

Table 10. Least square means for lint yield, yield components, and fiber quality traits in the 2012 RBTN trial conducted at Maricopa, AZ. (Cooperator: Michael Gore)

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 2004143	2019	41.44	7.21	4.44	25.53	10.06	5.20	1.18	82.59	32.78	3.85	7.79	66.83	68.64
MD 10-5	1992	40.61	6.70	5.19	31.48	9.68	5.46	1.14	83.58	34.10	5.38	7.33	50.75	68.00
NM11Q1008	1938	37.53	6.24	4.85	29.29	10.24	5.45	1.11	81.93	29.95	4.43	8.55	37.00	55.75
GA 2009100	1900	40.86	7.37	5.07	28.08	10.58	4.95	1.15	82.23	31.63	4.68	7.98	61.00	67.25
NC11AZ01	1888	39.54	7.53	5.17	27.26	11.30	5.44	1.16	83.23	34.18	3.83	8.03	55.75	68.25
PD05064	1882	37.99	7.15	5.50	29.28	11.50	5.82	1.17	83.63	36.18	4.65	7.55	56.00	73.00
AU91411	1793	37.38	7.83	5.46	26.16	12.95	5.43	1.18	82.13	33.28	5.18	7.58	59.00	64.50
AU90810	1792	37.48	7.08	4.79	25.41	11.71	5.31	1.18	82.75	32.20	5.48	7.80	65.25	67.00
MD 87	1753	37.75	7.49	5.28	26.66	12.18	5.16	1.18	83.36	34.98	4.42	7.39	66.16	73.31
GA 2008057	1730	36.95	6.24	4.33	25.68	10.44	5.17	1.18	83.23	34.75	5.30	7.10	70.75	74.50
PD05074	1722	39.28	7.50	4.97	26.05	11.37	5.45	1.13	83.05	33.70	4.73	7.40	47.75	65.25
AU90915	1692	38.98	7.49	5.16	26.89	11.56	5.70	1.15	82.73	33.68	5.65	7.70	48.25	67.75
LA08310066	1682	37.31	6.41	4.93	28.71	10.61	5.56	1.11	81.78	32.40	4.68	7.80	36.25	54.75
PD06078	1673	37.67	6.89	5.08	27.89	11.28	5.41	1.16	83.18	32.80	4.85	7.35	56.00	67.25
AU91215	1652	37.57	6.47	4.92	28.61	10.60	5.20	1.17	82.30	31.03	5.58	8.18	59.25	65.50
FM 958	1636	38.55	7.20	4.58	24.61	11.27	5.53	1.13	83.48	30.43	5.38	7.53	53.25	68.25
AU91111	1625	37.81	6.26	4.55	27.71	10.11	5.44	1.13	82.58	31.23	5.48	8.05	50.00	62.75
GA 2008083	1612	40.65	6.98	4.68	27.27	10.01	5.46	1.12	82.30	31.98	4.68	8.25	46.00	60.50
PD05071	1608	36.19	6.50	5.21	28.99	11.31	5.53	1.13	83.88	33.53	4.48	7.23	50.50	67.75
Ark 0409-17	1592	39.30	7.57	5.05	26.22	11.49	5.51	1.09	83.00	29.23	5.10	7.70	39.75	62.75
NM11Q1157	1556	35.02	6.64	4.89	25.91	12.16	4.83	1.15	83.43	34.48	5.08	7.60	64.25	73.00
MD 26ne	1547	38.11	7.12	5.17	27.75	11.38	4.93	1.21	83.73	33.36	4.96	7.17	81.33	76.01
Ark 0409-16	1521	38.87	7.73	5.38	27.21	11.93	5.04	1.10	82.57	30.26	5.13	8.04	47.33	63.01
DP 393	1502	38.84	6.70	4.83	28.08	10.37	5.51	1.10	82.70	31.53	5.90	7.85	42.25	61.75
Acala 1517-08	1495	35.46	6.58	4.60	24.75	11.80	5.20	1.20	83.22	36.42	4.93	7.30	71.59	75.93
Ark 0403-3	1425	37.38	6.47	4.37	25.25	10.68	5.57	1.15	83.13	32.83	4.68	7.48	55.75	67.00
SG 105	1422	37.93	7.37	4.98	25.70	11.90	5.09	1.14	82.40	31.95	3.65	8.00	59.75	65.00
PD06001	1410	35.82	6.52	5.33	29.33	11.66	5.16	1.16	81.80	31.28	4.28	8.10	55.50	60.75
Arkot 0407-4	1381	38.99	7.62	5.70	29.17	11.73	5.60	1.11	83.35	30.95	4.23	7.63	44.50	65.50
TAM 06WE-62-1	1343	36.63	7.90	6.60	30.64	13.52	5.23	1.20	83.80	38.70	4.70	7.10	79.75	85.75
Tamcot 73	1248	38.19	7.06	5.17	27.98	11.28	5.65	1.14	83.40	32.88	4.30	7.57	53.75	68.25
Arkot 0410-32	1173	37.37	7.37	4.78	24.27	12.12	5.55	1.15	84.30	32.00	5.40	7.08	58.75	73.75
Barbren 713	1095	34.39	6.84	5.29	26.68	12.90	5.13	1.08	81.80	30.85	4.30	8.03	41.75	58.00
Mean	1615	37.99	7.03	5.04	27.29	11.32	5.35	1.14	82.92	32.77	4.83	7.67	55.51	67.16
LSD (.05)	228	1.16	0.55	0.32	2.41	0.83	0.26	0.03	1.30	2.07	0.38	0.65	11.76	9.41
CV(%)	9.81	2.12	5.44	4.43	6.13	5.11	3.37	1.84	1.09	4.39	5.49	5.90	14.84	9.76
R-Square	0.74	0.85	0.70	0.84	0.62	0.77	0.70	0.75	0.43	0.73	0.86	0.48	0.71	0.56
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)