

Table 5. Least square means for lint yield, yield components, and fiber quality traits in the 2016 RBTN trial conducted at Florence, SC. (Cooperator: Todd Campbell)

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	%	%	%	%	%
Ark 0812-87ne	.	42.01	7.35	4.98	28.52	10.00	4.63	1.11	82.38	29.35	5.78	8.68	67.25	67.50	71.50
Ark 0818-23	.	40.27	6.55	4.96	30.52	9.50	4.32	1.11	81.60	31.48	5.68	8.83	68.25	62.75	74.50
Ark 0819-89	.	38.43	6.58	5.23	30.51	10.35	4.76	1.13	82.90	32.05	6.13	7.90	72.00	73.50	74.50
Ark 0822-48	.	41.87	8.12	5.31	27.36	11.25	4.99	1.14	82.83	32.48	6.48	8.33	68.75	71.50	71.00
Ark 0824-89	.	40.66	7.62	5.46	29.09	10.85	4.84	1.12	82.70	32.80	6.33	8.30	67.75	70.50	70.50
AU77082	.	40.95	6.69	4.69	28.78	9.50	4.50	1.09	82.00	30.08	5.13	9.03	61.50	62.75	67.50
AU82074	.	38.46	6.01	4.92	31.44	9.50	4.27	1.11	81.88	30.15	5.53	8.68	68.25	64.75	74.00
DP 393 CK	.	40.67	6.49	4.81	30.20	9.35	4.42	1.09	81.95	30.78	6.35	8.70	60.75	62.25	67.00
DP 493 CK	.	41.12	5.65	4.28	31.17	7.90	4.60	1.01	80.08	27.88	4.83	10.20	32.00	34.25	41.50
FM 958 CK	.	40.33	6.34	4.87	30.94	9.30	4.52	1.05	81.30	29.75	4.85	9.33	46.50	46.75	51.50
GA 2011113	.	42.83	6.45	4.58	30.64	8.55	4.80	1.07	81.23	31.08	5.70	8.90	49.25	52.50	58.25
GA 2012050	.	41.33	6.34	5.20	34.07	8.90	4.47	1.09	82.58	33.05	6.18	8.33	65.00	68.25	69.75
GA 2012082	.	41.73	6.95	5.27	31.67	9.60	4.54	1.11	81.88	29.95	5.75	8.90	67.75	64.75	73.50
GA 2012141	.	42.24	7.19	5.23	30.75	9.80	4.63	1.13	83.23	30.45	5.73	8.43	75.75	77.50	76.75
MD 16-1	.	41.32	6.57	5.14	32.25	9.10	4.55	1.01	81.85	29.18	5.18	9.20	42.25	53.00	49.50
MD 16-2	.	39.46	6.78	5.00	29.08	10.40	3.66	1.10	81.83	32.33	5.80	8.73	55.25	59.25	62.00
MS 0043-28-1	.	40.38	6.28	4.78	30.69	9.05	4.44	1.06	81.78	29.85	5.65	8.80	53.50	57.25	60.25
MS 0152-3-11	.	39.23	6.31	5.00	31.16	9.65	4.31	1.13	82.13	29.60	5.55	8.48	74.75	69.00	79.25
NM 13G1029	.	41.98	6.40	4.39	28.86	8.70	4.26	1.12	81.83	30.80	5.40	8.80	72.25	66.00	77.75
NM 13G2019	.	40.52	6.81	4.51	26.91	9.80	4.25	1.14	81.90	32.25	5.30	8.78	77.25	68.50	81.75
PD07040	.	36.64	5.77	5.23	33.22	9.80	4.04	1.10	81.00	30.15	5.23	9.25	62.75	56.75	71.50
PD08028	.	36.44	5.39	4.69	31.85	9.30	3.95	1.11	82.03	33.80	5.73	8.35	68.75	68.25	76.00
PD09046	.	36.47	5.22	4.93	34.58	8.90	4.27	1.11	80.03	30.53	4.95	9.68	62.50	51.00	73.25
PD09084	.	35.91	5.62	4.23	27.05	9.80	4.46	1.11	83.20	34.53	5.93	8.03	74.75	79.25	78.25
SG 105 CK	.	38.01	5.98	4.09	26.00	9.60	4.48	1.05	82.00	28.70	5.63	9.08	49.25	57.75	56.25
TAM11L-24	.	37.76	6.47	5.06	29.56	10.55	4.27	1.17	82.58	33.45	5.03	8.30	86.75	77.25	89.25
TAM13Q-18	.	39.32	6.53	4.80	28.97	10.00	4.21	1.07	81.20	31.50	5.48	9.53	55.50	55.00	64.75
UA 222 CK	.	40.09	6.89	4.77	27.80	10.10	4.56	1.11	82.15	30.98	6.52	8.80	65.25	65.25	70.25
Mean	.	39.87	6.48	4.87	30.13	9.61	4.43	1.10	81.93	31.03	5.63	8.80	63.27	62.96	68.99
Cultivar LSD (.05)	.	1.91	0.61	0.73	4.28	0.80	0.32	0.04	1.41	1.62	0.47	0.87	14.89	15.64	12.28
Cultivar (P>F)	.	<0.0001	<0.0001	0.0212	0.0126	<0.0001	<0.0001	<0.0001	0.0014	<0.0001	<0.0001	0.0004	<0.0001	<0.0001	<0.0001
CV(%)	.	3.41	6.66	10.60	10.09	5.94	5.16	2.54	1.23	3.72	5.93	7.02	16.73	17.66	12.65
R-Square	.	0.74	0.75	0.41	0.43	0.68	0.69	0.71	0.47	0.73	0.76	0.73	0.64	0.54	0.67
Reps	.	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 Lint yield excluded from analysis due to extreme variability (flooding event prior to harvest).

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).