

Table 15. Least square means for lint yield, yield components, and fiber quality traits in the 2012 RBTN trial conducted at Tallassee, AL. (Cooperator: David Weaver)

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	%	%		
GA 2004143	1963	46.32	8.05	5.31	30.55	9.22	4.92	1.17	84.40	31.18	4.88	6.83	56.50	66.25
Arkot 0407-4	1939	42.92	8.55	6.83	34.31	11.27	5.00	1.13	84.25	31.40	4.83	6.98	43.25	62.25
LA08310066	1902	40.50	7.11	5.91	33.73	10.34	4.91	1.15	83.35	32.43	5.88	7.03	49.25	58.75
Ark 0409-17	1885	43.74	8.35	6.17	32.33	10.66	4.75	1.13	84.43	29.68	6.13	6.78	48.75	65.50
NC11AZ01	1879	43.49	7.67	5.87	33.29	9.88	4.85	1.15	84.18	32.78	4.45	7.03	52.25	64.50
AU91411	1837	40.60	8.13	6.31	31.53	11.82	5.12	1.20	84.83	32.43	5.60	6.63	62.25	69.00
NM11Q1008	1825	41.53	6.56	5.28	33.47	9.16	4.81	1.16	84.33	30.43	5.30	7.15	55.25	65.75
PD05074	1824	43.28	7.33	5.70	33.69	9.52	4.85	1.20	85.43	33.78	5.03	6.85	69.50	75.50
MD 10-5	1820	44.13	7.46	6.14	36.30	9.36	4.95	1.13	83.50	31.50	5.68	7.00	42.50	58.50
AU90915	1807	42.44	7.84	6.15	33.26	10.54	5.25	1.17	84.53	31.13	6.35	6.58	50.75	64.50
GA 2009100	1804	43.88	7.60	5.60	32.30	9.64	4.48	1.20	84.28	32.95	4.98	6.80	70.25	69.75
DP 393	1790	41.90	7.48	5.99	33.50	10.29	4.88	1.15	84.23	31.85	6.53	6.75	50.50	64.50
AU91111	1756	41.60	7.09	5.68	33.36	9.86	4.75	1.21	84.50	31.50	5.63	7.20	70.75	70.00
GA 2008083	1725	42.80	7.70	5.80	32.21	10.21	5.13	1.19	84.83	33.15	5.40	6.78	61.25	70.00
Ark 0409-16	1725	41.81	8.06	6.62	34.41	11.11	4.79	1.14	83.75	29.20	5.70	7.03	48.25	61.25
AU91215	1690	40.91	6.88	5.70	33.90	9.86	4.79	1.19	84.70	31.35	5.90	6.85	65.25	70.00
MD 87	1665	39.79	7.83	6.63	33.73	11.74	4.75	1.19	85.58	36.15	5.03	6.50	71.25	83.50
MD 26ne	1664	40.98	7.45	6.34	34.84	10.65	4.63	1.26	86.33	34.18	5.55	6.38	91.50	87.00
AU90810	1627	40.44	6.85	5.82	34.36	10.00	4.64	1.20	84.70	31.30	5.53	6.68	68.50	70.75
GA 2008057	1618	41.08	7.13	5.18	29.89	10.14	4.69	1.19	84.65	33.60	5.75	6.63	66.50	70.75
SG 105	1607	41.97	8.24	6.16	31.35	11.30	5.11	1.14	83.83	32.70	4.40	7.00	43.50	60.00
Arkot 0410-32	1591	41.13	7.91	5.81	30.16	11.23	5.23	1.18	85.43	32.20	5.88	6.55	56.00	70.25
FM 958	1589	41.16	7.82	5.74	30.18	11.07	5.14	1.15	84.83	30.88	5.93	6.88	48.25	66.00
PD05071	1571	40.09	7.47	6.23	33.47	11.09	4.88	1.19	84.43	31.95	5.18	6.73	63.50	68.00
Ark 0403-3	1553	40.97	6.22	5.06	33.36	8.89	5.11	1.15	84.40	32.28	5.93	6.45	46.25	63.75
PD06001	1525	38.49	7.16	6.15	33.10	11.32	4.67	1.22	84.15	32.40	4.50	7.03	73.75	69.00
PD06078	1511	41.30	7.35	5.81	32.60	10.41	5.05	1.17	84.98	32.48	5.85	6.70	56.00	68.75
Tamcot 73	1489	40.12	6.81	5.76	33.98	10.07	4.73	1.17	84.55	32.63	5.50	6.85	62.25	68.75
PD05064	1411	42.01	8.20	6.05	31.54	10.47	4.98	1.23	84.53	34.38	5.15	6.75	72.25	72.00
Acala 1517-08	1349	40.08	7.55	6.06	32.17	11.18	4.87	1.23	85.00	37.40	5.33	6.75	77.50	82.50
NM11Q1157	1284	39.09	7.01	5.62	31.34	10.84	4.74	1.18	83.48	32.43	6.08	6.70	59.00	62.25
TAM 06WE-62-1	1252	39.09	8.00	7.35	35.91	12.38	4.55	1.22	86.30	38.93	5.48	6.43	85.25	92.50
Barbren 713	1159	36.87	6.52	6.23	35.38	11.08	4.66	1.11	83.28	30.75	5.10	7.03	41.50	58.00
Mean	1656	41.41	7.50	5.97	33.02	10.50	4.87	1.18	84.54	32.52	5.47	6.79	59.98	68.78
LSD (.05)	209	1.34	0.57	0.40	2.22	0.58	0.27	0.04	0.90	1.58	0.46	0.37	12.90	7.39
CV(%)	9.01	2.31	5.44	4.76	4.78	3.94	3.93	2.13	0.75	3.46	5.99	3.85	15.32	7.66
R-Square	0.73	0.84	0.73	0.79	0.61	0.85	0.62	0.73	0.65	0.81	0.81	0.49	0.74	0.77
Reps	4	4	4	4	4	4	4	4	4	4	4	4	4	4

Shaded values 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)