

Table 16. Least square means for lint yield, yield components, and fiber quality traits in the 2022 RBTN at Tifton, Georgia (Cooperator: Peng Chee).

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 1410-56	934	38.63	7.26	5.75	30.60	11.44	4.80	1.213	85.40	32.95	7.03	4.70	52.25	63.00	57.50
OA-22-3	903	41.65	6.08	4.86	33.26	8.38	4.25	1.227	84.80	35.10	6.48	5.00	61.00	64.00	68.75
Ark 1410-32	892	37.76	7.05	5.63	30.13	11.43	4.22	1.213	84.90	32.20	6.40	5.63	56.75	61.25	63.00
MS2010-87-44	891	39.38	6.96	6.26	35.51	10.63	4.50	1.211	84.63	33.13	7.23	5.35	54.25	58.25	62.00
AU90098	887	40.64	7.17	5.45	30.94	10.39	4.32	1.230	84.98	33.60	7.03	4.95	60.75	64.75	67.75
Ark 1406-21	870	39.25	6.29	5.26	32.87	9.61	4.40	1.216	84.80	31.98	7.20	5.13	56.50	60.50	63.25
Ark 1414-28	863	38.86	6.80	5.61	32.03	10.58	4.45	1.207	84.93	32.40	7.45	5.40	54.50	60.75	61.25
MS 2010-87-37	828	41.20	6.90	5.06	30.31	9.74	4.28	1.259	85.10	33.28	6.48	4.65	68.75	67.50	73.50
OA-22-2	827	41.73	6.60	5.22	33.02	9.02	4.40	1.234	84.95	34.15	6.58	5.15	62.00	64.00	68.00
Ark 1414-47	823	38.69	6.79	5.40	30.79	10.66	4.59	1.245	84.85	33.50	7.10	4.98	64.50	64.00	70.75
MS 2010-66-16	820	41.39	7.14	5.73	33.23	10.01	4.56	1.200	84.70	32.50	7.53	5.23	51.25	57.75	59.00
Ark 1414-43	817	38.88	7.03	5.41	29.99	11.09	4.73	1.238	85.58	33.48	6.95	4.90	61.00	67.75	65.00
MS 2010-28-27	794	38.71	6.43	5.34	32.15	10.08	4.68	1.194	85.00	33.28	7.75	5.15	47.25	58.25	54.25
DP 393 CK	793	40.37	7.51	5.41	29.47	10.85	4.72	1.196	84.53	31.68	8.00	5.45	46.75	55.00	55.00
TAM 18 SHA-27	791	37.44	6.09	5.31	32.65	10.04	4.31	1.246	85.10	32.23	6.58	4.88	66.25	66.75	71.75
CSX5432	784	42.63	6.62	5.04	32.94	8.92	4.10	1.286	85.33	33.93	6.88	4.25	79.00	74.00	83.00
DP 493 CK	751	40.06	6.50	5.49	34.03	9.60	4.52	1.179	84.10	32.40	6.50	6.20	44.75	51.00	54.75
AU72028	750	39.15	6.97	5.53	31.11	10.69	4.39	1.215	84.28	32.28	7.28	5.30	55.25	56.25	63.75
UA 222 CK	749	38.85	7.00	5.87	32.71	10.90	4.80	1.213	84.70	29.65	9.07	5.20	50.00	57.50	57.00
TAM 17 WSE-66	707	35.69	7.30	5.79	28.33	13.01	3.95	1.432	85.18	37.28	5.95	3.75	91.75	81.75	97.50
OA-22-1	701	38.13	5.74	5.14	34.16	9.21	4.30	1.193	84.30	29.50	8.88	5.75	49.00	53.75	58.00
MS 2010-96-8	678	38.38	7.10	6.16	33.28	11.27	4.43	1.206	84.43	33.90	7.15	5.35	52.50	56.50	60.75
MS 2010-87-42	663	38.47	6.67	5.30	30.75	10.73	4.42	1.224	84.65	32.53	7.18	5.20	57.75	60.25	64.75
TAM 17 WSH-12	654	41.63	6.58	5.02	31.87	9.10	4.17	1.236	83.90	30.05	7.90	5.40	59.50	55.50	68.50
TAM 17 SHK-43	645	39.17	7.79	6.40	32.19	12.02	4.46	1.318	84.58	33.38	6.80	4.05	83.50	69.75	88.75
TAM 17 WSE-68	607	35.41	6.90	5.68	29.17	12.41	3.97	1.396	84.73	35.50	6.45	3.75	90.25	76.00	96.00
FM 958 CK	579	38.17	6.56	5.91	34.46	10.51	4.32	1.215	84.63	32.70	6.80	5.45	56.00	59.00	63.25
TAM 17 WSG-51	487	33.89	6.77	5.81	29.21	12.95	3.85	1.426	85.13	34.35	6.80	3.75	86.00	75.00	89.00
Mean	767	39.08	6.81	5.53	31.83	10.55	4.39	1.245	84.79	32.96	7.12	5.00	61.39	62.85	68.06
LSD (.05)	179	1.97	0.76	0.53	3.37	0.74	0.31	0.030	ns	1.63	0.43	0.66	10.17	9.70	8.47
Entry (P>F)	0.0001	<.0001	0.0003	<.0001	0.0027	<.0001	<.0001	<.0001	0.3496	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001
CV(%)	15.86	3.53	7.84	6.68	7.44	4.97	4.98	1.71	0.86	3.52	4.28	9.38	11.77	10.97	8.85
R-Square	0.58	0.75	0.53	0.60	0.45	0.87	0.66	0.93	0.30	0.74	0.88	0.70	0.82	0.61	0.85
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).