

Table 8. Least square means for lint yield, yield components, and fiber quality traits in the 2011 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 [†]	QS2 [†]
	lbs/a	%	grams	grams	#	grams	mic	inches	%	g/tex	%	%		
AU3095	1054	44.01	7.52	4.85	28.42	9.50	5.03	1.13	82.08	28.63	5.10	8.28	49.25	61.50
AU3111	887	44.71	7.51	4.77	28.46	9.10	4.99	1.10	81.28	29.03	4.98	8.53	37.00	45.50
AU3202	915	40.80	7.41	4.73	26.10	10.60	5.03	1.13	82.38	28.88	4.08	7.85	45.00	43.25
AU3223	1055	45.64	7.48	4.53	27.64	8.80	5.00	1.11	82.20	29.43	6.08	7.75	44.25	61.25
Acala 1517-08	1079	38.94	6.85	5.27	30.12	10.50	4.76	1.19	83.83	36.83	5.38	7.25	80.00	86.50
Ark 0304-23	1185	41.24	7.41	4.99	27.84	10.40	4.51	1.18	83.58	32.80	4.63	7.53	76.25	77.25
Ark 0305-07	1272	44.17	7.92	4.79	26.68	9.90	4.71	1.16	83.00	31.88	4.55	7.80	65.50	70.50
Ark 0309-31	875	41.49	7.83	5.57	29.54	11.00	4.67	1.18	83.55	33.85	4.95	7.33	74.50	77.25
Ark 0316-36	1031	43.25	6.97	4.78	29.71	9.00	4.50	1.14	82.75	31.25	6.23	7.48	62.00	69.25
Ark M222-07	843	42.61	7.58	4.93	27.71	10.10	4.98	1.13	82.90	30.93	4.55	7.55	52.00	66.75
DP 393	961	42.41	6.78	4.45	27.89	9.10	4.85	1.11	82.38	32.13	6.63	7.48	47.00	63.50
FM 958	1023	41.17	7.41	5.29	29.59	10.50	4.66	1.18	83.30	34.20	3.88	7.60	73.25	75.50
GA 2004143	719	45.38	7.51	4.75	28.71	8.90	4.87	1.14	81.53	30.48	4.03	8.48	52.50	60.00
LA06307025	998	45.35	7.40	4.57	27.99	9.00	4.94	1.14	83.10	32.95	5.78	7.68	56.50	68.75
LA07307106	885	40.41	7.09	5.18	29.57	10.20	4.73	1.15	83.35	30.18	6.30	7.55	64.00	72.75
MD 25-26ne	978	39.18	6.25	4.99	31.25	9.60	4.22	1.20	83.78	33.95	5.28	7.23	84.25	82.75
MD 25-27Y	1270	40.86	6.91	5.12	30.37	9.90	4.41	1.14	83.45	31.90	4.58	7.35	65.00	74.00
MD 25-87Y	1020	40.30	7.16	5.52	31.16	10.50	4.65	1.16	82.80	36.28	4.75	7.40	69.00	78.25
NC08AZ21	963	38.14	6.03	4.75	30.17	9.60	4.77	1.11	81.68	29.75	5.10	8.25	45.50	50.00
NM08N1084	1177	40.37	6.42	4.67	29.47	9.40	4.48	1.14	83.05	34.25	5.33	7.40	63.00	73.50
NM08N1562	938	40.20	6.59	4.39	26.84	9.70	4.61	1.16	82.13	31.25	5.33	8.08	66.25	66.75
NM08N1564	1099	39.96	6.89	4.94	28.97	10.20	4.69	1.17	82.18	33.28	5.35	8.00	65.75	68.75
PD 05069	836	42.01	7.27	5.20	30.23	9.90	4.70	1.15	82.53	33.45	4.88	7.48	62.00	68.75
PD 05070	764	42.71	6.65	4.98	32.03	9.00	4.81	1.13	80.98	31.15	4.55	8.35	51.75	58.25
PD 06001	959	39.28	7.01	5.48	30.82	10.70	4.62	1.17	82.83	31.73	4.83	7.58	71.25	71.50
SG 105	754	40.49	7.36	5.11	28.07	10.60	5.10	1.14	83.08	31.08	5.48	7.25	53.50	67.50
Tamcot 73	860	39.30	6.89	5.01	28.57	10.40	4.59	1.18	83.20	36.03	5.33	7.62	76.50	81.75
Mean	978	41.64	7.12	4.95	29.03	9.86	4.74	1.15	82.70	32.13	5.11	7.71	61.21	68.19
LSD (.05)	270	1.58	0.60	0.52	3.76	0.69	0.33	0.03	1.30	1.95	0.48	0.62	15.00	14.51
CV(%)	19.60	2.69	6.01	7.44	9.20	4.95	5.01	2.10	1.12	4.32	6.67	5.73	17.41	15.11
R-Square	0.45	0.83	0.62	0.51	0.33	0.72	0.53	0.65	0.49	0.78	0.84	0.52	0.65	0.60
Reps	4	4	4	4	4	4	4	4	4	4	4	4	4	4

Shaded Values 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)