

Table 14. Least square means for lint yield, yield components, and fiber quality traits in the 2017 RBTN at Tifton, GA<sup>1</sup> (Cooperator: Peng Chee).

Cultivar	Lint Yield	Lint Percent	Lint Index	Boll Size	Seed per Boll	Seed Index	MIC	UHM	UI	STRN	ELO	SFC	QS1 <sup>2</sup>	QS2 <sup>2</sup>	QS3 <sup>2</sup>
	lb/A	%	grams	grams	#	grams	mic	%	%	g/tex	%	%			
LA14063001	<b>898</b>	<b>41.99</b>	6.53	5.12	<b>32.90</b>	8.98	4.70	1.13	83.98	31.18	6.85	7.20	60.25	61.00	67.00
LA14063083	<b>792</b>	<b>42.21</b>	<b>6.95</b>	4.90	29.81	9.46	4.69	1.14	83.78	33.15	<b>7.23</b>	7.65	61.00	59.75	67.75
Ark 0908-60	<b>782</b>	<b>41.75</b>	6.25	5.09	<b>34.13</b>	8.65	<b>4.94</b>	1.16	<b>84.60</b>	30.88	6.55	7.35	64.50	<b>67.25</b>	69.00
GA 2015073	<b>757</b>	<b>41.44</b>	6.43	4.92	31.79	9.03	<b>4.85</b>	1.11	84.08	32.33	6.28	6.75	52.75	58.75	59.75
GA 2012141	<b>746</b>	<b>41.08</b>	<b>7.35</b>	<b>5.16</b>	28.89	10.47	<b>4.91</b>	1.16	84.05	31.95	6.10	7.65	65.00	63.50	70.50
DP 393 CK	<b>741</b>	39.71	6.06	4.70	30.79	9.12	<b>4.83</b>	1.11	84.19	31.53	7.12	7.55	52.00	59.50	58.75
GA 2015032	<b>739</b>	39.83	5.76	4.84	<b>33.49</b>	8.61	4.81	1.15	<b>84.75</b>	33.00	6.13	7.08	66.00	<b>68.50</b>	69.75
Tamcot G11	<b>731</b>	38.77	<b>7.36</b>	<b>5.70</b>	30.06	<b>11.55</b>	4.42	<b>1.26</b>	83.88	32.33	5.43	7.43	<b>87.25</b>	<b>71.25</b>	<b>91.75</b>
TAM LBB130218	<b>729</b>	35.29	5.69	5.07	31.52	10.35	4.25	1.14	83.93	32.13	5.53	7.45	66.50	63.50	73.25
TAM LBB131001	<b>724</b>	39.82	5.79	4.50	31.02	8.66	4.29	1.13	83.20	31.40	6.25	<b>7.98</b>	60.50	55.75	69.75
TAM 13Q-18	<b>721</b>	37.98	6.11	5.08	31.58	9.91	4.67	1.10	81.98	30.33	6.30	<b>8.50</b>	45.50	42.50	58.50
PD 07040	<b>709</b>	36.69	5.90	<b>5.25</b>	<b>32.65</b>	10.10	4.78	1.12	83.20	31.73	6.30	7.53	54.75	53.75	64.25
Ark 0912-18	<b>693</b>	39.09	6.34	<b>5.27</b>	<b>32.66</b>	9.78	4.79	1.13	<b>85.18</b>	32.48	<b>7.68</b>	7.03	57.75	<b>68.75</b>	61.00
FM 958 CK	<b>682</b>	38.27	6.35	<b>5.39</b>	<b>32.43</b>	10.11	4.72	1.12	84.18	32.83	5.58	7.43	57.50	61.75	64.25
LA14063038	<b>671</b>	40.14	5.98	4.84	<b>32.50</b>	8.83	4.71	1.16	84.23	33.35	5.95	7.50	69.75	67.00	75.00
TAM WK-11L	<b>666</b>	36.96	5.82	<b>5.18</b>	<b>32.93</b>	9.78	4.58	1.11	<b>85.05</b>	31.18	6.75	6.95	56.00	66.75	60.25
GA 2015090	<b>658</b>	39.90	5.78	4.63	<b>31.96</b>	8.64	4.71	1.14	84.05	<b>33.63</b>	6.48	7.30	61.25	63.00	67.75
NM 13R1015	<b>655</b>	38.35	5.94	4.23	27.18	9.48	<b>4.86</b>	1.11	82.90	31.83	6.25	7.48	47.50	48.50	58.00
LA14063046	647	<b>40.85</b>	6.52	4.81	30.16	9.37	4.48	1.16	83.83	33.28	6.75	7.75	68.00	63.00	74.25
TAM 13Q-51	646	37.34	6.08	4.99	30.62	10.11	<b>5.19</b>	1.17	<b>85.35</b>	<b>35.40</b>	<b>7.48</b>	6.58	66.50	<b>75.50</b>	69.75
PD 09046	622	35.73	5.36	4.60	30.75	9.60	4.61	1.17	<b>84.43</b>	<b>33.88</b>	5.45	7.53	75.00	<b>71.00</b>	79.50
