

Table 5. Least square means for lint yield, yield components, and fiber quality traits in the 2015 RBTN trial conducted at Florence, SC ¹. (Cooperator: Todd Campbell)

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 2011004	573	45.95	10.44	6.14	28.49	11.85	5.06	1.14	82.18	29.35	5.13	9.35	68.75	72.50
GA 2010102	528	42.82	9.03	4.92	23.76	11.95	5.27	1.13	82.15	31.75	4.03	9.60	63.25	73.25
GA 2011124	483	45.31	8.54	4.91	27.55	9.95	5.37	1.07	81.30	28.43	4.90	9.55	40.25	55.00
UA 222 CK	466	43.43	8.77	6.11	30.76	11.35	5.00	1.12	81.38	28.88	5.88	9.55	61.25	66.75
Ark 0711-2	462	41.34	8.22	5.00	25.27	11.50	4.59	1.15	83.25	31.70	4.15	9.08	70.25	76.50
LA12306028	442	42.75	7.35	6.84	41.42	9.50	4.91	1.16	81.80	32.08	4.63	9.35	74.25	73.00
Ark 0707-33	408	44.64	9.44	5.31	26.24	11.65	5.19	1.07	82.00	27.88	5.75	8.93	43.75	59.25
MS 0043-28 -1	398	44.21	7.45	6.25	38.17	9.20	5.36	1.07	81.38	28.95	4.75	8.90	41.00	61.75
DP 393 CK	383	44.07	8.01	5.64	31.34	10.05	5.22	1.09	81.15	29.93	5.43	9.33	47.75	62.25
DP 491 CK	381	46.03	8.85	5.30	29.09	10.35	5.16	1.10	80.83	28.90	3.98	9.08	51.75	60.75
MS 0045-14 -5	375	44.08	8.61	5.91	30.75	10.70	5.30	1.06	81.35	28.93	4.28	8.80	38.25	60.75
LA12306017	366	44.29	8.59	5.62	29.18	10.50	5.38	1.10	81.10	29.40	4.78	8.50	47.25	59.00
Ark 0705-46	361	43.78	9.11	5.78	28.29	11.50	5.35	1.09	82.08	29.78	5.05	8.28	48.50	67.25
Ark 0701-17	355	44.27	9.05	4.70	23.02	11.20	5.10	1.10	81.68	28.98	5.00	8.20	54.75	63.50
PD 07116	350	42.25	8.12	5.66	29.57	10.95	5.16	1.11	80.78	30.18	3.70	8.73	54.75	61.75
SG 105 CK	335	44.78	10.48	5.11	23.13	12.85	5.56	1.07	81.20	27.48	4.98	9.58	34.50	50.25
PD 07092	330	38.76	7.95	5.60	27.65	12.50	4.08	1.20	83.23	36.08	4.73	9.70	83.50	86.75
LA12306010	309	43.82	9.64	6.43	29.77	12.10	4.46	1.13	80.60	29.83	4.65	9.35	59.00	62.00
MS 0045-14 -8	308	43.80	8.21	7.18	40.04	10.30	5.40	1.05	81.73	28.13	4.68	9.65	33.50	57.75
PD 07040	296	40.87	7.93	5.94	32.36	11.20	5.14	1.09	81.83	28.60	5.00	8.73	51.50	62.00
MS 0042-3 -7	291	41.80	7.30	5.56	31.77	10.00	4.89	1.10	80.73	28.05	5.00	8.95	51.25	52.25
PD 07105	241	38.77	7.84	6.64	33.23	12.15	4.55	1.18	81.55	31.70	3.40	9.58	85.00	74.25
NM 13W3007	234	41.87	7.67	5.44	29.43	10.45	5.08	1.10	80.63	30.10	4.18	9.15	52.00	60.75
NM 13P1088	223	39.05	7.49	4.39	22.66	11.50	4.63	1.10	82.65	31.60	5.28	8.78	66.50	76.50
Ark 0712-9	217	44.63	10.05	5.52	25.12	12.30	5.53	1.08	79.93	25.83	4.98	9.30	31.25	22.75
Acala 1517-08	200	40.13	8.49	5.09	24.62	12.45	4.80	1.13	81.73	30.75	4.40	9.03	69.00	71.50
FM 958 CK	188	43.19	7.55	5.96	34.53	9.80	5.00	1.11	80.60	30.30	3.85	9.25	56.25	62.00
NM 13W3017	147	38.42	7.77	5.30	26.24	12.35	4.79	1.15	81.70	31.25	3.28	8.98	73.25	71.75
Mean	345	42.83	8.50	5.65	29.41	11.15	5.05	1.11	81.52	29.81	4.63	9.11	55.44	63.71
Cultivar LSD (.05)	112	2.57	ns	ns	ns	ns	0.51	0.04	1.31	1.71	0.44	ns	18.29	15.27
Cultivar (P>F)	<0.0001	<0.0001	0.1290	0.6357	0.2103	0.3674	<0.0001	<0.0001	0.0002	<0.0001	<0.0001	0.5247	<0.0001	<0.0001
CV(%)	23.06	4.27	18.03	24.57	29.50	17.37	7.19	2.71	1.41	4.09	6.70	9.13	23.45	17.04
R-Square	0.73	0.68	0.35	0.26	0.34	0.31	0.58	0.69	0.59	0.78	0.86	0.29	0.67	0.65
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 (flooding event prior to harvest).