

Table 7. Least square means for lint yield, yield components, and fiber quality traits in the 2019 RBTN at Keiser, Arkansas (Cooperator: Fred Bourland).

Entry	Lint Yield ¹	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	%	%			
Ark 1115-36	1348	45.75	7.34	3.65	22.73	8.36	4.01	1.24	84.83	32.03	7.03	6.55	76.50	71.75	80.25
DP 393 CK	1286	40.58	6.57	4.06	25.05	9.25	4.14	1.16	84.05	32.60	7.33	6.68	48.25	55.25	57.00
GA2016099	1265	42.76	6.78	4.09	25.88	8.74	4.07	1.22	84.35	34.40	7.20	6.03	68.00	66.25	74.75
TAM 13S-03	1264	39.57	6.35	3.85	23.82	9.45	3.69	1.17	84.48	31.18	7.43	6.98	51.75	59.50	58.75
MS 2010-87-37	1244	41.67	6.54	3.76	23.98	8.80	3.92	1.20	84.20	32.83	7.20	5.93	61.50	61.25	68.25
Ark 1114-21	1233	43.32	6.73	3.90	25.14	8.64	3.44	1.20	84.00	31.23	7.70	6.30	53.75	56.75	60.75
CSX8308	1229	45.15	6.35	3.50	24.99	7.28	3.76	1.23	83.03	33.90	7.58	5.63	64.75	55.00	74.75
Ark 1102-55	1206	40.49	6.69	3.36	20.35	9.54	3.75	1.22	85.25	30.65	7.28	6.45	66.50	70.50	69.50
Ark 1112-59	1180	41.93	7.22	4.17	24.31	9.58	3.74	1.17	84.88	34.50	6.80	6.35	52.00	63.00	58.25
13AFX13-12-5	1176	38.54	6.11	3.97	25.02	9.31	3.56	1.23	84.88	35.75	7.23	5.75	66.25	70.25	72.00
FM 958 CK	1166	39.84	6.82	4.03	23.49	10.03	3.87	1.19	83.90	33.68	7.53	5.68	55.75	57.25	64.00
TAM 12J-39	1159	40.77	7.18	4.34	24.72	9.94	4.00	1.17	84.70	38.00	6.95	5.65	54.50	66.25	64.00
UA 222 CK	1159	40.30	6.83	4.12	24.40	9.71	3.58	1.21	84.35	31.43	7.25	7.35	59.50	61.75	65.50
Ark 1124-50	1130	43.15	7.12	4.22	25.65	9.10	3.93	1.26	84.98	33.98	7.05	5.83	80.50	75.00	84.00
GA2016103	1113	41.73	5.98	3.02	21.12	7.78	4.01	1.20	84.03	34.10	7.58	5.80	62.25	60.75	69.50
GA2016024	1112	42.14	6.38	4.56	30.03	8.45	3.59	1.22	84.93	34.38	6.98	6.13	65.50	69.00	70.50
DP 493 CK	1059	43.41	6.25	3.80	26.37	7.66	4.34	1.09	82.50	29.25	8.33	5.73	36.00	39.00	49.75
Ark 1117-60	1032	40.35	7.38	4.26	23.33	10.55	4.15	1.23	85.10	35.28	6.88	6.03	73.50	74.25	77.75
13AFX6-27-2	1025	36.93	6.57	4.85	27.44	10.98	3.73	1.31	85.65	39.60	6.30	6.50	94.50	89.50	98.25
TAMLBB15905	1022	38.71	6.63	3.77	22.05	10.22	3.85	1.28	85.85	35.25	6.43	6.08	88.50	84.75	89.25
TAMLBB16507	883	38.16	6.32	3.58	21.53	10.09	3.47	1.20	83.08	34.18	7.85	5.93	50.75	50.25	61.50
Mean	1157	41.20	6.67	3.95	24.35	9.21	3.84	1.21	84.43	33.72	7.23	6.16	63.36	64.63	69.92
LSD (.05)	184	1.18	0.54	0.69	4.18	0.72	0.33	0.04	1.23	1.90	0.54	0.20	13.52	13.94	10.49
Entry (P>F)	0.0010	<0.0001	<0.0001	0.0010	0.0095	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
CV(%)	11.25	2.02	5.77	12.39	12.13	5.49	6.12	2.17	1.03	3.98	5.24	2.34	15.09	14.65	10.61
R-Square	0.56	0.91	0.59	0.49	0.43	0.83	0.59	0.81	0.58	0.81	0.70	0.93	0.75	0.67	0.77
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 (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).