

Table 9. Least square means for lint yield, yield components, and fiber quality traits in the 2021 RBTN at Mississippi State, Mississippi (Cooperator: Ted Wallace).

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	%	%			
MS 2010-28-27	849	41.54	7.35	5.63	31.77	10.30	4.67	1.24	84.75	31.95	6.05	5.35	67.25	66.50	72.25
GA 2016029	833	41.87	7.48	5.94	33.42	10.30	5.12	1.23	84.50	32.13	6.23	5.90	55.25	60.25	61.25
TAM 14B-72	832	42.73	7.72	5.79	31.88	10.40	4.67	1.21	84.30	32.53	6.38	6.00	54.50	58.50	61.50
OA-133	829	41.16	7.45	6.55	36.27	10.60	4.94	1.24	84.73	32.85	6.33	5.15	60.50	63.75	65.75
MS 2010-87-37	817	40.80	7.56	5.40	29.07	10.90	4.99	1.22	84.55	32.53	5.85	5.85	54.00	60.25	60.25
TAMLBB16507	768	42.49	7.66	6.19	34.09	10.30	4.81	1.26	84.90	31.30	6.53	4.98	69.75	68.50	73.75
GA 2016090	760	40.75	6.93	5.33	31.49	10.00	4.87	1.23	84.18	31.88	5.90	5.88	58.50	59.25	65.50
TAM 14E-12	757	42.94	7.40	5.43	31.46	9.80	5.07	1.19	84.03	31.60	6.30	6.28	43.25	52.00	51.50
LA19073070	745	41.99	7.31	5.90	33.93	10.10	4.85	1.21	83.95	32.33	6.30	6.05	53.00	55.25	61.25
FM 958 CK	743	40.26	7.31	5.90	32.43	10.80	4.70	1.24	84.43	31.25	6.63	5.78	64.50	63.50	70.50
OA-13	729	39.22	7.20	5.69	31.04	11.20	4.84	1.22	83.70	32.65	5.80	6.20	55.00	54.75	63.75
MS 2010-96-9	723	41.90	8.00	5.96	31.53	11.10	4.85	1.22	83.28	31.78	6.33	6.68	51.00	50.00	61.50
GA 2015026	697	42.15	7.47	5.26	29.69	10.30	4.63	1.23	84.38	32.28	6.60	5.60	60.50	61.25	66.50
LA19073002	690	39.95	6.95	5.36	30.78	10.40	4.82	1.20	83.25	31.58	6.33	6.38	47.50	48.50	58.00
Ark 1301-16	665	40.95	7.19	5.71	32.48	10.30	4.85	1.23	85.38	34.28	6.23	5.13	64.00	71.00	69.00
TAMLBB17206	664	42.49	8.02	5.72	30.25	10.70	4.82	1.27	85.65	33.30	6.55	4.70	73.25	75.75	75.25
MS 2010-66-16	659	41.22	7.07	5.84	34.17	10.10	4.46	1.26	85.18	31.33	6.45	5.15	75.25	72.75	78.00
Ark 1309-56	654	41.07	7.81	6.05	31.78	11.20	4.97	1.23	84.63	32.20	6.45	5.55	59.25	62.50	64.50
DP 393 CK	646	41.84	7.15	5.44	31.93	9.80	4.92	1.23	84.75	33.20	5.95	5.65	59.25	63.50	64.25
MS 2010-87-42	646	41.57	7.76	5.57	29.93	10.90	4.88	1.22	85.05	33.18	6.35	5.30	57.75	65.00	62.25
OA-11	641	41.13	7.29	5.60	31.62	10.40	4.57	1.24	83.85	32.85	6.00	5.88	65.50	59.50	72.75
UA 222 CK	638	43.10	8.03	5.60	30.35	10.50	4.87	1.24	84.78	31.90	6.30	5.58	64.75	65.75	69.25
Ark 1308-58	636	40.62	7.50	5.95	32.29	10.90	4.73	1.25	84.90	31.90	6.48	5.35	67.75	68.25	72.00
MS 2010-87-5	634	42.02	7.39	5.79	32.96	10.10	4.91	1.22	84.48	33.08	5.80	5.95	55.00	60.25	61.75
Ark 1317-31	625	43.30	7.63	5.76	32.73	10.10	4.97	1.23	84.40	32.03	6.48	5.13	56.75	60.00	63.50
Ark 1311-18	605	40.46	7.25	5.43	30.28	10.60	4.56	1.24	84.50	32.93	6.40	5.63	58.50	61.75	64.50
DP 493 CK	604	42.66	7.91	5.55	29.97	10.60	4.79	1.21	84.15	32.28	5.90	6.10	51.25	56.00	59.00
CSX5432	554	40.50	7.46	5.98	32.54	10.90	4.57	1.28	84.63	34.18	6.33	5.00	77.00	71.25	82.25
Mean	701	41.52	7.47	5.72	31.86	10.49	4.81	1.23	84.47	32.40	6.26	5.65	59.99	61.98	66.13
LSD (.05)	159	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns
Entry (P>F)	0.0067	0.5096	0.8525	0.7184	0.2480	0.9459	0.6364	0.5645	0.1336	0.3191	0.8997	0.5779	0.2965	0.0971	0.3574
CV(%)	16.10	4.96	9.83	11.19	9.13	9.95	7.11	3.52	1.12	4.54	9.96	17.68	25.23	17.80	19.26
R-Square	0.43	0.28	0.22	0.23	0.30	0.18	0.24	0.27	0.35	0.29	0.20	0.29	0.30	0.36	0.28
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).