

Table 4. Least square means for lint yield, yield components, and fiber quality traits in the 2012 RBTN trial conducted at College Station, TX ¹. (Cooperator: Richard Percy)

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 87	2124	37.93	7.47	6.40	32.45	12.06	4.63	1.23	84.95	35.38	4.03	6.95	86.00	87.75
MD 10-5	1959	43.68	7.39	5.18	31.21	9.28	4.87	1.14	83.13	32.28	4.93	7.40	51.00	66.50
AU91411	1949	37.80	7.11	5.84	31.10	11.44	4.91	1.23	84.23	32.85	4.83	7.13	81.25	77.25
GA 2004143	1819	44.51	7.13	4.71	29.46	8.66	5.07	1.15	83.09	31.09	3.81	7.79	50.27	64.43
DP 393	1766	40.49	7.14	5.45	30.91	10.19	5.01	1.16	83.48	31.08	5.60	7.60	55.00	67.50
Ark 0409-16	1727	39.42	7.27	5.56	30.17	10.91	4.43	1.15	82.05	29.18	4.88	7.95	43.75	48.00
PD06078	1715	39.54	6.79	5.33	31.16	10.07	5.07	1.20	84.15	32.60	4.53	6.93	69.50	74.25
GA 2009100	1710	43.53	6.97	4.93	30.96	8.75	4.62	1.16	82.88	30.98	4.05	7.93	60.50	66.75
LA08310066	1683	39.43	6.55	5.17	31.17	9.83	5.13	1.12	81.75	31.28	4.60	8.20	37.00	54.50
Ark 0409-17	1632	40.94	7.03	5.34	31.20	9.88	5.10	1.10	82.60	28.70	4.80	7.78	33.50	52.00
PD05074	1623	40.90	6.44	5.09	32.27	9.15	5.19	1.15	83.18	32.58	4.15	7.53	49.00	64.50
MD 26ne	1623	40.22	7.66	5.90	31.10	11.09	4.79	1.26	85.25	33.40	4.40	6.90	89.50	85.75
PD05071	1611	38.56	6.78	5.80	32.88	10.63	4.96	1.15	83.00	31.53	4.28	7.50	54.00	64.75
Tamcot 73	1605	39.07	6.83	5.57	31.94	10.49	5.16	1.18	84.23	33.98	4.45	7.05	62.00	74.00
Arkot 0407-4	1595	39.45	7.61	6.28	32.60	11.52	5.11	1.16	84.25	31.25	4.03	7.25	56.75	72.00
FM 958	1568	39.51	7.12	5.55	30.84	10.64	5.36	1.13	83.78	29.55	5.00	7.50	42.75	65.50
GA 2008083	1482	41.61	7.39	5.28	29.77	10.11	5.27	1.18	83.05	30.98	4.30	7.58	56.50	64.50
PD05064	1476	40.33	6.72	5.27	31.64	9.73	5.11	1.19	83.30	34.23	4.58	7.45	62.25	69.00
AU91215	1463	38.19	6.46	5.15	30.39	10.13	4.92	1.17	82.38	30.28	5.15	7.93	58.25	62.75
GA 2008057	1460	39.03	6.18	4.58	28.93	9.37	4.74	1.15	83.10	32.43	4.98	7.43	55.75	67.25
AU90810	1459	39.67	6.78	5.39	31.60	10.06	5.08	1.16	83.08	31.33	4.73	7.65	54.50	65.25
Arkot 0410-32	1427	38.97	8.21	5.68	27.17	12.45	5.56	1.19	84.45	32.90	5.08	6.90	57.00	72.25
NM11Q1008	1422	38.51	5.98	4.92	31.65	9.36	4.92	1.14	81.35	28.55	4.23	8.95	44.50	45.50
TAM 06WE-62-1	1422	38.46	7.97	6.96	33.56	12.50	4.92	1.22	84.55	37.30	4.48	7.03	79.25	88.25
Ark 0403-3	1412	38.73	6.14	4.97	31.46	9.51	5.36	1.17	83.98	31.43	4.53	7.15	54.00	69.25
AU90915	1408	39.66	7.12	5.44	30.31	10.55	5.29	1.16	83.58	31.28	5.23	7.18	52.50	66.75
PD06001	1390	37.45	6.49	5.26	30.36	10.61	4.85	1.19	82.63	30.95	3.68	7.78	63.75	65.75
Acala 1517-08	1381	38.23	7.09	5.61	30.38	11.09	5.04	1.21	82.80	35.18	4.53	7.43	68.75	71.50
SG 105	1351	39.18	7.51	5.80	30.29	11.42	5.05	1.18	83.05	33.33	3.68	7.60	60.75	66.75
AU91111	1281	38.78	6.14	5.03	31.93	9.40	4.97	1.17	82.18	30.55	5.08	7.90	54.75	60.75
NC11AZ01	1277	39.34	7.08	5.44	30.28	10.65	5.11	1.17	82.95	34.15	3.43	7.83	55.50	65.75
NM11Q1157	1173	37.25	6.02	4.82	29.96	9.98	4.71	1.14	81.38	32.28	4.85	7.85	49.75	56.00
Barbren 713	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Mean	1562	39.64	6.95	5.43	30.97	10.36	5.01	1.17	83.24	32.02	4.53	7.53	57.80	66.96
LSD (.05)	345	1.47	0.68	0.50	3.41	0.76	0.29	0.04	1.00	1.48	0.37	0.51	14.26	10.98
CV(%)	15.74	2.64	6.94	6.62	7.83	5.23	4.10	2.34	0.86	3.29	5.81	4.86	17.59	11.68
R-Square	0.61	0.80	0.65	0.74	0.31	0.82	0.67	0.71	0.71	0.82	0.83	0.66	0.71	0.68
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)