

Table 7. Least square means for lint yield, yield components, and fiber quality traits in the 2012 RBTN trial conducted at Keiser, AR. (Cooperator: Fred Bourland)

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 0409-17	1734	40.25	7.85	5.22	26.78	11.32	4.97	1.17	83.68	31.80	5.53	6.98	46.75	61.75
MD 10-5	1723	40.83	6.97	4.97	29.15	9.79	4.89	1.18	84.30	34.40	5.25	6.85	53.00	68.00
GA 2004143	1713	41.42	6.93	3.96	23.69	9.50	4.80	1.20	83.53	32.58	3.98	7.43	59.00	64.00
AU91411	1650	37.36	7.46	5.22	26.22	12.28	4.90	1.23	84.53	33.73	5.23	6.88	66.75	71.50
Ark 0409-16	1597	39.09	8.10	5.24	25.27	12.38	5.04	1.15	82.68	30.70	5.28	7.78	38.25	55.00
MD 87	1592	37.03	7.31	5.32	26.95	12.18	4.65	1.26	85.85	39.43	4.58	6.63	85.75	92.25
NM11Q1008	1576	38.35	6.17	4.35	27.15	9.65	4.89	1.16	83.28	31.28	4.58	7.78	44.75	59.50
FM 958	1575	38.32	7.42	4.88	25.31	11.70	5.34	1.17	85.00	32.65	5.55	6.75	45.00	67.25
DP 393	1575	38.43	6.97	4.66	25.69	10.75	5.04	1.18	84.55	32.28	5.90	7.03	51.25	67.00
NC11AZ01	1571	38.55	7.18	5.67	30.36	11.18	5.10	1.23	84.63	35.05	3.63	7.03	63.50	72.00
AU91215	1561	37.92	6.53	4.33	25.27	10.45	4.66	1.22	84.13	32.15	5.48	7.35	65.75	68.75
AU90915	1543	38.73	6.96	4.70	26.09	10.79	4.94	1.22	84.13	32.88	5.78	7.13	61.50	67.50
GA 2008083	1538	39.74	7.18	4.76	26.31	10.59	5.16	1.22	84.55	33.48	4.63	7.13	60.50	68.75
GA 2008057	1515	36.77	6.23	4.21	24.93	10.35	4.59	1.22	84.40	35.43	5.58	7.05	68.00	74.25
Arkot 0410-32	1515	36.87	7.42	5.21	25.90	12.52	5.53	1.20	85.55	33.50	5.50	6.48	49.50	70.50
MD 26ne	1507	37.01	6.94	5.32	28.35	11.49	4.61	1.30	86.10	35.48	4.98	6.45	94.75	88.75
AU91111	1500	38.64	6.53	6.51	38.43	10.09	4.88	1.23	84.18	31.45	5.33	7.35	65.75	68.50
PD05074	1495	39.79	7.23	5.16	28.42	10.66	4.96	1.18	84.20	34.48	4.85	7.28	52.75	67.25
Arkot 0407-4	1477	39.54	8.21	5.64	27.16	12.27	5.54	1.16	84.20	32.63	4.35	6.90	33.50	59.75
PD06078	1467	37.59	6.89	4.87	26.54	11.15	5.10	1.20	84.38	33.88	4.95	7.00	55.00	67.00
Ark 0403-3	1460	37.23	6.27	5.31	31.50	10.30	5.22	1.20	84.55	35.55	4.90	6.98	54.25	70.50
GA 2009100	1455	40.30	6.52	4.64	28.70	9.52	4.26	1.23	84.20	33.48	4.80	7.03	72.00	71.50
PD05071	1438	36.40	6.58	5.06	27.94	11.22	4.95	1.19	84.23	34.13	4.48	7.38	53.00	67.00
AU90810	1431	36.48	6.49	4.45	24.96	11.03	4.50	1.25	84.63	32.63	4.98	7.28	76.25	73.75
LA08310066	1424	36.72	6.92	4.90	26.02	11.55	5.20	1.19	84.15	33.73	5.18	6.95	50.50	64.75
Tamcot 73	1411	37.33	7.15	5.91	30.88	11.75	4.83	1.23	84.68	34.35	5.25	7.05	67.75	72.75
SG 105	1404	38.18	7.41	4.69	24.19	11.79	4.98	1.21	83.75	35.38	3.95	7.15	58.00	68.00
PD06001	1394	36.01	6.43	5.11	28.65	11.15	4.91	1.21	83.15	32.75	4.20	7.38	57.75	61.25
PD05064	1344	39.04	6.60	4.66	27.53	10.16	4.58	1.22	83.83	34.85	5.00	7.08	66.25	69.50
TAM 06WE-62-1	1305	36.41	7.69	5.51	26.02	13.20	4.66	1.24	85.70	39.75	5.23	6.73	80.00	89.75
Acala 1517-08	1278	36.96	7.01	4.60	24.25	11.55	4.87	1.19	83.70	35.75	5.00	7.35	58.75	70.25
Barbren 713	1140	34.33	6.61	5.16	26.82	12.27	4.97	1.14	82.33	31.53	4.70	7.40	35.25	52.00
NM11Q1157	925	36.04	6.52	5.34	29.28	11.21	4.46	1.21	83.88	34.90	5.53	6.90	67.00	70.00
Mean	1480	37.99	6.99	5.02	27.30	11.14	4.91	1.20	84.26	33.88	4.97	7.09	59.33	69.10
LSD (.05)	172	1.22	0.43	1.15	6.41	0.75	0.31	0.03	1.07	1.70	0.34	0.45	12.77	8.33
CV(%)	8.26	2.28	4.42	16.36	16.74	4.82	4.46	2.00	0.91	3.57	4.82	4.52	15.34	8.59
R-Square	0.70	0.82	0.80	0.40	0.36	0.81	0.70	0.71	0.61	0.79	0.88	0.57	0.75	0.73
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)