

Table 7. Least square means for lint yield, yield components, and fiber quality traits in the 2018 RBTN at Keiser, Arkansas (Cooperator: Fred Bourland).

Entry	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	inch	%	g/tex	%	%			
GA 2012141	1308	41.98	7.66	4.38	24.13	10.40	4.51	1.20	84.38	31.30	6.70	7.16	55.80	58.60	63.60
LA14063075	1297	41.50	6.82	4.18	25.51	9.30	4.31	1.29	85.06	33.86	6.08	6.52	84.80	75.60	87.80
TAM 13S-03	1249	39.49	6.91	4.46	25.46	10.29	4.23	1.19	84.32	31.46	7.58	6.94	55.20	58.40	62.80
LA14063083	1234	41.86	7.64	4.67	25.77	10.18	4.32	1.23	84.30	32.10	6.90	7.04	64.00	61.60	70.80
DP 493 CK	1215	45.28	6.99	4.15	26.92	8.16	4.78	1.14	81.72	30.28	6.04	8.40	31.80	34.80	46.80
Ark 1005-41	1195	40.76	8.21	4.94	24.56	11.65	4.65	1.26	84.78	32.42	6.94	6.86	72.40	68.40	76.80
GA 2015024	1181	43.33	7.13	4.43	26.96	9.05	4.49	1.25	84.08	31.36	6.60	7.12	69.00	62.00	75.80
MS 2010-87-5	1157	44.48	8.05	5.05	27.99	9.82	4.61	1.23	84.72	33.22	6.16	7.02	64.00	65.00	70.00
TAM 12J-39	1142	41.62	7.84	5.04	26.83	10.76	4.73	1.19	84.00	37.62	6.08	6.88	49.60	58.00	61.60
FM 958 CK	1120	40.38	7.48	4.68	25.36	10.67	4.40	1.21	84.72	33.34	6.12	7.06	62.40	64.40	68.60
TAM LBB150824	1114	38.90	7.96	5.20	25.47	12.17	4.42	1.31	85.12	37.42	6.48	6.40	89.80	82.00	95.60
Ark 1015-42	1113	42.74	7.87	4.79	25.99	10.24	4.38	1.29	85.28	32.86	6.74	6.38	86.40	77.60	88.60
TAM LBB150921	1096	37.52	7.73	5.05	24.56	12.55	4.44	1.27	85.38	35.40	7.54	6.52	80.20	77.60	84.40
Ark 1007-15	1096	39.61	7.70	4.69	24.13	11.36	4.32	1.25	83.66	30.74	6.14	7.46	68.80	59.00	76.80
LA11309040	1070	44.75	7.84	4.40	25.09	9.37	4.85	1.16	83.78	31.30	7.28	7.22	36.20	47.20	46.40
TAM LBB150107	1046	40.71	7.27	4.29	24.06	10.25	4.69	1.24	86.32	34.50	7.26	6.46	73.20	79.80	74.00
DP 393 CK	1046	41.88	7.60	4.60	25.38	10.17	4.81	1.17	84.14	31.32	7.20	7.08	41.00	51.20	50.20
PD2011021	1018	37.66	6.90	4.62	25.25	11.12	4.26	1.19	84.30	33.48	6.72	6.90	54.20	58.20	62.60
Ark 1005-35	992	39.07	7.23	4.92	26.57	11.06	4.89	1.26	85.80	34.82	6.34	6.42	71.60	76.20	73.80
UA 222 CK	983	42.04	7.85	4.62	24.79	10.35	4.53	1.22	84.60	31.60	7.84	6.82	62.80	63.20	69.00
PD2011081	974	36.86	6.59	4.35	24.36	11.00	4.29	1.19	83.08	32.12	6.40	7.40	49.00	47.00	60.60
PD2011026	952	39.16	7.25	4.81	26.01	10.96	4.52	1.23	85.10	34.18	6.50	6.62	67.00	69.00	71.80
16-13P1115	815	39.51	7.65	5.26	27.21	11.46	4.01	1.22	85.40	37.16	6.02	6.78	67.40	74.80	74.40
Ark 1004-38	810	40.69	7.99	5.14	26.17	11.34	4.64	1.28	85.46	32.48	5.96	6.62	81.20	76.40	83.00
Mean	1093	40.91	7.51	4.70	25.61	10.57	4.50	1.23	84.56	33.18	6.65	6.92	64.08	64.42	70.66
LSD (.05)	164	1.13	0.50	0.56	ns	0.61	0.21	0.03	1.10	1.63	0.27	0.45	9.72	9.94	7.76
Entry (P>F)	<0.0001	<0.0001	<0.0001	0.0004	0.6285	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
CV(%)	0.93	2.20	5.31	9.45	10.03	4.59	3.64	2.00	1.04	3.91	3.25	5.20	12.08	12.28	8.74
R-Square	0.59	0.89	0.63	0.41	0.22	0.85	0.71	0.82	0.61	0.77	0.89	0.66	0.83	0.75	0.84
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).

¹ QS1, QS2, and QS3 (Quality Score) - 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).