

Table 17. Least square means for lint yield, yield components, and fiber quality traits in the 2016 RBTN trial conducted at West Side, CA. (Cooperator: Bob Hutmacher)

Cultivar	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>
	lbs/a	%	grams	grams	#	grams	mic	inch	%	g/tex	%	%	%	%	%
MD 16-1	<b>2743</b>	<b>45.58</b>	<b>8.50</b>	6.18	33.11	10.02	4.77	1.16	<b>83.95</b>	34.05	5.30	7.20	48.00	58.75	56.25
DP 393 CK	<b>2726</b>	43.44	7.79	5.17	31.25	10.13	5.02	1.18	<b>84.03</b>	34.33	6.03	7.65	50.50	59.75	57.25
Ark 0824-89	<b>2717</b>	43.75	<b>9.02</b>	<b>6.48</b>	31.43	<b>11.49</b>	<b>5.34</b>	1.20	<b>84.23</b>	<b>35.58</b>	5.78	7.48	50.75	62.00	57.75
GA 2011113	<b>2700</b>	<b>45.75</b>	7.94	5.48	31.61	9.30	5.05	1.17	83.70	33.78	5.75	7.45	44.50	55.00	52.75
Ark 0812-87ne	<b>2688</b>	<b>44.51</b>	<b>8.65</b>	5.97	32.59	10.63	4.91	1.20	83.25	33.43	5.98	<b>7.90</b>	56.25	56.25	64.50
UA 222 CK	<b>2667</b>	43.83	<b>8.45</b>	6.26	32.58	10.69	5.02	1.21	<b>83.88</b>	33.33	<b>6.75</b>	7.53	59.00	61.50	65.00
AU77082	<b>2626</b>	<b>44.42</b>	7.98	5.65	30.33	9.85	4.96	1.19	83.30	32.78	4.90	7.58	51.75	55.00	60.25
NM 13G1029	<b>2623</b>	44.18	7.52	5.40	31.71	9.39	4.66	1.21	83.38	<b>36.48</b>	5.25	7.85	62.00	61.75	71.50
Ark 0818-23	<b>2619</b>	42.92	7.82	6.31	<b>34.61</b>	10.33	4.70	1.24	<b>84.00</b>	<b>35.88</b>	5.48	7.40	74.00	70.25	80.00
GA 2012082	2547	<b>45.13</b>	<b>8.55</b>	6.07	32.19	10.29	<b>5.09</b>	1.17	82.73	32.20	6.08	<b>7.88</b>	41.75	47.50	53.00
Ark 0822-48	2534	43.96	<b>8.71</b>	5.96	30.12	11.04	<b>5.28</b>	1.21	83.03	34.85	<b>6.45</b>	<b>8.00</b>	49.50	52.75	59.00
MD 16-2	2525	41.42	7.77	5.98	31.94	10.86	4.30	1.25	83.30	<b>37.08</b>	5.33	7.30	76.25	67.75	85.25
MS 0043-28-1	2515	42.66	7.74	5.58	30.86	10.29	<b>5.16</b>	1.15	83.75	33.30	5.40	7.73	37.50	52.25	46.00
NM 13G2019	2504	43.35	7.33	5.05	29.79	9.47	4.66	1.25	83.83	<b>36.20</b>	5.15	7.53	76.50	70.50	83.25
FM 958 CK	2482	42.21	8.32	<b>6.42</b>	32.53	<b>11.29</b>	4.91	1.18	82.75	32.23	4.35	<b>8.10</b>	48.00	49.50	58.25
GA 2012050	2451	43.82	8.06	5.81	31.65	10.24	5.00	1.19	<b>84.38</b>	<b>35.65</b>	6.08	7.25	53.75	64.50	60.00
AU82074	2426	40.07	7.28	5.61	30.95	10.78	4.67	1.21	<b>85.25</b>	34.45	5.15	7.20	67.75	<b>75.25</b>	70.00
GA 2012141	2386	43.79	7.85	5.77	32.25	9.97	4.96	1.19	<b>84.55</b>	33.63	5.45	7.48	56.00	65.25	60.75
MS 0152-3-11	2384	44.18	8.20	5.74	31.11	10.26	4.82	1.23	<b>84.15</b>	32.98	5.38	7.58	66.50	66.50	71.50
SG 105 CK	2352	40.94	7.82	5.89	30.90	11.19	<b>5.20</b>	1.16	<b>84.43</b>	32.93	5.88	7.33	40.75	58.00	46.50
Ark 0819-89	2233	39.40	7.72	6.02	30.72	<b>11.77</b>	<b>5.34</b>	1.22	<b>84.93</b>	<b>36.50</b>	6.05	7.25	58.25	70.50	62.25
PD07040	2223	40.32	7.50	5.96	32.06	10.99	4.66	1.25	<b>84.23</b>	35.08	5.38	7.23	75.00	72.25	80.00
DP 493 CK	2120	<b>44.45</b>	7.27	5.49	33.59	8.95	<b>5.10</b>	1.12	81.98	32.25	4.75	<b>8.53</b>	26.50	35.00	41.00
PD08028	2081	38.49	7.12	<b>7.00</b>	<b>37.84</b>	<b>11.35</b>	4.57	1.26	<b>85.18</b>	<b>37.58</b>	5.30	7.00	<b>84.75</b>	<b>84.25</b>	<b>88.25</b>
TAM13Q-18	2058	39.23	7.45	6.09	30.26	<b>11.46</b>	4.74	1.19	83.55	34.23	5.08	7.68	55.75	58.00	63.75
TAM11L-24	2054	37.43	7.34	6.19	31.60	<b>12.16</b>	4.47	<b>1.34</b>	<b>85.13</b>	<b>37.18</b>	4.70	6.35	<b>95.50</b>	<b>88.25</b>	<b>97.75</b>
PD09084	2026	38.79	7.03	<b>6.69</b>	<b>37.05</b>	11.01	4.76	1.23	83.78	<b>35.65</b>	5.05	7.18	68.25	66.25	75.75
PD09046	1354	34.96	6.04	5.42	31.31	11.11	4.35	<b>1.30</b>	<b>83.95</b>	33.73	4.00	7.23	<b>87.50</b>	<b>74.00</b>	<b>91.50</b>
<b>Mean</b>	2406	42.25	7.81	5.92	32.07	10.58	4.87	1.21	83.88	34.54	5.43	7.49	59.38	62.80	66.39
<b>Cultivar LSD (.05)</b>	190	1.35	0.62	0.61	3.59	0.93	0.27	0.04	1.39	2.40	0.55	0.66	15.19	14.69	11.99
<b>Cultivar (P&gt;F)</b>	<0.0001	<0.0001	<0.0001	<0.0001	0.0051	<0.0001	<0.0001	<0.0001	0.0012	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
<b>CV(%)</b>	5.61	2.28	5.66	7.11	7.96	6.23	3.99	2.54	1.18	4.93	7.23	6.28	18.19	16.67	12.83
<b>R-Square</b>	0.88	0.91	0.73	0.62	0.47	0.66	0.74	0.77	0.45	0.55	0.77	0.51	0.75	0.61	0.80
<b>Reps</b>	4	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>1</sup> QS1, QS2, and QS3 - 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 (0.15), and strength (0.10) ; QS2 - fiber length (0.2), mic (0.1), UI (0.4), and strength (0.3); QS3 - fiber length (0.45), mic (0.25), UI (0.0), and strength (0.3).