

Table 8. Least square means for lint yield, yield components, and fiber quality traits in the 2016 RBTN trial conducted at Las Cruces, NM. (Cooperator: Jinfa Zhang)

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	%	%	%	%	%
NM 13G1029	2622	46.37	8.20	5.59	31.60	9.30	4.65	1.28	85.13	31.18	6.25	7.45	73.50	66.50	79.00
Ark 0818-23	2480	42.21	8.19	6.26	32.34	10.71	4.96	1.26	86.08	31.08	7.05	7.08	64.25	69.00	67.75
MS 0152-3-11	2468	43.60	8.41	6.08	31.58	10.41	4.94	1.23	85.40	30.33	6.95	7.18	55.75	60.75	61.75
MD 16-1	2414	45.33	8.42	6.14	33.07	9.49	4.94	1.16	84.65	30.50	6.50	7.55	38.25	48.75	47.75
GA 2011113	2410	44.36	6.94	5.22	33.45	8.60	4.84	1.20	85.08	30.93	6.93	7.10	49.25	56.25	57.00
MS 0043-28-1	2386	42.95	8.31	5.79	29.90	10.44	5.02	1.18	84.38	29.65	6.35	7.53	37.75	46.75	48.00
Ark 0812-87ne	2379	43.47	9.02	6.11	29.39	10.65	5.02	1.23	85.53	30.83	7.03	7.45	55.25	61.75	60.75
AU77082	2372	44.53	8.56	5.88	30.79	10.07	4.63	1.24	84.65	30.90	6.18	7.48	58.50	57.00	66.50
Ark 0824-89	2348	42.90	9.08	6.62	31.29	11.53	5.31	1.28	86.28	32.58	7.03	6.83	65.00	71.00	67.00
UA 222 CK	2299	41.88	8.51	6.29	30.86	11.08	4.75	1.26	85.75	30.85	8.10	7.08	69.25	68.50	73.00
GA 2012082	2272	43.93	8.24	6.24	33.49	9.97	4.80	1.19	84.70	29.68	6.70	7.68	46.00	52.00	54.75
DP 393 CK	2268	42.90	8.13	6.03	31.75	10.13	4.95	1.22	85.55	30.55	6.80	7.35	51.75	60.25	57.75
Ark 0819-89	2206	40.24	7.97	5.98	30.15	11.48	5.07	1.28	86.98	32.13	7.25	6.63	71.50	78.50	71.25
NM 13G2019	2157	40.32	7.12	5.72	32.34	9.79	4.63	1.25	85.00	31.13	6.83	7.45	65.75	62.50	72.50
Ark 0822-48	2148	42.44	8.71	6.48	31.54	11.13	5.17	1.26	85.10	31.15	7.58	7.45	57.25	59.75	63.25
MD 16-2	2078	41.73	8.04	6.22	32.29	10.58	4.36	1.24	84.53	32.93	6.43	7.38	61.75	57.50	70.00
GA 2012050	2062	43.16	8.27	6.19	32.35	10.12	4.68	1.23	85.58	31.30	7.13	7.25	59.25	64.00	65.00
FM 958 CK	2052	41.68	8.52	6.64	32.54	11.48	4.99	1.24	85.55	31.85	6.13	7.33	57.50	62.50	62.50
PD07040	2016	41.00	7.53	6.37	34.64	10.38	4.65	1.29	84.15	30.65	6.48	7.20	72.50	59.00	80.75
PD08028	2002	38.74	7.66	7.08	35.72	11.37	4.75	1.26	85.48	31.83	6.70	7.28	67.50	66.25	72.50
DP 493 CK	1940	45.19	7.83	5.34	30.83	8.40	4.96	1.17	84.28	29.25	6.13	7.93	34.75	44.75	45.75
GA 2012141	1872	43.19	8.15	5.65	29.94	9.82	4.59	1.25	85.60	30.88	6.75	7.20	65.50	66.50	70.25
AU82074	1785	41.06	7.81	5.95	31.22	10.72	4.58	1.21	84.88	30.05	6.50	7.48	55.25	57.50	63.50
TAM13Q-18	1754	38.61	7.76	6.35	31.54	11.27	4.52	1.25	85.45	30.98	6.55	7.18	69.25	66.75	74.25
PD09084	1746	39.08	7.14	6.19	33.72	10.83	4.83	1.26	85.40	32.43	6.40	7.10	66.25	65.25	71.25
SG 105 CK	1726	41.06	7.83	5.86	30.93	10.84	4.90	1.22	85.08	31.00	7.50	7.20	52.00	57.25	59.00
TAM11L-24	1646	36.65	7.26	6.00	30.26	11.96	4.57	1.33	86.43	33.43	5.98	6.48	87.50	81.25	88.25
PD09046	1457	38.89	6.75	5.65	32.55	10.33	4.22	1.31	84.65	31.10	5.58	6.93	81.00	66.00	87.25
Mean	2120	42.05	8.01	6.07	31.86	10.46	4.80	1.24	85.26	31.11	6.70	7.26	60.32	61.92	66.37
Cultivar LSD (.05)	579	2.69	0.84	0.65	ns	0.82	0.38	0.05	1.40	1.56	0.80	0.60	16.46	13.47	14.30
Cultivar (P>F)	0.0076	<0.0001	<0.0001	<0.0001	0.0806	<0.0001	<0.0001	<0.0001	0.0229	<0.0001	<0.0001	0.0070	<0.0001	<0.0001	<0.0001
CV(%)	19.41	4.55	7.40	7.56	7.54	5.61	5.63	2.76	1.17	3.56	8.52	5.85	19.39	15.49	15.32
R-Square	0.44	0.69	0.57	0.57	0.35	0.75	0.53	0.64	0.39	0.51	0.54	0.41	0.60	0.51	0.60
Reps	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4

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).