

Table 7. Least square means for lint yield, yield components, and fiber quality traits in the 2015 RBTN trial conducted at Las Cruces, NM ¹. (Cooperator: Jinfa Zhang)

Cultivar	Lint Yield	Lint Percent	Lint Index	Boll Size	Seed per Boll	Seed Index	MIC	UHM	UI	STRN	ELO	SFC	QS1 [†]	QS2 [†]
	lbs/a	%	grams	grams	#	grams	mic	inches	%	g/tex	%	%	%	%
GA 2010102	1091	43.25	7.26	4.82	28.92	9.30	5.16	1.13	82.78	31.88	5.53	7.90	54.75	66.50
SG 105 CK	1053	43.58	7.01	4.55	28.35	9.20	5.23	1.10	82.33	27.78	6.30	8.53	41.25	57.25
GA 2011124	872	47.05	6.24	4.07	30.86	7.00	5.06	1.08	81.68	27.73	6.15	8.68	34.75	42.25
FM 958 CK	864	45.34	7.53	4.47	27.05	8.90	4.89	1.12	81.90	29.23	5.50	8.65	50.00	61.50
MS 0045-14 -8	854	42.06	6.61	4.79	30.57	8.90	4.94	1.12	82.68	29.58	6.25	8.00	53.75	66.50
NM 13P1088	843	41.67	7.21	4.85	28.11	9.90	4.57	1.16	83.53	31.98	6.80	7.38	75.50	77.00
MS 0045-14 -5	842	44.55	7.39	4.40	26.53	8.80	4.78	1.07	82.00	28.60	5.80	8.73	42.25	61.50
Acala 1517-08	833	41.34	7.13	4.73	27.45	9.80	4.69	1.17	83.50	33.40	5.80	7.60	77.25	82.00
DP 491 CK	819	45.29	6.94	4.47	29.16	8.20	4.61	1.12	81.50	28.80	5.50	9.00	56.50	57.00
LA12306028	815	42.38	7.59	5.03	28.07	9.80	4.93	1.17	83.33	31.05	6.25	7.93	70.25	70.50
UA 222 CK	782	44.19	7.44	4.62	27.46	9.00	4.91	1.15	81.80	28.95	7.70	8.48	60.75	63.50
LA12306010	775	44.18	7.09	4.79	29.86	8.80	4.67	1.16	84.05	30.38	6.85	7.45	75.25	79.50
Ark 0711-2	768	44.29	7.07	4.59	28.89	8.50	5.01	1.13	82.28	30.58	5.28	8.45	56.25	65.00
LA12306017	759	43.72	7.12	4.70	29.02	8.90	4.91	1.11	82.20	29.38	6.33	8.63	51.75	63.75
GA 2011004	740	47.99	6.83	4.16	29.61	7.30	4.99	1.12	82.05	27.40	6.05	8.60	49.75	53.25
MS 0043-28 -1	710	43.77	7.17	4.65	28.57	9.10	5.05	1.09	82.00	28.75	6.28	8.58	43.50	60.50
Ark 0701-17	703	43.54	7.60	5.14	29.81	9.70	4.91	1.15	83.08	30.03	6.08	7.90	65.75	71.25
Ark 0707-33	678	43.75	7.82	4.73	26.50	9.70	4.83	1.11	83.70	28.25	7.78	7.68	55.50	71.75
PD 07092	673	41.32	7.02	4.70	27.71	9.60	4.41	1.20	83.78	34.38	6.33	7.48	89.00	88.25
NM 13W3007	670	41.97	6.70	4.12	25.83	9.00	4.59	1.17	83.75	31.53	6.38	7.65	80.00	79.25
Ark 0712-9	663	43.05	6.55	4.66	30.85	8.60	5.00	1.11	81.00	26.53	6.38	9.70	40.25	31.00
Ark 0705-46	644	44.00	7.90	4.72	26.34	9.60	5.45	1.09	82.38	28.25	6.80	7.73	35.25	55.75
MS 0042-3 -7	643	42.07	6.54	4.94	32.07	8.90	4.59	1.13	81.95	28.60	6.35	8.43	60.00	65.00
DP 393 CK	639	43.28	7.06	4.42	27.04	8.70	4.72	1.11	82.18	29.40	7.00	8.23	55.75	65.00
PD 07040	636	43.59	7.06	4.54	28.05	8.90	4.92	1.14	82.30	29.60	6.33	8.18	60.25	66.25
PD 07116	550	41.72	6.94	4.70	28.26	9.20	4.97	1.15	83.28	31.03	5.23	7.80	63.50	72.00
PD 07105	423	38.48	6.35	4.72	29.00	9.80	4.44	1.21	83.40	30.63	5.03	7.75	87.75	78.75
NM 13W3017	230	38.95	7.71	5.00	25.74	11.80	4.42	1.18	82.38	29.50	4.23	8.50	77.50	71.00
Mean	735	43.23	7.10	4.65	28.42	9.10	4.84	1.13	82.60	29.75	6.15	8.20	59.43	65.81
Cultivar LSD (.05)	319	2.89	ns	0.51	ns	0.74	0.27	0.03	1.14	1.59	0.48	0.58	12.12	12.64
Cultivar (P>F)	0.0031	<0.0001	0.1438	0.0089	0.1054	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
CV(%)	30.81	4.76	10.27	7.82	9.35	5.89	3.96	1.97	0.98	3.81	5.49	5.02	14.50	13.69
R-Square	0.45	0.57	0.36	0.41	0.38	0.78	0.70	0.78	0.58	0.77	0.87	0.71	0.81	0.71
Reps	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).

[†] QS1 & QS2 = 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 (0.1), and strength (0.15) ; QS2 - fiber length (0.1), mic (0.1), UI (0.3), and strength (0.5)

¹ Location omitted from over location analysis due to extreme variability (hail event on July 10, 2015).