

Table 12. Least square means for lint yield, yield components, and fiber quality traits in the 2022 RBTN at Stoneville (USDA location 1), Mississippi (Cooperator: Linghe Zeng).

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	1363	38.82	7.14	5.80	31.56	11.13	4.95	1.243	85.38	34.13	6.08	5.30	50.25	56.00	58.75
MS 2010-66-16	1203	41.26	8.22	6.12	30.74	11.58	4.73	1.264	85.85	35.58	5.48	4.65	62.50	65.25	69.50
MS 2010-87-37	1225	40.02	8.20	6.02	29.46	12.13	4.76	1.299	86.35	36.20	6.05	4.50	70.00	72.25	75.50
MS 2010-87-42	1144	38.99	7.52	5.93	30.75	11.63	4.56	1.247	85.28	34.05	5.88	5.28	57.00	58.25	65.25
MS2010-87-44	1300	39.58	7.42	5.69	30.39	11.18	4.57	1.288	86.10	34.63	5.93	4.38	67.50	68.25	73.00
MS 2010-96-8	1088	39.16	7.82	6.35	31.77	12.05	4.66	1.310	85.98	36.40	5.53	4.48	67.50	68.75	74.50
Ark 1406-21	1293	40.34	7.54	5.67	30.34	11.03	4.98	1.233	85.18	34.03	6.28	4.85	46.75	53.00	56.00
Ark 1410-32	1281	37.47	7.41	5.85	29.54	12.23	4.57	1.247	85.55	33.75	6.38	5.13	57.75	60.00	65.25
Ark 1410-56	1477	37.79	7.77	6.17	30.02	12.63	4.57	1.290	85.45	34.93	5.50	4.93	62.50	62.00	70.00
Ark 1414-28	1456	40.02	7.93	6.06	30.63	11.78	4.77	1.241	85.43	33.10	5.95	5.28	54.00	57.50	62.25
Ark 1414-43	1381	37.98	7.46	5.85	29.76	12.05	4.62	1.282	85.03	33.25	6.30	5.25	61.50	58.50	69.75
Ark 1414-47	1355	39.56	8.02	5.88	28.98	12.10	4.61	1.254	85.63	34.10	5.85	4.95	60.75	62.00	67.75
AU72028	1198	39.20	7.46	5.62	29.51	11.45	4.40	1.256	85.78	35.43	5.75	5.10	63.75	64.75	71.00
AU90098	1074	38.45	7.51	5.72	29.28	11.93	4.54	1.262	85.70	33.03	5.75	4.98	63.00	62.50	69.50
CSX5432	958	44.55	8.96	4.92	24.48	10.95	4.59	1.259	85.45	33.85	5.60	4.93	60.50	60.00	67.75
DP 393 CK	1364	39.67	7.52	5.84	30.83	11.30	4.67	1.268	86.43	35.05	5.90	4.63	66.75	70.50	71.50
DP 493 CK	1101	40.59	7.54	6.03	32.47	10.93	4.92	1.242	85.45	34.35	5.83	5.13	50.50	56.75	59.00
FM 958 CK	1028	36.99	7.61	5.98	29.07	12.85	4.57	1.289	86.20	35.65	5.53	4.48	71.50	71.00	76.75
OA-22-1	879	39.32	6.51	5.23	31.63	9.93	4.51	1.321	86.23	34.35	6.35	4.60	72.50	71.25	77.25
OA-22-2	1376	42.98	7.10	5.24	31.75	9.28	4.66	1.296	86.20	35.28	5.78	4.55	67.25	69.25	72.75
OA-22-3	1086	42.57	6.98	5.41	32.99	9.28	4.64	1.294	85.83	35.03	5.80	4.53	66.00	65.75	72.00
TAM 17 SHK-43	1119	37.84	7.72	5.92	29.08	12.58	4.69	1.245	85.38	33.23	6.10	5.20	56.75	58.25	64.75
TAM 17 WSE-66	838	34.75	7.33	5.99	28.40	13.65	4.89	1.240	85.58	33.95	6.20	5.15	50.25	57.25	58.00
TAM 17 WSE-68	949	36.58	7.55	5.81	28.13	13.03	4.77	1.255	85.85	35.15	5.70	5.08	60.00	63.75	66.75
TAM 17 WSG-51	783	35.24	7.24	6.26	30.52	13.23	4.83	1.229	86.10	34.05	5.95	5.05	51.00	61.25	57.25
TAM 17 WSH-12	1095	41.90	7.52	5.35	29.81	10.33	4.71	1.267	85.40	35.98	5.88	5.13	61.00	61.75	69.50
TAM 18 SHA-27	1293	38.90	6.77	5.54	31.84	10.50	4.69	1.280	86.40	35.08	5.93	4.38	70.00	71.25	74.25
UA 222 CK	1385	39.04	8.14	6.02	28.86	12.58	4.82	1.234	86.03	35.25	5.80	5.03	50.75	61.25	57.50
Mean	1182	39.27	7.57	5.79	30.09	11.62	4.69	1.265	85.76	34.60	5.89	4.89	60.70	63.15	67.61
LSD (.05)	164	1.69	0.46	0.46	2.40	0.86	ns	ns	ns	ns	ns	ns	ns	ns	ns
Entry (P>F)	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	0.7884	0.9435	0.8551	0.0862	0.1761	0.9541	0.9596	0.9167	0.9445
CV(%)	9.88	3.06	4.35	5.59	5.68	5.25	6.92	5.23	1.10	4.46	7.56	16.79	32.52	21.86	24.70
R-Square	0.78	0.81	0.75	0.59	0.56	0.82	0.23	0.18	0.21	0.34	0.31	0.21	0.17	0.19	0.17
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).