

Table 13. Least square means for lint yield, yield components, and fiber quality traits in the 2017 RBTN at Tallassee, AL<sup>1</sup> (Cooperator: Jenny Koebernick).

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	%	%			
LA14063083	<b>957</b>	44.00	<b>7.38</b>	4.58	27.29	9.28	<b>4.27</b>	1.20	<b>84.88</b>	<b>36.08</b>	<b>7.30</b>	6.88	<b>72.50</b>	<b>71.75</b>	<b>78.50</b>
Ark 0908-60	<b>891</b>	43.61	<b>7.13</b>	4.45	27.24	9.09	<b>4.75</b>	1.20	<b>84.70</b>	34.15	6.65	7.08	60.25	64.00	64.75
Ark 0911-13	<b>873</b>	42.46	<b>6.95</b>	<b>4.79</b>	29.48	9.33	<b>4.29</b>	1.22	<b>85.30</b>	32.93	<b>7.20</b>	7.18	<b>80.50</b>	<b>76.25</b>	<b>82.75</b>
Ark 0912-18	<b>781</b>	42.27	<b>7.49</b>	<b>4.97</b>	27.66	<b>10.14</b>	<b>4.52</b>	1.21	<b>85.65</b>	34.65	7.03	6.63	<b>72.75</b>	<b>76.25</b>	75.00
LA14063101	<b>767</b>	<b>46.31</b>	<b>6.93</b>	4.19	27.91	7.94	<b>4.50</b>	1.16	83.88	34.05	6.35	7.08	53.75	56.00	62.25
GA 2015073	<b>735</b>	41.97	6.32	4.13	27.46	8.62	<b>4.24</b>	1.15	<b>85.08</b>	35.28	6.13	6.90	60.25	<b>67.75</b>	66.00
TAM 13Q-18	<b>731</b>	40.23	<b>7.29</b>	<b>5.95</b>	32.61	<b>10.72</b>	3.89	<b>1.29</b>	84.40	34.45	5.08	6.58	<b>86.00</b>	<b>73.25</b>	<b>90.75</b>
UA 222 CK	<b>730</b>	42.54	<b>7.05</b>	4.51	28.27	9.41	4.18	1.18	<b>84.95</b>	33.98	<b>7.70</b>	6.88	67.25	<b>68.50</b>	71.75
TAM 13S-03	<b>730</b>	39.72	6.46	3.78	23.26	<b>9.68</b>	3.98	1.18	<b>84.48</b>	32.98	<b>7.38</b>	6.98	65.50	64.25	71.25
LA14063046	716	41.65	<b>6.75</b>	4.31	26.72	9.36	4.11	1.17	83.95	35.58	6.65	7.45	58.50	59.25	67.50
AU 90098	701	43.41	<b>6.95</b>	3.73	23.24	8.96	4.14	1.16	<b>84.48</b>	33.70	5.63	7.13	55.75	60.75	62.25
Ark 0921-27ne	697	40.03	5.72	4.54	31.80	8.46	4.05	1.17	84.05	35.38	6.45	7.18	60.75	61.00	69.25
GA 2012141	673	42.65	<b>7.23</b>	<b>5.29</b>	31.16	<b>9.65</b>	<b>4.45</b>	1.20	<b>85.10</b>	35.60	5.83	7.00	<b>72.75</b>	<b>73.50</b>	<b>77.50</b>
DP 493 CK	665	44.02	6.43	3.83	26.31	8.04	<b>4.89</b>	1.09	83.14	33.42	5.74	<b>7.53</b>	24.80	40.33	36.26
GA 2015032	645	41.52	6.60	4.63	29.11	9.18	<b>4.81</b>	1.18	<b>84.73</b>	35.55	6.10	6.88	57.25	64.25	63.50
PD 08028	645	39.42	5.68	4.16	28.86	8.65	3.97	1.18	83.95	35.43	6.03	7.15	65.25	62.00	73.75
LA14063038	638	41.62	5.94	4.17	29.22	8.26	3.94	1.20	84.08	<b>37.65</b>	5.73	7.23	66.25	65.25	75.25
Ark 0921-31ne	620	41.02	6.31	4.18	27.07	8.98	<b>4.41</b>	1.17	<b>85.40</b>	35.15	<b>7.60</b>	6.50	52.75	<b>67.00</b>	56.75
