

Table 8. Least square means for lint yield, yield components, and fiber quality traits in the 2012 RBTN trial conducted at Las Cruces, NM ¹. (Cooperator: Jinfa Zhang)

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	%	%		
AU90915	1917	45.21	8.63	5.00	26.21	10.40	5.34	1.19	84.80	32.63	6.68	7.03	57.50	67.25
MD 87	1847	44.10	8.28	5.17	27.48	10.30	4.90	1.22	85.85	37.10	5.48	6.65	75.75	84.50
MD 10-5	1816	46.01	7.78	4.60	27.20	9.00	4.99	1.17	85.25	33.95	6.63	6.45	56.75	71.25
MD 26ne	1796	44.49	8.45	4.91	25.83	10.40	4.96	1.25	85.88	35.33	6.18	6.50	77.50	80.75
FM 958	1675	44.14	8.62	4.84	24.80	10.80	5.54	1.15	85.30	31.20	6.48	6.58	43.00	66.00
Ark 0409-17	1673	45.93	8.59	4.84	25.90	10.00	5.31	1.13	84.55	31.48	6.78	6.78	38.25	61.75
Arkot 0407-4	1642	44.21	8.77	5.11	25.76	10.90	5.34	1.16	84.50	32.33	5.18	7.28	47.00	63.25
NM11Q1008	1637	44.10	7.12	4.15	25.74	8.90	5.23	1.16	84.10	30.80	6.40	7.40	47.25	61.50
NC11AZ01	1624	44.66	8.08	4.66	25.78	9.90	5.10	1.21	84.60	35.60	4.65	7.18	65.00	72.00
AU91111	1609	42.81	7.77	4.51	24.85	10.20	4.95	1.22	84.35	32.68	6.45	7.10	69.00	69.25
Tamcot 73	1604	43.57	7.78	4.54	25.61	9.80	5.04	1.18	85.08	34.53	6.75	6.58	59.75	71.50
GA 2009100	1573	46.86	7.81	4.48	26.92	8.80	4.86	1.19	84.60	34.53	5.45	7.00	65.25	71.25
AU90810	1563	43.05	8.19	4.96	26.09	10.70	4.99	1.21	85.25	32.35	6.45	6.95	69.75	73.25
PD05064	1557	44.63	7.75	4.64	26.78	9.50	5.03	1.23	84.48	34.83	5.80	6.80	71.00	71.00
Ark 0403-3	1538	43.78	7.01	4.13	25.84	8.90	5.51	1.12	84.73	33.85	6.30	6.63	35.00	62.00
AU91411	1519	43.07	8.19	4.87	25.66	10.60	5.20	1.20	84.58	34.20	6.13	6.80	62.25	69.50
Arkot 0410-32	1512	42.55	8.24	4.54	23.45	11.10	5.76	1.13	84.75	33.68	6.75	6.53	31.25	60.50
Ark 0409-16	1493	45.62	8.70	5.02	26.34	10.20	5.27	1.11	83.45	29.45	6.38	7.28	30.25	48.75
GA 2004143	1493	46.91	8.34	4.08	22.96	9.40	4.94	1.21	84.40	34.95	5.40	6.95	68.50	71.25
LA08310066	1429	43.49	7.57	4.85	28.15	9.70	5.14	1.14	84.45	32.38	6.38	6.98	44.00	63.00
Acala 1517-08	1423	42.57	7.75	4.47	24.57	10.40	4.81	1.23	84.63	35.30	5.75	6.80	77.25	75.50
AU91215	1381	45.38	8.19	4.77	26.47	9.70	5.17	1.18	83.85	31.78	6.65	7.20	53.00	61.50
NM11Q1157	1359	41.52	7.72	4.55	24.47	10.80	4.76	1.21	83.65	34.60	6.90	6.85	69.50	67.50
PD06078	1332	44.45	7.85	4.42	25.07	9.70	5.29	1.18	84.83	35.68	6.70	6.53	55.50	70.75
PD05074	1306	45.77	8.00	4.49	25.66	9.60	5.14	1.16	84.35	34.78	6.23	7.00	50.00	65.25
PD05071	1299	42.87	7.89	4.80	26.23	10.40	4.99	1.16	84.20	33.83	6.08	6.55	53.25	65.50
SG 105	1260	44.25	9.00	4.95	24.41	11.10	5.12	1.18	84.05	33.40	4.58	7.23	54.25	63.25
DP 393	1255	44.76	8.51	4.74	24.93	10.20	5.15	1.15	85.25	32.15	7.25	6.88	50.50	68.50
GA 2008057	1249	43.07	7.35	3.98	23.40	9.60	4.65	1.23	84.53	34.40	6.53	6.75	76.75	73.00
PD06001	1246	43.02	8.02	4.94	26.51	10.50	5.08	1.19	83.70	33.98	5.05	7.18	56.75	63.75
GA 2008083	1238	45.89	8.28	4.54	25.19	9.40	5.50	1.17	84.20	32.83	5.95	7.08	47.75	61.50
TAM 06WE-62-1	1183	40.64	8.84	5.58	25.77	12.80	4.86	1.21	85.48	37.68	6.68	6.73	72.25	82.75
Barbren 713	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Mean	1501	44.17	8.10	4.69	25.63	10.12	5.12	1.18	84.61	33.69	6.16	6.88	57.21	68.07
LSD (.05)	373	1.53	0.63	0.36	2.30	0.81	0.23	0.04	1.13	2.01	0.56	0.43	14.84	10.06
CV(%)	17.68	2.46	5.56	5.43	6.38	5.73	3.15	2.48	0.95	4.26	6.46	4.43	18.48	10.25
R-Square	0.42	0.71	0.61	0.71	0.42	0.72	0.76	0.66	0.43	0.68	0.79	0.51	0.69	0.57
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).

¹Seed of Barbren 713 was not available at the time of planting for this location.

[†] 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)