

Table 5. Least square means for lint yield, yield components, and fiber quality traits in the 2021 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	%	%			
CSX5432	1495	48.72	8.35	3.23	18.86	8.49	4.29	1.26	84.88	33.63	5.90	5.23	80.25	69.50	85.25
MS 2010-66-16	1391	45.50	7.39	4.68	28.80	8.57	4.31	1.20	85.18	33.65	6.10	5.55	64.50	65.50	70.25
MS 2010-87-37	1344	43.89	7.22	4.44	27.01	9.05	4.50	1.23	86.15	33.90	5.50	5.23	77.00	77.25	78.75
MS 2010-87-42	1339	44.31	7.40	5.14	30.85	9.06	4.39	1.23	85.08	33.90	5.78	5.40	73.00	68.50	78.50
Ark 1317-31	1333	41.90	7.04	4.70	27.96	9.66	3.92	1.25	85.65	35.15	6.83	4.80	81.75	77.25	85.75
FM 958 CK	1308	42.06	7.08	4.40	26.11	9.67	4.34	1.20	84.63	33.88	5.45	6.25	62.75	61.50	70.50
Ark 1301-16	1260	43.29	8.54	5.28	26.72	11.06	4.72	1.26	85.83	32.88	7.38	4.85	77.25	74.25	79.25
OA-13	1238	44.21	7.25	4.36	26.60	9.00	4.79	1.17	84.65	35.73	6.50	5.63	49.00	57.25	58.50
MS 2010-28-27	1236	44.76	7.23	4.21	25.97	8.76	4.37	1.21	85.18	34.03	6.45	5.20	67.50	67.00	73.50
Ark 1308-58	1227	42.86	7.25	4.44	26.18	9.42	4.22	1.25	85.10	32.33	7.50	5.15	78.50	70.00	82.75
OA-11	1226	46.16	7.39	4.03	25.20	8.51	4.86	1.15	84.63	33.55	6.93	5.53	43.75	52.75	52.00
MS 2010-96-9	1217	45.97	7.88	4.27	24.88	9.19	4.77	1.17	84.70	34.28	6.20	6.08	49.75	56.50	58.00
OA-133	1211	42.31	6.26	3.97	26.86	8.34	4.54	1.16	84.48	32.85	5.88	6.63	51.50	55.50	60.00
TAM 14B-72	1211	43.58	6.25	3.76	26.20	7.86	4.35	1.13	83.90	32.08	5.80	6.20	43.00	47.75	54.25
TAMLBB16507	1187	39.90	7.15	4.65	25.95	10.60	3.77	1.22	85.08	33.03	5.98	5.55	67.50	66.25	73.00
DP 393 CK	1185	42.78	6.89	3.72	23.06	9.00	4.54	1.18	85.48	34.65	6.83	5.83	59.75	66.25	65.25
MS 2010-87-5	1182	44.86	7.36	4.70	28.65	8.93	4.37	1.22	85.28	34.98	5.95	5.23	70.75	69.50	76.25
DP 493 CK	1181	45.53	7.15	4.13	26.34	8.23	4.82	1.15	83.58	32.43	5.48	7.63	40.50	44.50	52.25
UA 222 CK	1153	42.33	6.92	4.63	28.44	9.23	4.11	1.21	84.45	32.90	7.80	6.10	67.00	61.00	74.50
Ark 1311-18	1103	46.11	7.80	4.36	25.75	9.00	4.21	1.28	85.93	33.85	6.43	4.65	89.50	80.50	91.00
Ark 1309-56	1087	45.23	8.07	4.66	26.21	9.65	4.51	1.25	85.15	35.28	6.10	5.28	80.00	72.75	85.00
TAM 14E-12	1061	45.20	7.56	4.36	26.24	8.90	4.42	1.16	83.70	32.50	6.78	6.58	50.00	49.25	61.00
TAMLBB17206	1060	40.07	6.74	4.64	27.66	9.94	4.27	1.23	85.48	34.38	5.63	5.38	75.75	72.50	80.00
LA19073070	1059	42.48	7.11	4.87	29.13	9.46	4.55	1.14	85.73	36.58	6.63	4.55	50.50	66.25	58.25
LA19073002	979	41.77	6.90	4.50	27.43	9.35	4.68	1.16	84.45	32.93	5.63	6.20	44.50	52.25	53.50
GA 2016029	928	44.10	7.38	4.49	26.81	9.11	4.55	1.23	85.20	36.73	5.68	5.73	71.00	70.75	77.75
GA 2016090	867	43.72	7.25	4.48	26.94	9.21	4.17	1.20	84.40	33.70	5.65	6.18	62.50	59.50	70.75
GA 2015026	784	43.40	6.72	3.92	25.50	8.43	4.60	1.20	84.73	32.90	5.85	5.78	62.00	61.00	69.00
Mean	1173	43.82	7.27	4.39	26.51	9.13	4.43	1.20	84.95	33.88	6.23	5.65	63.96	64.03	70.53
LSD (.05)	236	1.45	0.61	0.89	ns	0.75	0.31	0.04	1.30	1.77	0.34	0.97	15.01	14.09	11.66
Entry (P>F)	<0.0001	<0.0001	<0.0001	0.0180	0.1905	<0.0001	<0.0001	<0.0001	0.0127	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
CV(%)	14.31	2.36	5.95	14.38	14.10	5.86	5.03	2.52	1.09	3.71	3.90	12.24	16.68	15.64	11.75
R-Square	0.58	0.82	0.66	0.39	0.31	0.69	0.65	0.72	0.41	0.56	0.90	0.57	0.70	0.55	0.72
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).