TAM LBB131001	611	41.53	6.25	<b>4.98</b>	33.60	8.70	4.20	1.18	84.00	34.35	6.20	7.23	65.75	62.50	73.75
NM 13R1015	606	40.08	6.24	3.66	23.48	9.28	4.21	1.18	84.18	35.55	6.18	7.03	63.75	63.00	71.50
FM 958 CK	589	40.61	<b>7.14</b>	<b>5.34</b>	30.60	<b>10.33</b>	<b>4.58</b>	1.15	<b>84.45</b>	<b>36.20</b>	5.53	7.08	54.50	62.25	63.00
PD 07040	582	38.81	6.10	4.38	27.85	9.56	4.11	1.18	<b>84.70</b>	34.00	6.20	7.00	64.75	66.50	70.50
DP 393 CK	582	40.05	6.03	4.46	29.75	8.93	4.22	1.12	<b>84.88</b>	34.60	<b>7.18</b>	7.08	51.50	62.25	58.25
GA 2015090	557	41.11	6.15	4.67	30.81	8.69	4.16	1.19	83.90	<b>36.83</b>	6.50	7.13	66.00	63.50	75.25
LA14063001	551	42.45	6.34	3.90	26.06	8.41	3.88	1.19	<b>84.73</b>	35.13	6.23	7.08	60.50	65.50	66.25
PD 2013016	550	40.15	<b>6.75</b>	<b>5.00</b>	29.95	<b>9.96</b>	<b>4.43</b>	1.24	<b>85.08</b>	<b>37.73</b>	5.05	6.78	<b>85.50</b>	<b>80.00</b>	<b>90.75</b>
Tamcot G11	539	40.81	6.11	4.18	27.98	8.68	3.83	1.13	82.60	33.20	5.55	<b>8.03</b>	32.25	38.50	45.25
TAM WK-11L	513	38.24	5.29	3.65	26.35	8.45	3.56	1.13	84.33	32.45	6.50	7.35	36.75	52.00	44.25
Acala 1517-08	504	38.28	5.70	4.13	27.78	9.07	4.12	1.13	83.53	34.03	5.73	7.20	43.00	49.25	53.25
TAM LBB130218	498	39.40	6.15	<b>4.80</b>	31.00	9.36	3.80	1.15	83.43	35.03	5.73	<b>7.70</b>	47.75	50.75	58.25
NM 16-13P1088B	471	38.23	6.18	<b>5.10</b>	31.55	<b>9.89</b>	4.21	1.11	83.70	34.73	6.15	6.95	44.75	51.50	55.00
PD 09046	422	36.76	5.59	4.43	29.26	9.53	3.97	1.21	<b>84.55</b>	<b>36.15</b>	5.38	7.08	<b>76.25</b>	<b>71.25</b>	<b>82.50</b>
TAM 13Q-51	322	37.46	5.27	3.40	24.06	8.71	3.51	1.21	<b>84.83</b>	<b>37.03</b>	5.93	7.05	66.25	<b>70.00</b>	72.75
<b>Mean</b>	639	40.98	6.42	4.43	28.33	9.13	4.19	1.18	84.39	34.94	6.26	7.09	60.37	63.03	67.44
<b>LSD (.05)</b>	233	1.98	0.88	1.22	ns	1.10	0.66	0.04	1.23	2.11	0.59	0.55	15.97	13.45	14.16
<b>Cultivar (P&gt;F)</b>	0.0001	<0.0001	<0.0001	0.0307	0.5542	<0.0001	0.0155	<0.0001	0.0009	<0.0001	<0.0001	0.0011	<0.0001	<0.0001	<0.0001
<b>CV(%)</b>	25.84	3.43	0.97	19.40	18.89	8.55	11.22	2.33	1.03	4.27	6.65	5.54	18.66	15.07	14.83
<b>R-Square</b>	0.56	0.75	0.57	0.38	0.25	0.51	0.40	0.74	0.46	0.51	0.80	0.48	0.67	0.58	0.67
<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 late season variables (root-knot nematode and target spot), which made plants highly susceptible to damage from 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).