

Table 11. Least square means for lint yield, yield components, and fiber quality traits in the 2015 RBTN trial conducted at Prattville, AL. (Cooperator: David Weaver)

Cultivar	Lint Yield	Lint Percent	Lint Index	Boll Size	Seed per Boll	Seed Index	MIC	UHM	UI	STRN	ELO	SFC	QS1 <sup>†</sup>	QS2 <sup>†</sup>
	lbs/a	%	grams	grams	#	grams	mic	inches	%	g/tex	%	%	%	%
Ark 0705-46	<b>1288</b>	42.60	<b>7.80</b>	<b>4.96</b>	27.11	10.41	<b>5.03</b>	1.13	84.50	32.03	6.23	7.15	44.75	63.25
Ark 0701-17	<b>1276</b>	42.83	<b>7.91</b>	<b>5.26</b>	28.53	10.46	<b>4.83</b>	1.15	84.25	31.48	5.50	<b>7.90</b>	52.50	63.75
DP 393 CK	<b>1211</b>	42.66	7.26	<b>5.15</b>	<b>30.32</b>	9.68	<b>4.88</b>	1.14	84.60	32.90	<b>6.60</b>	7.13	49.50	64.50
GA 2011004	<b>1200</b>	<b>45.50</b>	7.34	4.91	<b>30.39</b>	8.75	<b>4.84</b>	1.17	84.83	32.58	6.08	7.00	60.50	69.00
MS 0043-28 -1	1123	42.64	<b>7.42</b>	<b>5.13</b>	<b>29.58</b>	9.92	<b>5.09</b>	1.12	83.93	31.48	5.98	7.35	37.25	57.25
Ark 0711-2	1121	41.88	7.15	4.82	28.22	9.86	<b>4.97</b>	1.17	<b>85.35</b>	33.83	4.90	7.20	59.75	70.25
GA 2011124	1114	43.62	6.76	4.69	<b>30.26</b>	8.68	<b>5.08</b>	1.12	83.48	31.50	5.95	7.05	36.00	54.75
UA 222 CK	1086	41.89	7.39	4.72	26.74	10.17	4.54	<b>1.20</b>	85.10	33.38	<b>6.72</b>	7.00	<b>74.00</b>	73.00
Ark 0707-33	1084	42.64	<b>7.85</b>	<b>5.01</b>	27.43	10.46	4.63	1.15	<b>85.63</b>	31.85	<b>7.10</b>	6.90	59.00	72.50
SG 105 CK	1082	39.75	7.35	<b>5.41</b>	<b>29.18</b>	11.12	<b>5.04</b>	1.14	<b>85.20</b>	31.93	5.48	7.05	48.00	67.00
LA12306028	1061	39.83	6.90	4.78	27.55	10.40	4.52	<b>1.22</b>	<b>85.63</b>	<b>36.48</b>	5.75	6.80	<b>82.00</b>	<b>83.50</b>
PD 07092	1049	39.83	6.91	<b>5.21</b>	<b>30.22</b>	10.36	4.50	<b>1.23</b>	<b>86.10</b>	<b>37.05</b>	5.53	6.63	<b>83.75</b>	<b>87.50</b>
FM 958 CK	1049	41.92	<b>7.59</b>	<b>5.28</b>	<b>29.12</b>	10.45	<b>5.03</b>	1.14	83.80	33.40	4.75	<b>7.68</b>	46.50	61.75
LA12306010	1027	40.29	7.03	<b>5.09</b>	<b>29.16</b>	10.37	4.52	<b>1.21</b>	85.05	34.78	5.45	7.13	<b>76.75</b>	75.75
MS 0042-3 -7	1026	39.80	6.84	4.67	27.18	10.28	4.28	1.18	84.40	31.93	5.80	7.38	66.50	68.00
GA 2010102	1024	40.68	6.97	<b>5.12</b>	<b>29.89</b>	10.12	<b>5.02</b>	1.18	<b>85.33</b>	<b>36.10</b>	5.13	6.90	61.00	74.75
MS 0045-14 -5	1024	40.42	7.07	4.94	28.27	10.35	4.70	1.12	84.48	31.80	5.20	7.33	47.50	63.75
LA12306017	1018	40.70	7.10	<b>5.29</b>	<b>30.35</b>	10.28	<b>4.88</b>	<b>1.19</b>	<b>85.50</b>	<b>35.70</b>	5.63	6.83	67.25	76.75
NM 13W3007	986	38.34	6.08	4.57	28.83	9.72	4.61	<b>1.22</b>	<b>85.85</b>	<b>36.05</b>	5.18	6.88	<b>82.00</b>	<b>83.50</b>
DP 491 CK	965	42.15	6.75	<b>5.12</b>	<b>31.88</b>	9.25	4.49	1.17	84.23	33.43	5.08	7.50	63.00	66.50
Ark 0712-9	956	41.40	7.07	<b>5.03</b>	<b>29.44</b>	9.91	<b>4.95</b>	<b>1.19</b>	83.40	30.20	5.88	<b>8.03</b>	58.50	59.25
MS 0045-14 -8	953	40.61	7.23	<b>5.39</b>	<b>30.32</b>	10.50	<b>4.96</b>	1.13	84.85	33.90	5.35	7.30	46.25	66.00
Acala 1517-08	916	38.42	6.55	4.60	27.01	10.45	4.45	<b>1.19</b>	<b>85.28</b>	<b>37.15</b>	5.45	6.80	<b>72.50</b>	<b>81.25</b>
PD 07040	894	39.17	6.91	<b>5.04</b>	28.53	10.67	4.36	<b>1.19</b>	84.33	33.10	5.63	7.33	68.50	67.75
PD 07116	874	39.05	7.04	<b>5.41</b>	<b>29.97</b>	10.92	<b>4.80</b>	<b>1.19</b>	84.70	<b>35.48</b>	4.55	7.25	66.50	72.00
PD 07105	842	37.50	6.69	<b>5.10</b>	28.55	11.07	4.48	<b>1.23</b>	84.65	<b>35.93</b>	4.70	7.30	<b>81.75</b>	76.50
NM 13P1088	803	37.47	6.26	<b>5.07</b>	<b>30.40</b>	10.40	4.39	1.15	<b>85.25</b>	<b>35.75</b>	6.00	6.83	61.50	75.75
NM 13W3017	748	36.99	7.03	<b>5.38</b>	28.25	<b>11.95</b>	4.59	<b>1.19</b>	<b>85.28</b>	34.70	4.43	7.10	<b>72.25</b>	76.75
Mean	1029	40.73	7.08	5.04	29.02	10.25	4.73	1.17	84.82	33.78	5.57	7.17	61.62	70.44
Cultivar LSD (.05)	139	1.62	0.49	0.46	2.78	0.74	0.29	0.04	0.96	1.97	0.52	0.45	13.65	8.46
Cultivar (P>F)	<0.0001	<0.0001	<0.0001	0.0025	0.0296	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
CV(%)	9.46	2.83	4.97	6.53	6.80	5.16	4.42	2.17	0.80	4.15	6.60	4.49	15.75	8.53
R-Square	0.73	0.82	0.67	0.45	0.40	0.70	0.71	0.77	0.69	0.74	0.81	0.67	0.79	0.77
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).

<sup>†</sup> 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)