

Table 6. Least square means for lint yield, yield components, and fiber quality traits in the 2022 RBTN at Keiser, Arkansas (Cooperator: Fred Bourland).

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	%	%			
CSX5432	1602	45.66	8.14	3.81	21.36	9.32	4.47	1.303	86.63	32.18	5.78	4.45	78.50	75.00	81.00
OA-22-2	1450	44.16	6.68	3.79	25.03	8.18	4.39	1.252	85.23	34.58	5.58	5.73	60.25	59.25	69.25
MS 2010-66-16	1430	43.17	7.31	4.35	25.70	9.48	4.27	1.230	86.03	33.85	5.93	5.30	56.00	62.25	62.50
MS 2010-87-42	1417	41.39	6.74	4.11	25.22	9.42	4.63	1.229	85.83	32.95	5.95	5.68	51.50	59.00	58.75
Ark 1414-28	1390	41.24	6.94	4.00	23.76	9.59	4.33	1.245	85.48	33.03	5.98	6.03	56.00	58.00	63.50
MS 2010-96-8	1332	40.16	7.13	4.38	24.72	10.47	4.71	1.231	85.53	33.13	6.10	5.73	51.25	56.75	59.25
MS 2010-87-37	1332	42.17	7.08	4.15	24.77	9.45	4.35	1.251	86.13	32.68	5.78	5.65	62.25	65.25	67.75
Ark 1410-56	1287	39.38	7.21	4.52	24.82	10.84	4.34	1.273	86.63	34.23	6.00	5.08	70.25	72.75	74.00
Ark 1414-43	1276	38.95	6.66	4.23	24.78	10.23	4.35	1.273	85.65	33.38	5.63	5.53	65.50	63.50	72.00
OA-22-3	1272	43.67	6.95	3.93	24.71	8.46	4.38	1.262	86.40	36.45	5.53	5.35	66.00	71.50	73.00
Ark 1406-21	1266	42.97	6.64	4.19	27.17	8.51	4.65	1.250	86.30	33.13	6.30	5.30	57.00	64.25	62.00
MS2010-87-44	1250	41.27	6.88	4.38	26.33	9.59	4.53	1.233	85.28	32.83	6.00	5.85	53.25	56.00	62.00
Ark 1414-47	1250	39.64	6.35	3.96	24.84	9.55	3.98	1.262	86.38	34.28	5.78	5.58	63.00	68.00	68.25
DP 393 CK	1248	41.83	7.21	4.42	25.69	9.80	4.27	1.270	85.73	33.50	6.35	5.30	53.00	59.00	60.25
AU90098	1238	41.92	7.01	4.41	26.33	9.60	4.57	1.249	85.40	33.08	5.65	5.75	57.00	58.00	64.75
AU72028	1238	41.88	7.11	4.25	25.09	9.55	4.60	1.209	85.53	32.60	6.20	6.20	48.25	55.25	56.25
MS 2010-28-27	1233	40.39	6.70	4.53	27.37	9.67	4.82	1.227	85.88	34.38	6.13	5.28	48.00	58.50	55.75
Ark 1410-32	1230	39.08	6.74	4.63	27.06	10.31	4.11	1.273	86.18	31.58	5.43	5.40	68.75	68.00	73.50
TAM 17 SHK-43	1224	41.26	7.22	4.33	24.82	9.99	4.43	1.266	85.60	32.43	6.15	5.63	65.25	62.25	71.50
DP 493 CK	1185	41.82	6.77	4.21	26.12	9.10	4.55	1.207	84.70	30.83	5.63	6.48	44.00	47.75	55.25
OA-22-1	1185	41.58	6.16	3.68	24.84	8.46	4.68	1.205	85.30	30.28	6.65	5.88	42.00	51.00	51.00
FM 958 CK	1179	38.98	6.67	4.39	25.64	10.25	4.46	1.254	85.05	31.98	5.75	5.45	59.75	56.75	68.50
UA 222 CK	1162	41.19	7.56	4.29	23.39	10.59	4.34	1.251	85.75	33.40	7.55	5.38	60.50	61.75	67.25
TAM 18 SHA-27	1152	38.98	7.27	4.21	22.60	11.12	3.70	1.302	86.00	33.83	6.18	4.68	70.25	67.50	74.75
TAM 17 WSH-12	1142	43.53	6.81	3.77	24.09	8.64	4.34	1.220	84.43	29.68	6.70	6.35	48.00	47.75	59.75
TAM 17 WSG-51	1006	35.17	6.00	4.35	25.66	10.85	3.98	1.432	86.65	35.20	6.13	3.73	91.50	82.00	93.75
TAM 17 WSE-68	950	35.64	6.14	4.01	23.26	10.97	3.58	1.411	85.80	34.15	6.03	3.80	78.25	70.00	82.25
TAM 17 WSE-66	900	37.09	6.65	4.04	22.62	11.11	3.93	1.380	86.68	35.88	5.90	4.20	77.75	77.75	81.75
Mean	1244	40.86	6.88	4.19	24.92	9.75	4.35	1.266	85.79	33.19	6.03	5.38	60.82	62.67	67.48
LSD (.05)	168	1.52	0.51	0.50	ns	0.82	0.40	0.059	1.26	1.62	0.32	0.98	14.64	13.11	12.40
Entry (P>F)	<.0001	<.0001	<.0001	0.0100	0.1779	<.0001	<.0001	<.0001	0.0371	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001
CV(%)	9.63	2.65	5.24	8.46	9.92	5.94	6.59	3.32	1.04	3.46	3.76	12.96	17.10	14.87	13.07
R-Square	0.72	0.87	0.67	0.49	0.41	0.74	0.61	0.76	0.36	0.71	0.83	0.56	0.63	0.52	0.62
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).