Acala 1517-08	605	35.45	5.66	4.54	28.24	10.23	4.37	1.12	83.73	<b>34.20</b>	6.40	7.28	53.00	58.50	62.25
TAM 13S-03	597	36.46	5.74	4.59	29.22	9.92	4.30	1.11	84.20	30.80	<b>7.25</b>	7.30	58.00	61.75	64.50
Ark 0921-31ne	592	37.39	6.00	4.81	29.98	9.97	4.61	1.13	<b>85.15</b>	31.25	<b>7.55</b>	7.00	63.75	<b>70.75</b>	66.75
PD 08028	578	35.53	5.53	<b>5.48</b>	<b>35.34</b>	9.94	4.69	1.13	<b>84.68</b>	33.53	6.45	7.08	59.75	66.00	64.75
Ark 0921-27ne	575	37.61	5.88	4.64	29.71	9.65	4.77	1.14	<b>85.28</b>	32.85	6.30	6.98	64.25	<b>71.50</b>	66.50
AU 90098	574	40.49	6.10	4.55	30.33	8.86	<b>4.83</b>	1.11	83.03	31.55	5.65	7.85	48.75	49.75	58.75
DP 493 CK	547	<b>42.27</b>	5.85	4.55	<b>32.98</b>	7.90	<b>5.20</b>	1.05	82.80	29.33	5.75	<b>8.13</b>	24.50	38.50	37.00
PD 2013016	544	37.58	5.74	4.93	<b>32.29</b>	9.43	4.68	1.16	<b>84.85</b>	<b>34.58</b>	5.45	7.35	72.00	<b>73.25</b>	76.00
LA14063101	515	<b>42.30</b>	6.34	4.61	30.75	8.60	4.81	1.12	<b>84.50</b>	33.05	6.35	7.38	55.75	63.25	61.25
Ark 0911-13	484	40.25	6.73	4.76	28.56	9.60	4.46	1.21	<b>84.83</b>	31.20	<b>7.33</b>	7.40	<b>87.00</b>	<b>77.75</b>	<b>88.75</b>
NM 16-13P1088B	484	34.89	5.87	4.87	29.04	<b>10.92</b>	4.30	1.11	83.63	<b>35.18</b>	6.50	7.08	56.25	59.25	66.00
UA 222 CK	266	39.38	6.11	4.30	27.78	9.31	<b>4.85</b>	1.11	83.63	31.43	<b>7.47</b>	7.68	51.25	55.00	59.75
<b>Mean</b>	648	38.87	6.12	4.88	31.03	9.54	4.68	1.13	84.09	32.38	6.45	7.40	60.29	62.29	66.73
<b>LSD (.05)</b>	244	1.64	0.61	0.54	3.48	0.84	0.36	0.03	1.08	1.78	0.46	0.52	11.72	10.52	10.41
<b>Cultivar (P&gt;F)</b>	0.0154	<0.0001	<0.0001	<0.0001	0.0007	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
<b>CV(%)</b>	26.84	3.00	7.08	7.84	8.00	6.24	5.51	2.05	0.92	3.91	5.13	5.04	13.86	12.03	11.12
<b>R-Square</b>	0.62	0.84	0.68	0.62	0.48	0.70	0.66	0.78	0.65	0.63	0.84	0.68	0.73	0.70	0.70
<b>Reps</b>	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4

Values in bold not significantly different from highest value according to LSD(0.05).

<sup>1</sup>Caution, due to excessive plot to plot variability in harvest weights caused by hurricane related weather conditions, results for this trial were excluded from the analysis over locations and should be viewed with caution. Although results for yield should be viewed with caution, variability (CV%) in yield components and fiber quality traits suggests these measurements may provide valid means separation for purposes of comparison.

<sup>2</sup>QS1, QS2, and QS3 = Represent values for "Qscore", a measurement 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 (0.50), mic (0.25), UI (0.15), and strength (0.10)

QS2 - fiber length (0.20), mic (0.10), UI (0.40), and strength (0.30)

QS3 - fiber length (0.45), mic (0.25), UI (0.00), and strength (0.30).