

Table 5. Least square means for lint yield, yield components, and fiber quality traits in the 2022 RBTN at Jackson, Tennessee (Cooperator: Tyson Raper).

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	%	%			
Ark 1414-47	1885	41.98	8.28	5.80	29.38	11.45	4.65	1.288	85.98	34.88	6.83	4.23	61.25	64.50	67.75
MS 2010-66-16	1874	43.93	8.32	6.36	33.59	10.63	4.47	1.271	86.28	33.40	7.05	4.25	59.25	64.75	64.50
Ark 1414-43	1874	40.64	8.28	5.85	28.82	12.09	4.33	1.330	86.55	33.48	6.65	3.78	77.25	73.75	80.50
Ark 1414-28	1864	41.38	7.63	5.82	31.58	10.82	4.44	1.271	85.58	32.00	7.13	4.53	57.00	58.75	64.75
Ark 1410-56	1799	40.10	8.26	6.71	32.60	12.34	4.57	1.284	86.75	32.85	7.08	4.20	64.50	70.00	68.50
MS 2010-87-37	1783	42.68	8.33	6.63	33.96	11.18	4.56	1.314	86.53	34.58	6.63	3.75	69.75	71.75	74.25
Ark 1410-32	1726	39.91	7.54	6.11	33.35	11.30	4.11	1.286	85.88	31.88	6.65	4.30	62.75	63.25	68.75
OA-22-3	1716	45.11	7.56	5.43	32.39	9.22	4.46	1.281	86.78	33.90	6.65	4.15	63.00	69.75	67.00
OA-22-1	1695	41.32	6.87	5.84	35.19	9.74	4.00	1.302	86.23	34.63	6.58	4.28	68.50	68.75	73.75
AU90098	1690	42.24	7.93	6.00	32.08	10.83	4.34	1.276	86.05	32.83	6.65	4.35	58.75	63.00	65.00
OA-22-2	1689	45.09	7.73	5.36	31.81	9.44	4.27	1.303	86.50	34.78	6.40	4.08	69.50	71.75	74.50
MS2010-87-44	1684	43.09	8.32	6.03	31.21	11.01	4.53	1.284	87.03	32.73	7.60	4.08	62.75	71.00	65.25
Ark 1406-21	1640	43.21	7.47	5.91	34.26	9.81	4.37	1.265	85.50	31.60	7.53	4.88	54.25	57.25	62.25
DP 393 CK	1605	42.29	8.46	6.02	30.07	11.55	4.74	1.233	84.80	31.68	7.85	5.43	38.75	46.00	49.75
AU72028	1599	41.20	8.04	6.01	30.87	11.46	4.55	1.234	85.58	32.63	6.95	5.18	45.00	54.00	53.75
MS 2010-28-27	1575	40.91	7.39	5.60	30.98	10.68	4.54	1.241	85.80	34.15	7.65	5.08	45.25	56.50	53.00
MS 2010-87-42	1568	41.30	7.99	5.95	30.71	11.38	4.51	1.274	85.33	33.08	6.80	4.45	54.75	56.25	63.25
CSX5432	1524	46.00	8.17	4.92	27.77	9.58	4.00	1.301	85.15	33.33	7.10	4.23	65.00	59.50	73.50
TAM 18 SHA-27	1484	40.14	8.84	6.53	29.72	13.16	4.02	1.342	86.60	35.70	7.13	3.78	81.25	78.00	85.50
UA 222 CK	1448	40.54	8.19	6.02	29.78	12.01	4.62	1.292	85.38	31.45	8.47	4.35	60.75	58.75	68.25
TAM 17 SHK-43	1437	40.82	8.28	6.39	31.51	12.01	4.61	1.285	85.38	33.43	6.95	4.48	58.00	57.75	65.50
DP 493 CK	1414	40.97	7.09	5.56	32.17	10.23	4.45	1.273	84.78	33.08	6.30	4.68	55.75	53.00	66.00
MS 2010-96-8	1410	40.20	7.44	6.28	33.96	11.05	4.38	1.252	85.60	32.58	7.65	4.63	50.00	56.00	58.00
FM 958 CK	1405	39.37	7.54	5.94	31.19	11.59	4.34	1.273	85.30	33.18	6.75	4.50	57.25	57.50	66.00
TAM 17 WSH-12	1293	43.25	8.43	5.47	28.09	11.06	4.41	1.255	84.78	30.83	7.83	5.08	51.00	50.75	61.25
TAM 17 WSE-66	1263	37.13	7.71	6.81	32.85	13.07	4.09	1.431	86.20	35.23	6.45	3.73	92.25	79.00	95.75
TAM 17 WSG-51	1190	35.26	6.83	5.59	29.24	12.49	3.90	1.463	85.70	34.70	7.30	3.75	87.25	73.00	91.75
TAM 17 WSE-68	1148	36.30	7.59	5.95	28.41	13.32	3.94	1.404	85.55	35.18	6.78	3.78	85.50	72.50	92.25
Mean	1582	41.30	7.87	5.96	31.34	11.23	4.36	1.297	85.84	33.35	7.05	4.35	62.72	63.46	69.29
LSD (.05)	261	1.43	0.75	0.64	4.32	1.014	0.31	0.036	1.10	1.56	0.42	0.79	12.87	11.38	10.68
Entry (P>F)	<.0001	<.0001	<.0001	<.0001	0.0393	<.0001	<.0001	<.0001	0.0005	<.0001	<.0001	0.0003	<.0001	<.0001	<.0001
CV(%)	11.64	2.46	6.80	7.57	9.79	6.42	5.06	1.97	0.91	3.33	4.23	12.97	14.58	12.74	10.95
R-Square	0.69	0.90	0.58	0.58	0.40	0.76	0.65	0.87	0.49	0.65	0.81	0.56	0.77	0.64	0.79
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).