

Table 7. Least square means for lint yield, yield components and fiber quality traits in the 2022 RBTN at Las Cruces, New Mexico (Cooperator: Jinfa Zhang).

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	%	%			
OA-22-3	<b>1678</b>	<b>46.14</b>	6.91	5.40	<b>28.87</b>	7.95	4.08	1.253	84.03	29.73	6.40	5.58	51.00	51.25	61.00
CSX5432	<b>1594</b>	<b>46.20</b>	<b>8.41</b>	5.40	23.74	9.61	4.06	1.322	<b>86.20</b>	30.08	6.75	4.10	<b>77.00</b>	<b>77.00</b>	<b>78.75</b>
Ark 1414-43	<b>1584</b>	40.77	7.71	<b>6.36</b>	<b>26.90</b>	11.04	4.26	1.323	85.03	29.10	6.48	3.95	<b>73.75</b>	<b>67.50</b>	<b>78.75</b>
OA-22-2	<b>1568</b>	<b>44.16</b>	7.05	5.46	<b>27.11</b>	8.84	4.21	1.271	84.10	29.23	6.43	5.55	56.25	53.75	65.50
MS 2010-87-37	<b>1492</b>	43.53	<b>8.38</b>	<b>6.48</b>	<b>26.94</b>	10.74	<b>4.48</b>	1.287	84.58	29.95	6.53	4.50	62.50	59.75	69.75
Ark 1414-28	<b>1485</b>	41.80	<b>8.35</b>	<b>6.51</b>	26.10	11.29	<b>4.47</b>	1.284	<b>85.45</b>	30.00	6.68	4.63	62.75	<b>64.25</b>	66.00
MS 2010-28-27	<b>1445</b>	41.78	7.63	6.31	<b>27.61</b>	10.48	<b>4.47</b>	1.245	<b>85.23</b>	29.95	7.18	5.43	52.25	59.00	57.50
Ark 1410-56	<b>1418</b>	40.36	<b>8.45</b>	5.93	22.83	<b>12.27</b>	<b>4.50</b>	1.291	<b>86.55</b>	<b>33.43</b>	6.95	4.55	68.25	<b>76.50</b>	70.75
Ark 1406-21	<b>1418</b>	43.95	7.68	6.29	<b>28.89</b>	9.51	<b>4.42</b>	1.307	84.90	28.68	7.10	4.10	69.00	<b>64.75</b>	75.00
Ark 1414-47	<b>1388</b>	40.79	7.92	<b>6.37</b>	<b>26.27</b>	11.18	4.18	1.324	<b>85.30</b>	29.68	6.68	3.90	<b>75.00</b>	<b>70.00</b>	<b>79.50</b>
MS2010-87-44	<b>1388</b>	41.38	8.10	<b>6.44</b>	<b>26.31</b>	11.33	<b>4.48</b>	1.298	<b>86.18</b>	28.78	6.98	4.18	68.75	<b>72.25</b>	69.75
DP 393 CK	1321	41.36	7.97	<b>6.59</b>	<b>27.34</b>	11.09	<b>4.47</b>	1.251	84.20	28.73	7.25	<b>5.83</b>	51.00	52.75	60.50
AU72028	1317	41.30	7.78	6.30	<b>26.82</b>	10.88	<b>4.45</b>	1.268	<b>85.23</b>	29.10	7.00	4.80	58.50	<b>63.00</b>	64.75
AU90098	1295	41.93	<b>8.84</b>	<b>6.60</b>	25.06	12.05	<b>4.58</b>	1.281	<b>85.83</b>	29.88	6.45	4.58	60.50	<b>64.75</b>	65.50
MS 2010-87-42	1293	42.43	8.16	<b>6.49</b>	<b>27.02</b>	10.93	<b>4.49</b>	1.286	<b>85.88</b>	29.00	7.05	4.43	64.50	<b>69.00</b>	67.50
