

Table 10. Least square means for lint yield, yield components, and fiber quality traits in the 2016 RBTN trial conducted at Maricopa, AZ. (Cooperator: Alison Thompson)

Cultivar	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
	lbs/a	%	grams	grams	#	grams	mic	inch	%	g/tex	%	%	%	%	%
GA 2011113	1514	42.38	6.99	4.23	25.68	9.36	4.75	1.15	83.03	32.27	5.80	7.93	54.33	59.33	61.33
UA 222 CK	1509	39.74	7.29	4.46	24.28	10.87	4.71	1.19	82.87	32.13	7.17	8.33	68.33	63.67	74.67
DP 393 CK	1450	41.28	7.19	4.43	25.49	10.09	4.88	1.13	82.93	32.30	6.93	7.90	47.00	55.33	54.67
DP 493 CK	1437	42.76	6.45	3.85	25.55	8.52	4.34	1.09	81.53	29.87	5.37	9.80	37.67	43.33	50.33
NM 13G2019	1437	40.96	7.41	4.34	24.11	10.53	4.67	1.18	82.30	33.47	5.83	8.17	62.67	57.67	71.00
AU82074	1399	38.52	6.56	4.47	26.20	10.37	4.40	1.16	82.67	31.17	5.67	8.37	61.33	59.00	68.67
MS 0152-3-11	1352	41.04	7.55	4.96	26.93	10.63	4.74	1.17	83.50	30.77	5.97	8.03	63.67	66.00	68.67
GA 2012141	1320	40.69	7.95	4.45	22.95	11.47	4.64	1.16	83.13	31.43	5.80	8.37	61.33	62.33	67.00
GA 2012050	1312	40.24	7.77	5.23	27.14	11.45	4.74	1.18	84.17	33.80	6.20	7.57	67.00	71.67	69.33
MS 0043-28-1	1307	40.73	7.09	4.38	25.16	10.16	4.89	1.13	82.70	32.20	5.77	8.07	45.00	53.00	53.33
Ark 0812-87ne	1305	42.06	8.18	4.85	24.88	11.13	4.41	1.16	82.03	30.77	6.23	8.57	57.67	53.67	67.00
Ark 0818-23	1304	40.81	7.79	4.73	24.86	11.17	4.66	1.18	83.83	33.17	5.83	7.77	68.00	71.00	72.33
AU77082	1283	40.89	7.54	4.79	25.96	10.80	4.86	1.14	82.27	31.17	5.73	8.43	48.33	51.33	57.33
SG 105 CK	1250	39.88	7.25	4.62	25.51	10.81	4.80	1.15	82.20	31.10	6.07	8.30	51.33	52.00	60.67
PD09084	1248	35.80	6.17	4.38	25.45	10.84	4.66	1.17	84.07	34.40	5.87	7.37	67.33	72.00	71.00
MD 16-1	1245	43.06	7.69	4.84	27.16	10.03	4.74	1.12	83.17	31.53	6.57	8.20	46.67	56.67	53.67
FM 958 CK	1243	39.38	7.23	4.85	26.41	11.03	4.80	1.15	82.37	31.17	4.83	8.87	51.00	53.00	60.00
NM 13G1029	1209	39.72	6.81	4.18	24.66	10.21	4.16	1.17	82.40	31.17	5.77	8.30	64.33	58.67	72.33
TAM13Q-18	1198	38.06	7.31	4.87	25.50	11.77	4.72	1.18	83.60	32.87	5.77	7.90	66.33	67.67	70.33
GA 2012082	1187	41.71	7.66	4.69	25.58	10.64	4.68	1.14	81.90	29.73	6.00	8.87	50.67	49.67	61.33
Ark 0822-48	1179	39.97	8.01	4.85	24.23	11.97	5.03	1.23	84.63	33.23	6.93	7.67	76.67	77.67	77.00
PD08028	1143	37.13	6.52	5.47	31.18	10.92	4.62	1.20	84.37	33.80	5.73	7.50	74.67	76.33	76.00
Ark 0824-89	1139	40.56	7.87	4.67	24.09	11.37	5.07	1.19	84.47	33.87	6.23	7.67	63.33	73.33	65.67
PD07040	1117	37.66	6.75	4.63	25.87	11.00	4.72	1.17	82.30	31.80	5.43	8.50	58.67	55.67	67.33
MD 16-2	1070	38.80	7.14	4.80	26.20	11.04	3.98	1.20	83.00	37.10	6.33	7.83	66.33	68.33	75.00
TAM11L-24	1057	35.90	6.79	4.64	24.53	11.97	4.21	1.29	84.13	33.93	4.87	7.17	85.33	80.00	86.67
Ark 0819-89	1053	37.20	7.21	4.42	22.80	12.03	5.09	1.19	85.27	34.70	6.33	7.20	66.00	80.33	66.00
PD09046	939	34.76	6.02	4.39	25.42	11.07	4.39	1.22	82.07	32.90	5.00	8.37	75.67	61.00	83.67
Mean	1257	39.70	7.22	4.62	25.49	10.83	4.66	1.17	83.10	32.42	5.93	8.11	60.95	62.49	67.23
Cultivar LSD (.05)	225	1.48	0.71	0.49	3.29	1.17	0.33	0.04	1.49	1.83	0.54	0.78	17.01	14.58	14.50
Cultivar (P>F)	0.0002	<0.0001	<0.0001	<0.0001	0.0348	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.0003
CV(%)	10.73	2.28	6.00	6.46	7.91	6.63	4.34	2.29	1.09	3.44	5.57	5.89	17.05	14.26	13.17
R-Square	0.70	0.90	0.72	0.66	0.52	0.65	0.79	0.75	0.65	0.74	0.82	0.70	0.63	0.66	0.61
Reps	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3

Values in bold are not significantly different from highest value according to LSD(0.05).

¹ QS1, QS2, and QS3 - Qscore, 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 (0.5), mic (0.25), UI (0.15), and strength (0.10) ; QS2 - fiber length (0.2), mic (0.1), UI (0.4), and strength (0.3); QS3 - fiber length (0.45), mic (0.25), UI (0.0), and strength (0.3).