

Table 1. Least square means for lint yield, yield components, and fiber quality traits over 10 locations ¹ in the 2014 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	%	%	%	%
LA11309040	1576	45.52	8.17	5.17	29.02	9.55	5.00	1.15	84.37	29.82	5.75	7.61	46.26	63.28
Ark 0614-49	1553	40.89	7.39	5.70	31.64	10.54	4.89	1.20	85.55	31.30	5.56	6.91	69.15	75.59
DP 393 ck	1470	42.62	7.76	5.50	30.29	10.27	4.90	1.17	85.06	31.15	5.69	7.21	57.85	70.75
MS 0043-28 -1	1464	42.31	7.57	5.36	30.09	10.12	4.90	1.14	84.13	30.13	4.85	7.51	47.36	62.31
MD10-6	1460	43.33	7.75	5.63	31.59	9.93	4.62	1.15	84.48	31.66	4.83	7.35	55.26	67.69
GA 2009037	1452	42.75	7.26	5.32	31.41	9.56	4.95	1.17	83.25	30.16	4.51	8.21	52.44	58.40
UA 222 ck	1442	42.22	8.01	5.55	29.30	10.71	4.72	1.21	84.58	30.92	6.02	7.44	69.91	70.81
Ark 0614-34	1430	41.49	7.79	5.81	31.03	10.77	5.01	1.22	85.73	30.58	5.70	7.09	71.58	76.17
OA-173	1429	42.24	7.14	5.33	31.60	9.59	4.98	1.18	84.52	30.77	4.73	7.65	57.09	66.97
LA11309062	1427	43.56	8.04	6.20	33.69	10.24	4.90	1.18	84.71	31.43	5.25	7.43	60.53	69.13
Ark 0615-38	1422	40.82	7.84	5.71	29.84	11.22	5.00	1.18	84.97	32.05	4.75	7.28	59.65	70.33
SG 105 ck	1416	41.26	7.67	5.36	28.87	10.72	4.98	1.16	85.08	29.97	5.11	7.25	53.19	69.09
GA 2010074	1415	42.27	7.97	5.61	29.84	10.70	5.07	1.18	84.49	31.05	4.81	7.41	56.33	66.87
PX06520-42-2-1	1415	41.28	8.32	5.79	28.93	11.65	4.82	1.26	85.72	36.35	5.00	7.07	87.68	88.31
OA-185	1399	42.97	7.61	5.28	29.96	9.88	4.83	1.14	83.81	30.00	4.68	7.94	47.29	60.40
MS 0045-14 -5	1384	42.07	7.50	5.72	32.20	10.17	4.70	1.15	84.32	30.32	4.74	7.58	52.72	65.56
GA 2009100	1367	40.15	7.17	5.61	31.54	10.48	5.11	1.18	84.56	32.09	3.98	7.51	54.12	66.63
NM12Y1005	1361	43.82	8.21	5.48	29.42	10.30	5.02	1.09	83.54	28.48	4.80	8.14	30.25	44.77
MS 0040-19 -4	1353	41.14	7.53	5.50	30.08	10.56	4.65	1.16	83.36	29.86	4.93	7.98	54.43	60.99
FM 958 ck	1342	41.79	8.03	5.89	30.69	10.99	4.80	1.17	84.16	31.55	3.78	7.57	56.23	65.78
AU51038	1324	42.84	7.20	5.55	33.18	9.46	4.33	1.21	83.79	32.05	4.41	7.69	72.04	67.60
NM12Y1004	1315	43.74	8.54	5.55	28.48	10.74	4.80	1.13	83.91	29.27	4.76	8.04	44.87	59.20
AU91411	1305	40.29	7.80	5.90	30.50	11.37	4.89	1.19	84.60	32.35	4.93	7.29	63.08	69.35
LA11309005	1282	40.07	7.25	5.43	30.07	10.66	4.67	1.19	83.99	31.45	4.22	7.60	64.83	66.93
AU52034	1272	41.06	7.37	5.69	31.78	10.40	4.72	1.22	85.06	34.12	4.57	7.13	76.07	77.48
DP 491 ck	1254	42.54	7.36	5.72	33.09	9.78	4.69	1.20	84.31	31.91	4.16	7.77	67.80	68.91
NM12Y1002	1200	40.13	6.58	5.17	31.61	9.62	4.66	1.16	84.49	30.81	5.90	7.73	57.23	67.52
PD 07116	1156	41.15	6.97	5.54	32.83	9.77	4.77	1.21	84.27	33.15	4.25	7.35	67.88	70.04
PD 07066	1154	38.30	7.08	5.78	31.39	11.21	4.41	1.20	84.61	32.63	4.54	7.17	70.94	72.66
PD 08039	1021	35.61	6.29	5.61	31.85	11.21	4.36	1.25	84.06	31.41	4.62	7.59	81.68	70.88
Mean	1362	41.67	7.57	5.58	30.86	10.41	4.81	1.18	84.45	31.29	4.86	7.52	60.19	67.68
LSD (.05)	65	0.48	0.22	0.19	1.09	0.27	0.08	0.01	0.35	0.48	0.15	0.19	3.95	3.24
CV(%)	10.93	2.73	6.95	7.93	8.37	6.13	4.00	1.97	0.94	3.43	6.85	5.58	14.77	10.76
R-Square	0.84	0.89	0.75	0.60	0.55	0.73	0.80	0.86	0.69	0.80	0.90	0.70	0.76	0.67
Reps	40	43	43	43	43	43	39	39	39	39	39	39	39	39

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

¹ FlorenceSC location excluded from over location analyses; LasCruces location includes yield data only; TallasseeAL location includes fiber data only.

[†] 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)