

Table 10. Least square means for lint yield, yield components, and fiber quality traits in the 2022 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	%	%			
OA-22-2	965	41.89	6.23	4.88	32.81	8.50	4.00	1.277	85.68	35.58	5.45	5.05	64.25	69.25	70.75
DP 393 CK	931	39.78	7.12	5.61	31.47	10.50	4.58	1.218	85.08	32.48	6.50	6.25	47.50	56.00	55.50
TAM 17 WSH-12	911	43.12	7.16	4.80	29.18	9.30	3.97	1.211	83.33	29.23	6.38	7.45	36.50	40.50	49.75
MS 2010-87-42	890	41.75	6.66	4.85	30.39	9.50	4.07	1.264	85.18	32.48	5.78	5.53	59.75	61.25	66.25
Ark 1406-21	885	42.05	7.16	5.29	31.13	9.70	4.52	1.260	85.45	32.68	5.90	5.43	56.75	62.25	62.50
MS 2010-66-16	855	42.56	7.45	5.21	29.77	9.90	4.33	1.235	85.90	33.13	5.58	5.70	51.75	63.25	57.00
OA-22-1	852	40.90	5.96	4.94	34.14	8.50	4.41	1.217	84.35	30.30	6.43	6.43	44.75	50.00	55.00
MS 2010-87-37	845	40.78	6.56	5.40	33.59	9.40	4.14	1.276	85.03	32.30	5.45	5.38	62.75	61.75	69.50
CSX5432	844	46.57	7.50	4.92	30.62	8.40	3.79	1.277	85.15	32.38	5.83	5.48	60.75	61.75	67.00
TAM 17 WSE-68	839	35.68	6.32	5.46	31.01	11.30	3.55	1.418	85.70	35.83	5.85	3.78	83.75	77.50	88.00
MS 2010-28-27	839	39.41	6.49	5.07	31.04	9.80	4.15	1.272	85.55	33.18	6.08	5.18	63.00	65.50	68.50
OA-22-3	817	43.50	6.60	4.83	31.87	8.50	4.03	1.237	85.50	35.20	5.53	5.90	52.75	62.50	60.75
TAM 17 SHK-43	804	39.29	7.13	5.46	30.29	10.90	4.08	1.323	84.75	33.20	5.75	4.73	74.25	65.00	81.00
MS2010-87-44	784	40.15	5.82	4.74	33.07	8.60	4.06	1.260	85.28	32.08	5.85	6.00	58.75	61.75	65.50
DP 493 CK	772	40.71	7.05	4.94	28.32	10.10	4.07	1.241	84.23	32.55	5.43	6.13	49.25	51.00	60.00
Ark 1414-28	757	40.45	6.92	4.75	27.79	10.10	4.03	1.288	85.60	32.80	5.88	4.93	67.75	67.50	72.50
AU72028	712	40.33	6.81	5.31	31.47	10.00	4.27	1.235	85.05	32.18	5.78	6.08	50.25	56.75	57.75
MS 2010-96-8	704	39.53	6.88	5.54	32.19	10.50	4.20	1.262	84.98	32.03	5.93	5.45	58.25	59.75	65.75
FM 958 CK	700	38.13	6.60	5.41	31.28	10.60	4.38	1.268	84.83	32.65	5.75	5.45	55.00	57.25	62.50
Ark 1410-56	699	39.17	6.65	5.01	29.52	10.20	4.06	1.268	85.90	34.10	5.70	5.18	63.25	68.00	67.75
Ark 1414-43	689	39.08	6.31	4.57	28.32	9.70	3.93	1.307	85.43	33.40	5.58	4.88	71.00	67.75	75.50
UA 222 CK	670	39.14	7.06	4.95	27.52	10.80	3.95	1.311	85.05	30.88	7.15	4.70	72.50	65.75	78.50
AU90098	662	40.94	7.46	5.28	28.92	10.70	4.22	1.264	85.18	32.55	5.48	5.65	59.75	61.25	66.25
Ark 1414-47	647	39.74	6.95	4.80	27.90	10.40	4.01	1.290	85.95	32.85	5.80	4.95	68.75	70.75	72.25
TAM 17 WSE-66	626	35.83	6.34	5.10	29.05	11.20	3.57	1.440	86.15	37.55	5.50	3.78	87.25	83.75	91.50
TAM 18 SHA-27	603	38.20	7.14	5.20	27.78	11.40	3.51	1.327	85.15	34.70	5.98	4.28	67.75	66.00	74.00
Ark 1410-32	593	38.54	6.85	4.90	27.58	10.70	3.86	1.250	84.85	31.33	5.33	6.13	53.50	56.75	61.75
TAM 17 WSG-51	580	34.65	6.00	5.18	29.82	11.20	3.65	1.464	85.55	34.55	5.95	3.78	85.75	75.50	88.75
Mean	767	40.07	6.76	5.09	30.28	10.01	4.05	1.284	85.21	33.00	5.84	5.34	61.69	63.07	68.28
LSD (.05)	230	1.70	0.84	ns	ns	1.10	0.36	0.038	ns	1.28	0.26	1.04	13.40	13.99	10.42
Entry (P>F)	0.0220	<.0001	0.0018	0.1541	0.0766	<.0001	<.0001	<.0001	0.0987	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001
CV(%)	21.33	3.02	8.85	9.43	10.21	7.79	6.40	2.11	1.14	2.76	3.13	13.77	15.43	15.77	10.85
R-Square	0.45	0.85	0.45	0.33	0.36	0.66	0.61	0.88	0.33	0.84	0.86	0.64	0.69	0.50	0.73
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).