

Table 5. Least square means for lint yield, yield components, and fiber quality traits in the 2017 RBTN at Keiser, AR (Cooperator: Fred Bourland).

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	%	%			
LA14063083	1101	43.45	8.26	5.73	30.19	10.41	5.00	1.24	85.20	29.88	7.02	7.08	54.60	59.60	61.00
Ark 0912-18	1049	41.92	8.59	5.38	26.23	11.54	5.21	1.26	87.40	30.50	7.92	6.70	63.00	77.80	62.40
GA 2012141	982	40.96	8.17	5.14	25.79	11.57	5.14	1.25	85.06	29.50	6.18	7.32	53.40	58.00	60.00
LA14063001	944	42.96	8.28	5.55	28.81	10.68	5.00	1.29	85.44	30.80	6.38	6.90	67.80	66.60	72.40
LA14063046	940	41.85	8.01	5.79	30.26	10.79	5.12	1.27	85.60	30.86	6.52	7.18	60.40	64.60	64.80
Ark 0908-60	927	42.19	7.83	5.54	29.82	10.36	5.15	1.27	85.08	30.18	6.62	7.38	58.00	60.20	64.80
Ark 0911-13	925	41.09	8.16	5.39	27.17	11.38	5.21	1.30	85.52	29.20	6.90	6.94	67.60	66.00	70.60
UA 222 CK	920	41.00	8.67	5.72	27.05	12.07	5.19	1.27	85.10	29.84	7.18	7.24	59.60	60.60	65.20
TAM WK-11L	901	38.98	7.40	5.42	28.53	11.22	4.97	1.23	85.78	30.14	6.34	7.08	53.00	62.80	58.00
Ark 0921-31ne	889	39.43	7.73	4.99	25.51	11.58	5.08	1.25	86.20	30.20	8.32	6.66	58.00	67.80	60.80
LA14063101	870	43.56	7.94	5.47	29.99	10.05	5.11	1.25	85.16	31.32	6.22	7.04	54.60	59.20	61.00
TAM 13Q-51	853	39.17	7.56	5.11	26.48	11.32	5.22	1.31	86.04	33.12	6.58	6.68	70.60	72.00	73.20
DP 393 CK	848	41.73	7.91	5.47	28.92	10.88	5.23	1.22	85.66	30.78	6.80	6.94	46.40	59.40	51.60
FM 958 CK	839	39.71	8.14	5.88	28.68	11.91	5.06	1.26	85.62	31.54	5.34	7.10	58.20	63.80	63.00
LA14063038	837	40.20	7.31	5.29	29.10	10.49	5.05	1.31	85.20	31.62	5.36	6.94	71.80	66.60	76.20
Ark 0921-27ne	830	38.63	7.14	5.47	29.55	11.02	5.04	1.24	85.86	32.04	6.18	6.80	54.80	64.20	59.40
PD 07040	829	38.54	7.83	5.39	26.59	12.09	5.07	1.26	85.06	30.38	6.02	7.06	56.80	59.60	63.00
GA 2015073	815	42.31	8.02	5.46	28.91	10.62	5.02	1.23	85.74	30.14	6.10	6.74	51.20	61.80	56.40
GA 2015032	803	41.56	7.29	5.46	31.14	10.02	5.11	1.25	84.80	30.54	5.78	7.32	52.60	55.80	60.00
TAM 13S-03	748	39.16	7.49	4.86	25.45	11.35	4.83	1.22	85.08	29.48	6.78	7.18	49.80	56.60	57.40
NM 13R1015	716	39.85	7.16	4.90	27.24	10.51	5.00	1.21	85.36	31.32	6.38	6.62	44.40	56.40	51.20
GA 2015090	689	41.25	7.56	4.98	27.23	10.53	4.96	1.27	84.68	31.12	6.14	7.24	61.20	58.60	68.00
AU 90098	652	42.42	7.88	5.06	27.22	10.32	4.75	1.26	85.16	30.72	5.50	7.12	61.20	62.00	67.40
TAM 13Q-18	642	39.56	7.80	5.27	26.72	11.66	4.97	1.22	83.44	29.86	6.00	7.70	43.60	43.40	55.60
PD 08028	626	37.22	7.08	5.89	31.04	11.66	4.88	1.27	85.70	32.14	6.00	6.80	66.60	67.80	71.00
TAM LBB130218	618	38.13	7.46	5.08	26.00	11.80	4.64	1.19	83.82	30.70	5.52	7.40	42.40	45.20	54.40
DP 493 CK	607	42.87	7.20	4.94	29.48	9.20	5.07	1.17	83.98	28.74	5.34	8.30	30.20	41.40	42.20
TAM LBB131001	560	40.27	7.18	5.02	28.17	10.31	4.61	1.29	84.44	31.22	5.94	7.54	71.40	61.20	78.60
PD 2013016	555	41.16	7.78	5.13	27.18	10.76	5.01	1.30	85.10	32.32	5.32	6.96	70.40	65.20	75.80
Tamcot G11	549	39.19	8.50	5.83	26.91	12.86	4.69	1.34	83.90	30.08	5.56	6.76	82.80	62.40	90.60
Acala 1517-08	538	39.07	7.34	4.98	26.50	11.03	4.85	1.23	85.26	32.14	6.42	6.84	52.40	59.80	59.80
PD 09046	514	35.30	6.39	4.92	27.19	11.37	4.50	1.33	84.36	31.48	5.12	6.68	82.40	64.80	89.20
NM 16-13P1088B	437	37.85	7.21	5.30	27.85	11.55	4.64	1.22	85.28	32.20	6.76	6.96	54.60	60.00	61.20
Mean	774	40.38	7.71	5.33	27.97	11.06	4.98	1.26	85.18	30.79	6.26	7.07	58.36	60.95	64.43
LSD (.05)	150	0.95	0.33	0.56	3.09	0.48	0.17	0.03	1.03	1.20	0.39	0.43	11.00	10.53	8.78
Cultivar (P>F)	<0.0001	<0.0001	<0.0001	0.0005	0.0014	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
CV(%)	15.44	1.87	3.46	8.47	8.83	3.44	2.75	1.91	0.97	3.12	5.03	4.83	15.07	13.81	10.89
R-Square	0.72	0.89	0.82	0.37	0.36	0.83	0.73	0.76	0.52	0.59	0.87	0.57	0.67	0.49	0.73
Reps	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5

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

¹QS1, 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).