Table 11. Least square means for lint yield, yield components, and fiber quality traits in the 2022 RBTN at Mississippi State (USDA), Mississippi (Cooperator: Jack McCarty).

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	%	%			
DP 393 CK	**1145**	41.98	**6.81**	4.72	**29.34**	9.42	**4.67**	1.167	83.58	34.18	6.45	6.75	47.75	52.00	58.00
MS 2010-96-8	**1122**	41.04	**6.70**	**4.92**	**30.28**	9.63	**4.54**	1.172	83.95	34.80	6.13	6.23	49.50	56.25	58.75
MS 2010-28-27	**1068**	42.16	**6.71**	4.66	**29.32**	9.21	**4.73**	1.168	84.05	34.10	6.25	6.25	47.00	55.25	55.25
AU72028	**1055**	42.68	**6.87**	**5.01**	**31.23**	9.24	**4.88**	1.166	83.28	32.53	5.85	6.85	40.25	47.00	51.00
Ark 1410-56	**1042**	40.95	**7.33**	**4.91**	27.44	10.57	**4.54**	1.203	**85.45**	35.68	5.80	5.95	63.25	72.75	67.50
Ark 1414-43	**1041**	40.53	**6.59**	**5.22**	**32.61**	9.67	4.27	1.210	84.08	35.15	5.78	6.70	58.75	61.25	67.00
TAM 17 SHK-43	**1036**	40.93	**7.18**	**5.33**	**30.38**	10.36	4.25	1.239	84.23	33.73	6.15	6.53	71.25	65.75	76.75
Ark 1414-28	**1024**	41.94	**7.07**	**5.05**	**30.31**	9.77	4.46	1.216	**85.50**	34.53	6.13	5.83	65.00	72.75	68.00
AU90098	**996**	43.61	**7.02**	**5.05**	**31.44**	9.09	**4.73**	1.184	84.28	34.18	5.73	6.83	52.75	59.50	60.50
UA 222 CK	**978**	40.60	6.06	4.63	**31.18**	8.84	3.89	1.208	83.65	31.30	**7.20**	7.22	56.25	55.50	64.25
MS 2010-66-16	**970**	43.49	**7.14**	**4.88**	**29.77**	9.28	4.45	1.160	83.95	34.13	5.85	6.45	50.50	56.00	59.50
MS2010-87-44	**953**	42.42	**6.83**	4.86	**30.30**	9.28	**4.57**	1.207	**85.15**	33.05	6.03	6.05	65.75	69.50	69.00
CSX5432	**949**	**47.64**	**6.92**	3.82	26.25	7.60	4.25	1.201	84.33	33.00	5.83	6.58	63.00	62.75	69.25
Ark 1414-47	**926**	41.17	6.44	4.56	**29.14**	9.21	4.20	1.235	**85.63**	35.45	5.95	6.10	76.00	**78.75**	79.00
FM 958 CK	**918**	40.47	**6.64**	4.79	**29.29**	9.77	4.42	1.194	83.40	34.28	5.83	6.30	57.75	55.25	67.75
MS 2010-87-37	858	43.38	**6.64**	4.64	**30.44**	8.67	4.44	1.191	84.20	34.08	5.58	7.00	58.25	60.50	65.25
DP 493 CK	844	42.92	6.05	4.29	**30.47**	8.04	4.29	1.143	81.98	31.38	5.53	**8.03**	41.25	40.75	55.25
OA-22-1	840	41.47	6.24	4.67	**31.13**	8.80	4.16	1.212	**84.85**	34.13	5.45	6.18	67.75	69.25	72.75
Ark 1410-32	832	40.83	**6.89**	4.62	27.49	9.96	4.28	1.176	**84.78**	33.18	5.25	6.60	57.25	64.00	63.25
Ark 1406-21	830	43.02	6.04	4.15	**29.53**	7.99	4.32	1.184	83.95	33.33	5.85	6.73	57.00	57.75	65.00
TAM 17 WSH-12	804	45.04	6.33	4.18	**29.71**	7.72	4.36	1.127	82.28	28.95	6.45	**8.48**	35.50	38.75	49.75
TAM 17 WSG-51	750	35.87	5.53	4.19	27.27	9.89	3.52	**1.381**	**85.48**	35.73	6.43	3.88	**83.75**	**80.75**	**85.75**
MS 2010-87-42	702	42.02	**6.74**	4.03	25.21	9.31	**4.65**	1.179	**84.85**	33.88	5.85	6.18	52.00	62.25	57.75
TAM 18 SHA-27	680	40.25	**6.88**	**5.03**	**29.68**	10.17	3.56	1.260	**85.35**	35.65	5.98	5.33	72.00	75.50	75.00
OA-22-3	583	44.05	5.78	3.83	**29.23**	7.34	4.05	1.174	83.83	35.08	5.58	6.75	53.50	57.25	62.75
OA-22-2	581	43.72	5.78	3.81	**29.29**	7.41	3.97	1.204	84.00	35.43	5.33	7.00	57.75	60.25	66.25
TAM 17 WSE-68	576	36.36	5.88	4.36	27.08	10.28	3.71	1.334	**85.28**	36.03	6.03	4.00	**86.75**	**81.50**	**89.25**
TAM 17 WSE-66	556	36.74	**6.87**	4.60	24.60	**11.84**	3.82	**1.395**	**86.00**	**38.30**	5.60	3.80	**94.25**	**92.00**	**96.50**
Mean	881	41.69	6.57	4.60	29.26	9.23	4.28	1.210	84.33	34.11	5.92	6.30	60.06	62.88	67.00
LSD (.05)	262	1.16	0.79	0.47	3.50	1.03	0.39	0.041	1.28	1.81	0.28	1.14	15.89	14.08	13.05
Entry (P>F)	<.0001	<.0001	0.0001	<.0001	0.0018	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001
CV(%)	21.12	1.98	8.59	7.19	8.49	7.90	6.49	2.41	1.08	3.77	3.36	12.82	18.80	15.91	13.85
R-Square	0.60	0.92	0.54	0.69	0.48	0.75	0.72	0.87	0.62	0.72	0.85	0.70	0.68	0.67	0.66
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).