Table 4. Least square means for lint yield, yield components, and fiber quality traits in the 2017 RBTN at Jackson, TN (Cooperator: Tyson Raper).

Cultivar	Lint Yield	Lint Percent	Lint Index	Boll Size	Seed per Boll	Seed Index	MIC	UHM	UI	STRN	ELO	SFC	QS1[1]	QS2[1]	QS3[1]
	lb/A	%	grams	grams	#	grams	mic	%	%	g/tex	%	%			
Ark 0908-60	**1745**	**44.35**	**8.51**	4.64	24.56	10.38	**5.13**	1.25	85.05	30.88	4.25	7.40	59.50	63.25	64.25
LA14063083	**1719**	**43.01**	**8.08**	**8.42**	45.05	10.47	**4.93**	1.24	85.75	30.63	**5.00**	7.08	63.50	69.75	66.50
Ark 0911-13	**1637**	41.69	**7.96**	5.36	28.12	10.89	**4.91**	1.25	84.58	30.23	**4.85**	7.18	64.75	62.00	70.75
FM 958 CK	**1629**	41.81	**8.42**	5.50	27.47	11.30	**4.93**	1.23	84.68	**33.95**	3.20	7.25	57.50	60.50	64.25
LA14063001	**1627**	**43.48**	**8.87**	6.24	30.60	11.25	4.63	1.25	84.38	32.23	4.08	7.45	67.75	62.00	74.50
Ark 0921-31ne	**1625**	40.29	7.27	6.13	34.06	10.46	4.70	1.22	85.25	31.00	**4.88**	7.07	61.24	65.23	66.20
LA14063046	**1608**	42.38	**8.70**	6.10	29.90	11.46	**4.89**	1.25	85.13	32.08	4.48	7.13	63.50	65.50	68.25
GA 2012141	**1587**	**42.71**	**8.65**	5.59	27.96	11.19	**4.97**	1.22	84.68	31.85	3.88	7.48	53.00	57.75	59.75
Ark 0912-18	1570	41.13	**8.87**	6.58	30.71	12.41	**5.16**	1.26	**87.00**	32.78	**4.90**	6.60	67.25	**78.50**	66.25
DP 393 CK	1564	40.79	7.71	**7.76**	41.99	10.93	**5.00**	1.20	85.30	31.88	4.40	7.08	49.50	61.00	55.00
GA 2015073	1525	42.40	**8.08**	**7.06**	37.37	10.66	**4.96**	1.21	85.08	31.93	3.88	7.28	53.75	61.00	59.25
TAM 13S-03	1515	40.51	7.78	6.13	31.95	11.10	4.72	1.23	85.65	30.85	**4.85**	7.13	65.00	70.00	68.50
Tamcot G11	1504	38.30	**8.85**	**7.82**	34.01	**13.97**	4.73	**1.32**	85.05	31.93	3.40	6.40	**86.50**	**74.25**	**89.50**
GA 2015032	1502	**43.27**	7.56	5.29	30.32	9.65	**4.96**	1.24	85.20	32.43	3.68	7.23	60.25	65.00	65.25
GA 2015090	1489	41.93	7.79	6.05	32.58	10.46	4.88	1.24	84.65	**33.80**	3.85	7.18	62.75	62.25	69.00
AU 90098	1487	**43.44**	**8.23**	6.41	34.02	10.45	4.84	1.21	84.43	30.95	3.23	7.45	53.25	56.75	61.00
Ark 0921-27ne	1471	39.94	7.46	**6.76**	36.76	10.96	4.52	1.22	84.80	33.00	4.25	7.33	58.75	62.00	65.75
LA14063101	1471	**44.24**	**8.86**	5.12	25.97	10.71	**5.02**	1.21	84.60	31.40	3.80	7.38	49.00	56.00	56.75
PD 08028	1463	39.23	6.96	**6.97**	40.94	10.61	4.83	1.24	85.43	**33.88**	4.03	6.85	65.50	68.75	69.50
TAM 13Q-51	1442	39.30	7.17	**7.32**	40.02	10.89	4.82	**1.32**	**86.85**	**33.40**	4.40	6.15	**91.00**	**87.50**	**88.50**
UA 222 CK	1428	40.82	**7.94**	5.25	27.03	11.17	4.86	1.25	84.78	30.53	**5.00**	7.13	65.50	63.75	71.00
PD 07040	1425	38.63	7.42	6.68	34.92	11.52	4.86	1.23	85.05	31.45	3.80	7.23	60.25	63.75	65.75
LA14063038	1400	40.61	7.18	**6.84**	38.77	10.23	4.74	**1.28**	84.40	**33.58**	3.48	7.28	74.50	65.75	**81.00**
TAM 13Q-18	1386	39.65	7.44	6.47	34.39	11.00	4.86	1.19	83.03	31.98	3.78	7.80	43.50	43.00	56.25
PD 2013016	1367	41.80	**8.01**	6.42	33.55	10.89	**4.93**	1.27	84.33	**34.25**	3.10	7.30	67.25	62.00	74.50
PD 09046	1361	36.49	6.76	5.52	29.97	11.45	4.45	**1.28**	83.85	**33.45**	3.05	7.15	**75.25**	61.75	**83.00**
DP 493 CK	1360	41.39	7.27	5.92	34.45	9.98	**4.95**	1.15	82.45	32.00	3.05	**8.55**	28.25	33.75	43.25
Acala 1517-08	1338	39.69	6.87	5.82	33.62	10.11	**4.95**	1.20	84.88	**34.73**	3.93	6.90	49.25	59.50	57.50
TAM LBB130218	1304	37.57	6.87	6.27	34.91	11.03	4.67	1.21	83.45	**34.08**	3.20	7.55	53.25	51.00	64.50
TAM LBB131001	1288	40.91	6.56	6.52	40.87	9.26	4.42	1.26	84.15	32.73	3.88	7.53	70.00	61.25	77.25
TAM WK-11L	1263	39.03	7.14	6.14	33.58	10.86	4.70	1.18	85.00	31.45	4.15	7.20	47.25	58.00	54.25
NM 13R1015	1249	39.09	7.24	6.38	35.48	10.93	**5.08**	1.20	84.05	32.90	3.55	7.08	44.25	50.25	53.50
NM 16-13P1088B	995	37.71	7.50	5.92	30.03	12.04	4.59	1.20	84.93	**34.28**	3.95	7.15	56.25	62.00	63.50
Mean	1465	40.84	7.76	6.28	33.51	10.93	4.84	1.23	84.78	32.38	3.97	7.21	60.24	61.96	66.48
LSD (.05)	164	1.91	1.02	1.71	ns	1.21	0.27	0.04	1.22	1.53	0.35	0.55	15.87	13.88	12.78
Cultivar (P>F)	<0.0001	<0.0001	<0.0001	0.0152	0.0642	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
CV(%)	7.96	3.34	9.41	19.43	23.70	7.89	3.99	2.35	1.02	3.34	6.29	5.43	18.67	15.88	13.63
R-Square	0.77	0.75	0.55	0.38	0.34	0.55	0.56	0.69	0.60	0.65	0.88	0.59	0.62	0.56	0.63
Reps	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4

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

[1]QS1, QS2, and QS3 = Represent values for "Qscore", a measurement 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 (0.50), mic (0.25), UI (0.15), and strength (0.10)

QS2 - fiber length (0.20), mic (0.10), UI (0.40), and strength (0.30)

QS3 - fiber length (0.45), mic (0.25), UI (0.00), and strength (0.30).