

Table 16. Least square means for lint yield, yield components, and fiber quality traits in the 2016 RBTN trial conducted at Tifton, GA. (Cooperator: Peng Chee)

Cultivar	Lint Yield ¹	Lint Percent	Lint Index	Boll Size	Seed per Boll	Seed Index	MIC	UHM	UI	STRN	ELO	SFC	QS1 ²	QS2 ²	QS3 ²
	lbs/a	%	grams	grams	#	grams	mic	inch	%	g/tex	%	%	%	%	%
Ark 0812-87ne	.	41.04	7.52	4.84	26.47	10.65	4.28	1.20	84.75	32.45	5.23	7.43	59.75	59.25	67.00
Ark 0818-23	.	37.62	6.71	5.06	28.49	10.88	4.32	1.22	85.90	33.48	4.95	6.90	74.00	73.00	77.25
Ark 0819-89	.	35.84	5.79	5.42	33.47	10.19	4.82	1.19	85.93	34.50	5.80	6.80	61.50	69.00	66.25
Ark 0822-48	.	38.78	7.00	5.77	32.12	10.90	4.37	1.25	84.93	34.33	5.93	7.10	79.50	69.25	85.00
Ark 0824-89	.	38.60	7.40	5.57	29.15	11.61	5.01	1.23	86.24	35.36	5.22	6.81	70.78	75.52	73.83
AU77082	.	38.10	6.72	5.00	28.56	10.73	4.92	1.18	84.70	32.55	4.73	7.13	53.25	56.00	60.75
AU82074	.	36.37	6.55	5.16	28.72	11.32	4.63	1.20	85.58	33.28	4.80	6.85	67.00	67.75	71.25
DP 393 CK	.	38.22	6.76	5.26	30.02	10.72	4.88	1.19	85.00	34.00	5.58	7.03	58.25	61.25	65.50
DP 493 CK	.	42.46	5.94	4.50	32.24	7.89	5.49	1.10	83.93	30.55	4.60	7.73	18.75	37.00	30.50
FM 958 CK	.	37.83	6.72	5.20	29.25	10.91	4.60	1.18	84.50	33.85	4.13	7.33	58.00	56.75	66.50
GA 2011113	.	40.15	6.09	5.19	34.56	8.98	4.90	1.15	84.81	32.76	5.18	7.06	44.54	53.34	52.37
GA 2012050	.	39.02	6.86	5.52	31.38	10.59	5.09	1.18	85.83	34.88	5.95	6.45	52.75	64.75	58.00
GA 2012082	.	40.04	7.51	5.60	30.06	11.04	4.83	1.16	84.65	31.20	5.38	7.18	49.50	54.25	57.75
GA 2012141	.	38.22	6.54	5.26	30.69	10.44	5.09	1.19	85.35	34.48	5.03	6.95	54.25	62.25	60.75
MD 16-1	.	40.88	7.42	5.24	28.92	10.54	4.85	1.12	85.10	31.88	5.03	6.60	40.75	53.75	48.75
MD 16-2	.	37.48	6.75	5.35	29.64	11.11	3.82	1.21	84.95	36.43	5.18	6.95	64.50	65.50	73.00
MS 0043-28-1	.	38.22	6.51	4.96	29.29	10.29	5.13	1.16	85.10	31.75	5.15	6.98	43.25	54.50	50.25
MS 0152-3-11	.	38.56	6.66	5.27	30.54	10.44	4.99	1.22	85.00	32.10	5.03	7.00	64.25	62.50	70.00
NM 13G1029	.	36.88	5.65	4.23	27.21	9.33	4.83	1.24	85.58	37.45	5.00	6.65	73.00	73.75	79.50
NM 13G2019	.	39.61	6.62	4.73	28.18	9.91	4.71	1.23	84.93	35.10	4.78	7.20	73.75	67.50	80.50
PD07040	.	35.51	6.09	5.35	31.13	10.80	4.58	1.20	84.55	33.03	4.70	7.00	64.00	59.25	71.50
PD08028	.	35.97	6.05	5.34	31.82	10.62	4.86	1.19	85.08	35.20	5.05	7.00	57.25	62.00	65.25
PD09046	.	32.62	5.33	5.22	31.83	10.83	4.68	1.23	85.20	35.75	4.10	6.90	74.00	70.50	80.50
PD09084	.	34.54	5.70	4.93	29.87	10.66	4.90	1.18	85.13	34.63	5.38	6.85	53.00	60.50	60.75
SG 105 CK	.	37.83	6.97	5.01	27.39	11.22	5.00	1.15	85.58	32.10	5.38	6.70	44.50	58.75	50.50
TAM11L-24	.	33.74	6.39	4.94	26.08	12.37	3.91	1.32	85.63	36.10	4.33	6.30	86.75	78.75	90.75
TAM13Q-18	.	34.91	6.46	5.09	27.61	11.85	4.45	1.19	85.33	33.58	4.93	7.10	66.00	66.00	71.75
UA 222 CK	.	38.54	6.32	4.33	26.51	9.88	4.50	1.20	84.65	33.10	6.00	7.18	63.75	60.00	71.00
Mean	.	37.77	6.54	5.12	29.69	10.60	4.73	1.19	85.14	33.78	5.09	6.97	59.66	62.59	66.31
Cultivar LSD (.05)	.	1.85	0.75	ns	ns	1.03	0.35	0.04	1.00	1.86	0.46	0.39	15.16	11.37	13.84
Cultivar (P>F)	.	<0.0001	<0.0001	0.3951	0.5212	<0.0001	<0.0001	<0.0001	0.0080	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
CV(%)	.	3.38	8.09	13.50	14.26	6.84	5.25	2.47	0.82	3.86	6.31	3.92	17.83	12.77	14.65
R-Square	.	0.81	0.61	0.33	0.31	0.65	0.75	.74	0.43	0.69	0.76	0.61	0.97	0.60	0.70
Reps	.	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).

¹ Lint yield excluded from analysis due to extreme variability (flooding event prior to harvest).

² 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).