

Table 9. Least square means for yield components and fiber quality traits in the 2022 RBTN at Maricopa, Arizona (Cooperator: Alison Thompson).

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 1414-28	1389	39.54	6.93	4.55	26.02	10.40	4.88	1.189	84.10	37.93	5.65	6.43	76.75	84.00	79.75
Ark 1414-47	1388	38.78	6.70	4.44	25.74	10.20	4.81	1.137	82.23	34.30	5.40	8.18	55.75	59.75	64.00
AU72028	1307	38.69	6.66	4.42	25.68	10.20	5.08	1.120	82.50	33.83	5.55	7.98	46.25	56.50	53.25
DP 393 CK	1271	38.66	7.14	4.69	25.40	11.00	5.06	1.113	82.93	34.98	5.85	7.23	46.75	61.00	53.50
MS 2010-66-16	1248	41.05	7.49	4.76	26.19	10.40	4.95	1.120	83.18	33.80	5.35	7.75	51.25	63.25	56.00
MS2010-87-44	1176	38.83	7.11	4.62	25.28	11.00	5.07	1.142	82.70	33.18	5.43	7.68	53.75	62.00	59.75
MS 2010-96-8	1167	37.88	6.82	4.82	26.87	10.80	5.18	1.106	82.40	33.08	5.55	7.70	40.25	53.50	47.50
MS 2010-28-27	1161	37.18	6.39	4.41	25.91	10.50	4.91	1.148	83.00	36.70	5.50	6.85	60.50	68.25	67.00
Ark 1414-43	1137	37.75	6.20	4.27	26.00	10.00	4.63	1.162	82.60	35.30	5.33	7.73	68.25	68.50	75.50
Ark 1406-21	1097	39.92	6.67	4.39	26.32	9.70	4.95	1.129	82.38	34.53	5.78	8.10	51.50	59.00	59.00
CSX5432	1088	43.08	7.41	3.74	21.70	9.40	4.67	1.149	82.75	33.65	5.13	8.03	63.75	66.00	69.25
AU90098	1077	38.50	6.43	4.44	26.59	10.00	4.76	1.131	81.85	32.58	5.20	8.25	54.25	55.50	62.50
TAM 17 WSH-12	1070	40.70	6.46	3.98	25.04	9.10	4.57	1.125	82.43	32.38	5.78	8.40	56.25	60.25	63.00
Ark 1410-32	1042	36.21	6.83	4.62	24.45	11.70	4.53	1.140	82.63	33.95	5.03	7.65	61.25	63.75	67.50
TAM 18 SHA-27	1022	39.81	7.14	4.43	24.74	10.50	4.52	1.135	81.58	34.05	5.55	8.80	55.75	55.00	65.75
MS 2010-87-42	1019	37.47	6.52	4.48	25.77	10.50	5.10	1.174	82.83	33.68	5.43	7.30	62.50	65.75	67.00
Ark 1410-56	972	37.22	6.53	4.35	24.83	10.70	4.66	1.133	82.85	35.68	5.45	7.58	60.25	66.50	67.00
TAM 17 SHK-43	955	37.60	7.03	4.46	23.99	11.30	4.76	1.185	80.93	33.85	6.13	7.98	67.00	54.75	77.50
TAM 17 WSG-51	906	32.93	5.70	4.68	27.03	11.30	4.24	1.300	82.63	37.25	5.60	5.33	92.25	79.25	97.75
OA-22-3	887	40.49	6.06	3.90	26.11	8.60	4.95	1.130	81.65	32.18	4.98	8.10	49.25	52.25	58.25
OA-22-2	882	39.36	5.71	3.86	26.61	8.50	4.72	1.141	81.95	32.10	5.03	8.40	57.75	57.75	65.75
MS 2010-87-37	860	38.53	6.50	4.53	27.02	10.10	4.73	1.178	82.80	35.53	5.18	7.28	71.50	70.75	77.25
FM 958 CK	836	35.52	6.27	4.70	26.64	11.00	4.71	1.146	82.10	33.98	5.30	7.88	60.25	60.25	67.75
OA-22-1	821	38.20	5.70	3.88	26.02	9.00	5.09	1.110	82.00	30.58	5.60	7.98	41.75	51.25	50.50
DP 493 CK	790	39.82	6.28	4.25	27.14	9.10	5.17	1.092	81.45	30.73	4.95	9.68	33.25	44.25	44.00
TAM 17 WSE-68	787	34.25	6.43	4.69	24.94	12.00	4.07	1.254	82.80	35.48	5.63	6.33	83.75	76.00	88.50
UA 222 CK	761	38.72	7.23	4.57	24.49	11.20	5.06	1.115	82.37	31.06	6.00	8.80	44.58	54.81	52.11
TAM 17 WSE-66	640	34.65	6.08	4.37	25.13	11.10	4.18	1.268	83.03	38.40	5.48	6.38	93.50	83.25	98.50
Mean	1027	38.26	6.59	4.40	25.63	10.33	4.78	1.152	82.45	34.09	5.46	7.70	59.28	62.61	66.25
LSD (.05)	288	1.19	0.60	0.40	ns	0.83	0.29	0.048	1.07	2.45	0.21	1.27	16.36	13.20	14.23
Entry (P>F)	<.0001	<.0001	<.0001	<.0001	0.1768	<.0001	<.0001	<.0001	0.0003	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001
CV(%)	19.90	2.21	6.50	6.44	7.84	5.72	4.21	2.92	0.92	5.06	2.77	11.68	19.45	14.88	15.14
R-Square	0.58	0.90	0.64	0.61	0.34	0.76	0.76	0.75	0.51	0.64	0.84	0.58	0.68	0.60	0.71
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).