

Table 3. Least square means for yield components and fiber quality traits in the 2019 RBTN at Alexandria, Louisiana (Cooperator: Gerald Myers).

Entry	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
	lb/A	%	grams	grams	#	grams	mic	inch	%	g/tex	%	%			
13AFX13-12-5	—	35.45	6.07	4.95	28.87	11.03	4.30	1.30	87.75	33.45	3.98	6.40	74.75	73.25	78.75
13AFX6-27-2	—	34.37	6.91	5.62	27.96	13.15	4.78	1.35	87.33	35.15	5.30	6.28	84.25	75.50	89.00
Ark 1102-55	—	39.54	7.48	5.59	29.55	11.38	4.80	1.26	87.75	28.93	5.23	6.23	58.25	65.75	62.75
Ark 1112-59	—	40.03	7.97	5.99	30.08	11.89	4.78	1.28	88.53	34.85	4.53	5.75	69.00	76.75	71.75
Ark 1114-21	—	41.58	7.74	5.86	31.34	10.70	4.65	1.25	86.13	30.18	5.03	6.45	54.25	53.00	63.75
Ark 1115-36	—	43.67	7.87	4.96	27.52	10.12	5.23	1.30	87.05	30.65	5.80	6.08	59.50	61.50	65.00
Ark 1117-60	—	39.68	8.24	6.40	30.80	12.48	5.30	1.28	88.63	32.90	4.73	5.73	57.50	71.00	59.00
Ark 1124-50	—	40.16	7.43	5.64	30.50	11.01	4.93	1.31	87.15	31.45	3.70	6.20	69.50	65.50	74.50
CSX8308	—	43.98	7.29	5.04	30.44	9.22	5.08	1.29	87.60	32.35	3.75	6.15	63.00	66.75	67.00
DP 393 CK	—	39.70	7.44	5.29	28.20	11.36	5.17	1.24	87.42	32.52	6.08	6.31	46.75	59.06	52.43
DP 493 CK	—	41.48	6.92	5.15	30.90	9.70	5.28	1.19	86.13	31.13	3.70	6.73	29.25	43.00	40.25
FM 958 CK	—	38.27	7.52	5.86	29.86	12.07	5.03	1.26	85.65	32.03	3.55	6.10	49.50	48.00	60.25
GA2016024	—	40.55	7.41	5.43	29.84	10.84	4.93	1.26	85.68	33.30	4.43	6.53	51.25	50.00	62.00
GA2016099	—	40.68	7.55	5.49	29.57	10.93	5.08	1.30	86.55	32.00	4.75	6.43	60.25	58.50	67.25
GA2016103	—	40.27	6.87	5.09	29.83	10.13	5.00	1.28	87.05	33.18	4.18	6.13	60.25	62.00	66.25
MS 2010-87-37	—	41.62	7.64	5.37	29.19	10.67	5.10	1.29	87.03	32.05	4.30	6.30	59.00	61.00	64.75
TAM 12J-39	—	37.14	7.78	6.56	31.30	13.10	5.33	1.23	86.30	35.98	3.58	5.98	38.00	53.00	49.75
TAM 13S-03	—	38.61	7.09	5.21	27.69	11.47	4.73	1.25	86.70	31.65	6.68	5.98	52.00	56.25	60.25
TAMLBB15905	—	36.87	6.86	5.16	27.73	11.67	4.53	1.34	88.55	35.33	4.48	5.43	88.50	85.25	90.25
TAMLBB16507	—	36.82	7.40	6.16	30.66	12.65	4.75	1.26	85.83	32.58	3.93	6.10	53.75	50.75	64.00
UA 222 CK	—	39.11	7.83	6.08	30.48	12.18	5.08	1.26	86.83	31.20	6.40	6.18	51.50	56.75	58.75
Mean	—	39.50	7.40	5.57	29.63	11.32	4.94	1.27	87.03	32.52	4.67	6.16	58.57	61.55	65.13
LSD (.05)	—	1.20	0.46	0.72	3.54	0.80	0.25	0.04	1.50	1.68	0.64	0.67	13.13	13.84	10.14
Entry (P>F)	—	<0.0001	<0.0001	<0.0001	0.5639	<0.0001	<0.0001	<0.0001	0.0007	<0.0001	<0.0001	0.1052	<0.0001	<0.0001	<0.0001
CV(%)	—	2.15	4.33	8.95	8.22	5.03	3.55	2.02	1.21	3.62	9.65	7.66	15.65	15.73	10.88
R-Square	—	0.92	0.77	0.57	0.31	0.83	0.76	0.77	0.60	0.76	0.85	0.49	0.78	0.69	0.80
Reps	—	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).

¹ Lint yield excluded due to excessive variability.

² 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).