

Table 8. Least square means for lint yield, yield components, and fiber quality traits in the 2019 RBTN at Las Cruces, New Mexico (Cooperator: Jinfa Zhang).

Entry	Lint Yield ¹	Lint Percent	Lint Index	Boll Size	Seed per Boll	Seed Index	MIC	UHM	UI	STRN	ELO	SFC	QS1 ¹	QS2 ¹	QS3 ¹
	lb/A	%	grams	grams	#	grams	mic	inch	%	g/tex	%	%			
CSX8308	1574	45.00	6.16	4.62	34.23	7.10	4.61	1.26	84.25	34.28	6.13	7.00	70.25	64.00	78.00
Ark 1124-50	1524	43.28	7.50	5.31	30.95	9.00	4.66	1.24	85.15	32.73	6.25	6.98	67.00	67.75	71.50
DP 493 CK	1440	41.62	5.99	4.95	34.99	7.50	4.65	1.16	82.78	30.03	6.38	7.98	37.50	40.75	51.00
13AFX13-12-5	1424	39.08	6.31	5.27	32.74	9.20	4.21	1.29	84.68	32.55	6.53	6.65	81.75	70.50	86.75
13AFX6-27-2	1414	37.43	7.17	5.94	31.03	11.10	4.65	1.37	85.95	35.55	7.78	5.95	92.50	84.50	94.75
Ark 1102-55	1378	41.02	7.07	4.67	27.04	9.30	4.36	1.24	85.20	29.63	7.25	7.15	68.50	68.50	73.25
TAM 12J-39	1324	40.73	7.01	5.61	32.69	9.50	4.54	1.20	85.28	36.75	6.45	6.80	60.25	69.25	68.00
GA2016024	1307	44.28	7.82	4.66	26.68	9.00	4.67	1.22	84.78	32.18	7.15	7.28	60.00	63.00	66.75
GA2016103	1304	41.47	7.24	4.74	27.11	9.30	4.90	1.23	84.18	32.10	6.57	7.30	56.75	57.00	64.50
TAM 13S-03	1223	39.28	7.05	4.89	27.37	10.00	4.46	1.19	84.88	30.58	7.78	6.83	52.50	59.75	59.50
MS 2010-87-37	1193	43.39	7.62	5.16	29.49	9.10	5.01	1.23	84.73	33.83	6.20	6.85	55.75	61.50	63.00
Ark 1112-59	1184	41.32	7.38	5.52	30.91	9.70	4.79	1.20	85.00	34.43	6.90	7.17	53.00	61.25	60.00
GA2016099	1171	41.98	7.27	4.90	28.39	9.00	4.69	1.24	84.93	34.55	6.65	6.95	64.50	66.25	70.75
Ark 1114-21	1141	43.58	7.53	5.35	30.89	8.60	4.51	1.24	84.13	30.48	7.25	6.95	63.25	59.00	71.00
Ark 1117-60	1117	42.11	7.82	5.23	28.44	10.10	5.03	1.21	84.58	34.28	6.50	7.03	50.25	58.00	58.25
UA 222 CK	1115	40.18	7.18	5.39	30.70	9.70	4.65	1.24	85.13	32.43	7.82	7.10	66.00	66.50	70.25
FM 958 CK	1106	42.10	8.53	5.18	26.24	10.40	4.82	1.22	83.90	33.65	5.95	7.30	54.25	54.50	63.75
DP 393 CK	1025	40.62	7.36	5.29	29.57	9.30	4.91	1.17	84.00	32.43	6.83	7.33	39.50	49.00	49.50
Ark 1115-36	888	44.81	7.73	5.26	30.76	8.70	4.87	1.25	86.20	32.38	7.00	6.70	68.00	73.75	70.00
TAMLBB16507	708	37.64	6.06	5.20	32.39	9.10	4.07	1.24	84.03	33.30	6.55	7.45	59.25	57.00	68.00
TAMLBB15905	620	41.01	7.45	5.11	28.34	10.10	4.80	1.25	85.35	35.90	6.40	6.55	67.75	71.50	73.25
Mean	1199	41.52	7.20	5.15	30.05	9.28	4.66	1.23	84.72	33.05	6.78	7.01	61.36	63.01	68.18
LSD (.05)	300	2.63	1.00	0.83	6.11	0.92	0.30	0.04	1.57	2.89	0.45	0.50	16.59	15.01	14.19
Entry (P>F)	<0.0001	<0.0001	0.0002	0.2083	0.1886	<0.0001	<0.0001	<0.0001	0.0343	<0.0001	<0.0001	<0.0001	<0.0001	0.0005	<0.0001
CV(%)	17.69	4.48	9.79	11.39	14.37	7.04	4.55	2.51	1.31	6.18	4.71	5.02	19.12	16.84	14.71
R-Square	0.64	0.64	0.53	0.46	0.48	0.73	0.67	0.73	0.40	0.54	0.80	0.63	0.61	0.51	0.60
Reps	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).

¹ 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).