
NM1303	1455	38.91	6.44	5.11	30.31	9.89	4.80	1.17	83.60	30.32	6.05	7.67	50.03	62.60
FM 958 ck	1442	41.03	7.77	5.95	30.74	10.92	4.84	1.16	83.45	31.41	4.41	7.67	49.76	63.20
GA 2010098	1440	42.21	7.45	5.76	31.96	10.02	4.59	1.19	83.59	32.38	5.13	7.57	61.77	67.35
Ark 0506-47	1431	40.55	7.31	5.30	28.92	10.51	4.95	1.20	84.26	32.31	4.95	7.33	60.06	69.11
AU55052	1414	39.39	6.88	5.44	30.61	10.43	4.73	1.19	83.39	31.83	5.28	7.47	57.43	64.73
Ark 0504-4	1405	41.72	7.65	5.50	29.56	10.50	4.95	1.20	84.32	32.12	5.39	7.19	60.75	70.11
PX06520-42-2-3	1404	39.69	8.29	5.96	27.80	12.37	4.90	1.28	85.79	37.32	5.64	6.62	87.11	91.05
NM1302	1399	38.67	6.77	5.37	30.21	10.53	4.76	1.18	83.48	30.44	5.95	7.65	52.81	61.20
PD05064	1393	41.24	7.01	5.50	31.84	9.72	4.75	1.21	83.61	33.30	5.08	7.50	64.15	67.99
PD05069	1372	41.55	7.11	5.45	31.18	9.77	4.67	1.24	83.18	33.41	5.05	7.42	72.32	67.73
PD07092	1365	39.37	7.30	5.62	29.87	11.06	4.50	1.23	85.04	34.86	5.18	6.86	78.27	81.75
Acala 1517-99	1194	38.91	7.21	5.40	28.55	11.09	4.47	1.21	83.83	33.43	5.08	7.27	68.05	71.30
Mean	1484	41.13	7.29	5.54	30.71	10.23	4.79	1.19	83.91	32.21	5.31	7.40	59.47	68.05
LSD (.05)	74	0.51	0.20	0.20	1.22	0.28	0.09	0.01	0.36	0.53	0.16	0.16	4.62	3.17
CV(%)	11.78	2.84	6.11	8.20	9.13	6.21	4.19	2.47	0.98	3.79	6.79	5.00	17.85	10.72
R-Square	0.85	0.83	0.74	0.65	0.55	0.75	0.83	0.74	0.77	0.78	0.87	0.85	0.68	0.65
Reps	43	41	41	41	41	41	41	41	41	41	41	41	41	41

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

¹ Means for RBTN locations KeiserAR and TiftonGA were excluded from analyses over locations due excessive variability.

[†] Lint percent and fiber values for LubbockTX based upon 2 replications.

[‡] 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)