

Table 7. Least square means for lint yield, yield components, and fiber quality traits in the 2016 RBTN trial conducted at Keiser, AR. (Cooperator: Fred Bourland)

Cultivar	Lint Yield ¹	Lint Percent	Lint Index	Boll Size	Seed per Boll	Seed Index	MIC	UHM	UI	STRN	ELO	SFC	QS1 ²	QS2 ²	QS3 ²
	lbs/a	%	grams	grams	#	grams	mic	inch	%	g/tex	%	%	%	%	%
AU77082	1160	40.18	7.59	4.26	22.67	10.92	5.09	1.21	85.58	34.10	4.28	7.23	51.00	58.25	58.50
MD 16-1	1149	42.38	7.88	4.79	25.77	10.37	4.94	1.18	85.93	35.78	4.80	6.73	48.25	60.75	56.50
GA 2012082	1129	41.93	8.09	4.01	20.79	10.85	5.05	1.20	85.55	32.40	4.93	7.15	48.50	56.25	56.00
MS 0152-3-11	1121	40.39	7.16	4.62	26.21	10.24	4.79	1.22	85.45	32.05	4.70	7.40	60.50	60.25	67.25
AU82074	1098	38.59	7.09	4.36	23.70	10.92	4.77	1.20	85.13	33.70	4.53	7.45	53.00	55.75	61.75
GA 2012050	1090	40.50	7.28	4.32	24.05	10.37	4.60	1.23	86.55	35.80	5.15	6.80	69.00	73.00	73.50
MS 0043-28-1	1087	40.54	7.42	4.37	23.83	10.60	5.09	1.15	84.38	32.88	4.70	7.33	35.25	43.25	47.25
Ark 0822-48	1078	40.46	8.02	4.60	23.29	11.61	5.16	1.25	84.93	34.13	5.33	7.18	58.50	56.25	66.50
NM 13G2019	1068	41.05	7.38	4.54	25.27	10.32	4.85	1.25	85.93	36.40	4.58	6.78	70.00	69.75	76.00
NM 13G1029	1061	40.93	7.28	4.25	23.86	10.22	4.66	1.28	85.30	36.03	4.63	6.73	79.50	69.00	86.50
GA 2011113	1047	41.50	7.14	4.00	23.26	9.81	4.91	1.20	85.10	35.18	4.63	6.90	51.50	55.50	60.75
UA 222 CK	992	39.92	7.60	4.68	24.55	11.01	4.82	1.24	85.55	33.03	5.85	7.15	64.25	62.50	70.25
Ark 0812-87ne	990	41.87	8.43	4.49	22.34	11.30	4.87	1.25	86.30	32.88	5.23	7.05	68.00	69.50	71.75
SG 105 CK	987	39.49	7.61	3.75	19.39	11.30	5.33	1.18	86.05	32.30	5.13	6.80	38.25	55.75	44.75
Ark 0819-89	974	37.43	7.05	3.98	21.17	11.54	5.05	1.23	86.75	37.48	5.40	6.73	63.00	73.75	68.25
TAM13Q-18	956	37.88	7.26	4.34	22.54	11.58	4.85	1.21	85.25	34.60	4.73	7.13	54.25	57.50	62.75
GA 2012141	946	39.76	7.07	4.45	25.07	10.40	4.85	1.23	85.83	33.18	4.80	7.05	61.00	63.00	66.75
DP 393 CK	939	40.79	7.85	4.34	22.58	10.90	5.15	1.19	84.90	33.88	5.20	7.20	42.75	49.50	52.25
FM 958 CK	931	39.03	7.79	4.56	22.84	11.86	5.11	1.20	85.33	34.78	3.58	7.08	48.00	55.50	56.75
DP 493 CK	902	43.27	7.16	4.32	26.11	8.96	5.24	1.19	84.60	32.83	4.00	7.58	38.50	45.75	49.00
Ark 0818-23	881	40.25	7.98	4.32	21.81	11.43	4.91	1.21	85.93	35.65	4.85	6.78	57.25	64.25	64.25
Ark 0824-89	861	39.90	8.47	4.71	22.18	12.41	5.44	1.24	86.40	36.60	5.08	6.63	58.00	68.50	63.00
MD 16-2	826	39.88	7.70	4.91	25.44	11.30	4.30	1.25	85.80	39.15	5.10	6.73	73.50	72.25	81.75
TAM11L-24	777	35.51	7.14	4.01	19.88	12.63	4.49	1.31	86.70	36.15	4.08	6.40	87.25	81.75	90.00
PD09084	733	35.50	6.66	4.68	25.04	11.70	4.80	1.26	86.95	39.05	4.70	6.58	77.00	81.25	81.50
PD09046	643	32.88	5.73	3.99	22.90	11.38	4.34	1.32	85.85	35.58	3.65	6.20	89.25	76.00	94.00
PD07040	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
PD08028	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Mean	978	39.68	7.45	4.37	23.33	11.00	4.90	1.23	85.69	34.83	4.75	6.95	59.43	62.88	66.44
Cultivar LSD (.05)	185	1.18	0.44	ns	3.75	0.61	0.31	0.04	1.10	1.91	0.37	0.49	14.95	12.33	12.88
Cultivar (P>F)	<0.0001	<0.0001	<0.0001	0.0745	0.0179	<0.0001	<0.0001	<0.0001	0.0002	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
CV(%)	13.41	2.12	4.23	10.61	11.41	3.94	4.44	2.28	0.91	3.90	5.60	5.03	17.86	13.93	13.77
R-Square	0.59	0.91	0.82	0.46	0.44	0.83	0.69	0.75	0.56	0.74	0.84	0.60	0.73	0.68	0.74
Reps	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4

Values in bold are not significantly different from highest value according to LSD(0.05).

¹ Cultivars PD07040 and PD08028 were excluded from analysis due to poor stand establishment.

² QS1, QS2, and QS3 - 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 (0.15), and strength (0.10); QS2 - fiber length (0.2), mic (0.1), UI (0.4), and strength (0.3); QS3 - fiber length (0.45), mic (0.25), UI (0.0), and strength (0.3).