Ark 1410-32	1275	42.31	<b>8.68</b>	<b>6.46</b>	25.17	11.63	<b>4.29</b>	1.286	85.03	29.50	6.13	4.55	63.50	<b>63.25</b>	69.50
MS 2010-96-8	1261	41.88	8.11	<b>6.43</b>	<b>26.57</b>	11.07	<b>4.51</b>	1.220	84.63	29.60	6.80	<b>5.93</b>	44.00	52.75	53.00
TAM 17 SHK-43	1216	41.53	8.24	<b>6.88</b>	<b>27.72</b>	11.41	4.25	1.321	<b>85.30</b>	29.98	6.50	3.95	<b>74.00</b>	<b>69.75</b>	<b>78.50</b>
FM 958 CK	1196	40.63	8.19	<b>6.42</b>	25.55	11.62	<b>4.47</b>	1.269	84.28	28.88	6.83	4.93	53.75	53.50	62.00
MS 2010-66-16	1184	<b>44.34</b>	<b>8.54</b>	<b>6.73</b>	<b>27.91</b>	10.56	<b>4.31</b>	1.231	<b>85.58</b>	30.40	6.50	5.58	49.50	61.50	55.25
DP 493 CK	1177	41.82	7.48	6.11	<b>27.29</b>	10.08	4.25	1.261	83.23	27.38	6.33	<b>6.08</b>	49.25	41.75	57.00
OA-22-1	1154	41.47	7.12	6.01	<b>28.03</b>	9.91	3.78	1.313	<b>85.78</b>	30.20	6.33	3.93	70.00	<b>71.50</b>	73.00
TAM 17 WSH-12	1072	<b>45.76</b>	8.16	5.31	23.88	9.53	4.11	1.220	83.75	26.65	<b>7.70</b>	<b>6.65</b>	39.25	34.75	43.25
TAM 17 WSE-66	998	38.65	8.18	<b>7.02</b>	<b>26.58</b>	<b>12.90</b>	3.78	<b>1.438</b>	85.08	<b>31.23</b>	5.95	3.78	<b>87.00</b>	<b>73.25</b>	<b>90.25</b>
TAM 17 WSE-68	747	36.76	7.78	<b>6.94</b>	<b>26.23</b>	<b>13.21</b>	3.75	<b>1.414</b>	83.85	30.68	6.23	3.80	<b>83.25</b>	<b>63.25</b>	<b>90.50</b>
TAM 17 WSG-51	683	36.95	7.15	6.30	26.08	11.97	3.51	<b>1.417</b>	84.83	29.43	7.13	3.80	<b>74.75</b>	<b>66.75</b>	<b>79.00</b>
UA 222 CK	673	39.44	7.76	6.23	25.37	11.79	4.25	1.281	84.50	27.90	<b>8.02</b>	4.83	59.00	55.75	65.00
TAM 18 SHA-27	656	42.29	7.99	6.08	25.71	10.77	<b>4.38</b>	1.261	85.18	<b>31.40</b>	6.53	5.15	56.75	62.00	63.00
<b>Mean</b>	1249	41.85	7.95	6.28	26.43	10.92	4.26	1.294	84.99	29.59	6.74	4.75	62.68	61.97	68.21
<b>LSD (.05)</b>	339	2.07	0.56	0.67	2.79	0.98	0.30	0.046	1.35	2.24	0.47	1.07	14.95	14.19	12.59
<b>Entry (P&gt;F)</b>	<.0001	<.0001	<.0001	<.0001	0.0056	<.0001	<.0001	<.0001	0.0002	0.0006	<.0001	<.0001	<.0001	<.0001	<.0001
<b>CV(%)</b>	19.29	3.52	4.97	7.61	7.50	6.39	5.07	2.52	1.13	5.39	4.97	16.06	16.95	16.28	13.12
<b>R-Square</b>	0.65	0.77	0.68	0.55	0.42	0.79	0.68	0.79	0.49	0.46	0.72	0.60	0.62	0.56	0.66
<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).