

Table 1. Least square means for lint yield, yield components, and fiber quality traits over 15 locations ¹ in the 2012 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	%	%		
MD 10-5	1655	42.99	7.19	5.47	33.08	9.32	4.99	1.15	83.70	33.14	5.77	6.91	50.45	65.08
NM11Q1008	1606	40.03	6.28	4.88	31.23	9.29	4.95	1.14	83.01	30.18	5.16	7.79	46.60	58.12
Ark 0409-17	1581	42.09	7.90	5.58	29.79	10.64	5.13	1.13	83.81	30.15	6.00	6.98	44.00	61.37
MD 87	1580	39.08	7.77	6.10	30.71	11.89	4.89	1.21	85.16	36.63	4.75	6.62	74.51	84.14
GA 2004143	1573	43.83	7.43	4.78	28.20	9.32	4.90	1.18	83.46	32.58	4.62	7.29	59.94	65.95
AU90915	1557	41.12	7.61	5.53	29.90	10.74	5.26	1.18	84.12	32.20	6.20	6.86	54.77	67.20
GA 2009100	1555	42.88	7.34	5.30	30.88	9.61	4.64	1.19	83.74	32.89	4.93	7.10	67.03	69.47
AU91411	1546	39.29	7.72	5.83	29.80	11.72	5.08	1.21	84.18	33.72	5.52	6.77	66.54	71.11
MD 26ne	1520	40.14	7.45	5.76	31.05	10.91	4.81	1.26	85.56	34.38	5.34	6.47	86.91	83.97
Ark 0409-16	1516	41.14	7.90	5.74	29.84	11.11	4.98	1.13	82.93	29.58	5.63	7.49	40.87	54.20
Arkot 0407-4	1503	41.55	8.26	6.25	31.39	11.45	5.24	1.14	84.08	31.74	4.66	7.01	45.43	64.95
DP 393	1497	40.92	7.37	5.45	30.15	10.44	5.05	1.16	84.14	32.22	6.44	6.90	54.48	67.53
PD05074	1492	41.46	7.23	5.34	30.79	10.05	5.08	1.17	83.79	33.73	5.11	7.10	54.05	66.25
NC11AZ01	1481	41.61	7.44	5.47	30.66	10.30	5.01	1.17	83.73	34.15	4.20	7.39	56.43	67.62
FM 958	1469	40.41	7.61	5.37	28.65	10.99	5.30	1.15	84.31	31.09	5.73	6.88	47.43	66.18
LA08310066	1468	39.62	6.95	5.32	30.40	10.41	5.15	1.15	83.21	32.52	5.47	7.37	45.48	60.53
AU91215	1466	39.91	6.88	5.33	30.99	10.15	5.00	1.18	83.58	30.99	5.80	7.26	58.28	65.48
AU91111	1457	40.02	6.77	5.31	31.47	9.97	4.96	1.19	83.54	31.11	5.81	7.31	61.85	65.97
AU90810	1438	38.96	6.98	5.48	30.62	10.73	4.87	1.21	84.31	32.13	5.49	7.00	71.12	72.25
GA 2008083	1425	41.59	7.54	5.24	28.88	10.36	5.19	1.19	84.12	32.73	5.24	6.96	61.18	68.53
GA 2008057	1396	39.49	6.54	4.77	28.90	9.85	4.69	1.19	83.88	33.48	5.88	6.91	67.33	70.75
PD06078	1394	40.25	7.12	5.33	30.08	10.40	5.12	1.19	84.32	33.28	5.55	6.68	62.10	70.35
Tamcot 73	1391	39.40	7.03	5.47	30.88	10.59	4.95	1.19	84.20	33.96	5.51	6.85	64.07	71.45
SG 105	1378	40.66	7.84	5.63	29.20	11.28	5.00	1.17	83.56	32.94	4.40	7.16	56.00	65.15
Ark 0403-3	1370	39.54	6.32	4.93	30.73	9.55	5.27	1.16	84.19	33.29	5.41	6.84	50.07	66.93
PD05071	1352	38.70	6.98	5.63	31.21	10.88	4.92	1.16	83.87	32.46	5.09	6.90	54.68	66.57
PD06001	1344	38.46	6.89	5.51	30.82	10.88	4.86	1.19	83.26	32.06	4.61	7.28	61.83	64.93
PD05064	1341	40.77	7.14	5.55	31.72	10.13	5.00	1.20	83.86	34.47	5.18	6.99	66.45	70.57
Arkot 0410-32	1305	39.13	7.52	5.46	28.43	11.49	5.38	1.16	84.89	32.57	5.81	6.58	51.60	69.98
Acala 1517-08	1268	38.75	7.14	5.39	29.11	11.14	4.94	1.22	84.04	36.07	5.23	6.91	73.96	77.13
TAM 06WE-62-1	1209	38.63	8.03	6.66	31.97	12.62	4.80	1.21	85.25	38.39	5.43	6.54	78.63	88.32
NM11Q1157	1186	38.15	6.71	5.11	29.21	10.70	4.69	1.16	82.92	33.72	5.98	7.05	56.68	63.52
Barbren 713	1118	36.09	6.53	5.62	31.01	11.46	4.84	1.11	82.20	30.95	5.01	7.56	38.06	54.21
Mean	1437	40.20	7.26	5.47	30.36	10.62	5.00	1.18	83.91	32.89	5.36	7.02	58.45	68.05
LSD (.05)	64	0.39	0.17	0.15	0.92	0.23	0.07	0.01	0.28	0.42	0.12	0.14	3.46	2.42
CV(%)	11.40	2.69	6.34	7.39	8.13	5.70	3.88	2.20	0.91	3.54	6.24	5.53	16.42	9.88
R-Square	0.90	0.89	0.81	0.77	0.65	0.77	0.78	0.78	0.73	0.82	0.88	0.86	0.71	0.68
Reps	52	60	56	60	56	56	60	60	60	60	60	60	60	60

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

¹ Means for Barbren 713 included 10 locations (CollegeStnTX, LasCrucesNM, and SuffolkVA locations were excluded).

[†] Means for yield included 13 locations (LubbockTX and TiftonGA locations were excluded).

[‡] Means for Lint Index, Seed per Boll, and Seed Index included 14 locations (RockyMtNC location excluded).

[§] 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)