

Table 10. Least square means for lint yield, yield components, and fiber quality traits in the 2021 RBTN at Mississippi State (USDA), Mississippi (Cooperator: Jack McCarty).

Entry	Lint Yield	Lint Percent	Lint Index	Boll Size	Seed per Boll	Seed Index	MIC	UHM	UI	STRN	ELO	SFC	QS1 <sup>1</sup>	QS2 <sup>1</sup>	QS3 <sup>1</sup>
	lb/A	%	grams	grams	#	grams	mic	inch	%	g/tex	%	%			
MS 2010-87-42	1130	45.23	<b>9.00</b>	5.84	29.37	10.90	<b>5.54</b>	1.20	<b>85.73</b>	35.98	5.73	5.03	53.50	<b>67.75</b>	58.00
MS 2010-87-37	1109	44.55	8.55	5.59	29.13	10.65	<b>5.30</b>	<b>1.24</b>	<b>84.93</b>	35.15	5.53	4.58	67.00	67.00	72.00
MS 2010-66-16	1094	45.27	8.94	5.93	30.08	10.80	<b>5.42</b>	1.22	<b>85.83</b>	<b>38.13</b>	5.83	4.65	62.50	<b>73.00</b>	67.00
GA 2016029	1085	45.05	8.40	5.88	<b>31.53</b>	10.25	<b>5.35</b>	1.22	<b>84.93</b>	36.45	6.03	5.38	58.75	64.75	65.75
DP 393 CK	1054	44.00	8.60	5.65	28.89	10.95	<b>5.51</b>	1.18	<b>85.05</b>	34.48	6.90	5.33	46.00	59.00	52.25
MS 2010-96-9	1036	46.08	<b>9.14</b>	5.94	29.92	10.70	<b>5.35</b>	1.17	84.38	35.18	6.40	<b>6.20</b>	43.50	53.75	52.75
MS 2010-28-27	1021	44.34	8.52	5.83	<b>30.35</b>	10.70	<b>5.42</b>	1.23	<b>84.73</b>	35.23	6.30	5.10	59.75	62.50	66.00
TAM 14B-72	1018	43.45	7.61	5.02	28.71	9.90	5.00	1.18	<b>85.05</b>	34.40	6.23	5.30	51.50	61.25	57.75
TAM 14E-12	995	44.95	8.37	5.52	29.65	10.25	5.19	1.14	83.30	33.88	6.63	<b>6.65</b>	34.25	42.25	47.25
UA 222 CK	981	42.76	8.33	5.69	29.26	<b>11.15</b>	5.03	<b>1.25</b>	84.53	33.65	<b>7.60</b>	4.85	<b>71.25</b>	65.00	<b>77.00</b>
CSX5432	974	<b>50.03</b>	<b>9.25</b>	4.95	26.80	9.25	4.97	<b>1.24</b>	84.20	34.65	5.90	5.63	65.75	61.00	73.25
GA 2016090	974	43.85	8.40	<b>6.08</b>	<b>31.77</b>	10.75	<b>5.28</b>	1.23	<b>84.98</b>	35.08	5.83	5.25	62.25	65.50	68.00
GA 2015026	957	44.70	7.40	5.08	<b>30.70</b>	9.15	4.95	1.22	<b>85.48</b>	34.30	5.93	4.90	67.75	<b>70.50</b>	71.25
FM 958 CK	921	42.84	8.51	<b>5.98</b>	<b>30.17</b>	<b>11.35</b>	<b>5.39</b>	1.19	84.50	36.50	5.35	5.30	49.00	58.00	58.00
Ark 1309-56	919	45.16	<b>9.14</b>	<b>6.04</b>	29.80	<b>11.10</b>	<b>5.40</b>	<b>1.26</b>	<b>85.28</b>	<b>38.78</b>	5.98	4.60	<b>71.00</b>	<b>74.25</b>	<b>77.50</b>
Ark 1317-31	917	41.19	7.96	5.91	<b>30.62</b>	<b>11.35</b>	4.76	<b>1.27</b>	<b>85.55</b>	<b>36.78</b>	6.50	4.15	<b>83.50</b>	<b>79.50</b>	<b>87.50</b>
TAMLBB16507	915	40.32	7.97	<b>6.38</b>	<b>32.23</b>	<b>11.80</b>	4.96	1.22	84.20	34.63	5.70	5.35	61.50	59.50	69.50
OA-13	889	44.96	8.95	5.33	26.78	10.95	<b>5.70</b>	1.19	<b>85.43</b>	<b>36.98</b>	6.35	5.05	46.00	63.50	52.50
LA19073070	872	42.55	8.05	<b>6.06</b>	<b>32.12</b>	10.85	5.05	1.15	<b>85.53</b>	<b>37.33</b>	6.73	4.43	44.50	64.25	52.50
MS 2010-87-5	854	45.41	8.64	5.78	<b>30.34</b>	10.40	<b>5.33</b>	1.19	<b>85.03</b>	35.38	6.18	5.15	51.25	61.50	58.00
LA19073002	852	42.13	8.08	<b>6.11</b>	<b>31.90</b>	<b>11.10</b>	<b>5.49</b>	1.15	83.63	34.75	5.55	<b>5.88</b>	32.25	43.75	43.75
DP 493 CK	831	44.67	7.56	5.34	<b>31.54</b>	9.35	5.22	1.17	83.78	34.53	5.45	<b>6.75</b>	43.75	49.25	54.25
TAMLBB17206	831	40.50	7.62	5.55	29.60	<b>11.20</b>	4.88	1.20	84.40	34.75	5.73	<b>6.30</b>	56.75	59.25	65.00
Ark 1301-16	822	44.69	<b>9.65</b>	<b>6.42</b>	29.73	<b>11.95</b>	<b>5.44</b>	1.23	<b>84.80</b>	33.43	6.88	5.18	59.00	62.00	64.50
Ark 1311-18	805	46.45	8.62	5.53	29.81	9.95	5.23	<b>1.26</b>	84.25	33.40	6.53	4.75	68.00	61.50	74.00
OA-11	776	46.39	8.65	5.12	27.43	10.00	<b>5.51</b>	1.17	84.18	36.08	<b>7.25</b>	5.35	38.75	51.50	49.25
Ark 1308-58	748	43.83	8.26	5.38	28.62	10.60	4.99	<b>1.24</b>	<b>85.18</b>	33.35	<b>7.40</b>	5.00	<b>70.75</b>	<b>69.00</b>	74.25
OA-133	699	43.09	7.05	5.13	<b>31.82</b>	9.30	4.82	1.18	83.98	33.18	5.95	<b>6.10</b>	51.00	52.75	59.75
<b>Mean</b>	931	44.23	8.40	5.68	29.95	10.59	5.23	1.21	84.74	35.23	6.23	5.29	56.10	61.53	63.16
<b>LSD (.05)</b>	ns	0.95	0.67	0.47	2.12	0.92	0.42	0.04	1.12	2.03	0.36	0.90	13.56	12.11	11.40
<b>Entry (P&gt;F)</b>	0.2217	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.0003	<0.0001	0.0003	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
<b>CV(%)</b>	21.93	1.53	5.67	5.86	5.04	6.18	5.73	2.12	0.94	4.10	4.09	12.12	17.18	13.98	12.83
<b>R-Square</b>	0.31	0.92	0.70	0.67	0.59	0.64	0.52	0.74	0.52	0.60	0.88	0.61	0.71	0.60	0.71
<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> QS1, QS2, and QS3 (Quality Score) - 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).