

Table 10. Least square means for lint yield, yield components, and fiber quality traits in the 2019 RBTN at Maricopa, Arizona (Cooperator: Alison Thompson).

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	%	%			
DP 493 CK	979	43.94	5.99	3.49	25.53	7.35	5.47	1.04	79.68	28.00	5.45	10.45	24.25	30.50	33.25
Ark 1115-36	942	44.92	6.43	3.59	25.75	7.59	5.34	1.13	83.03	30.60	6.20	8.18	61.25	72.00	62.50
MS 2010-87-37	942	42.02	6.79	3.84	23.78	9.07	5.14	1.13	82.45	30.95	5.55	8.48	61.50	68.25	64.50
Ark 1117-60	908	41.35	6.91	3.79	22.83	9.48	4.96	1.14	81.98	32.13	5.73	8.73	65.75	66.75	70.00
DP 393 CK	891	41.21	7.69	3.82	21.63	9.09	5.02	1.11	82.15	32.13	6.00	8.68	57.00	65.25	63.00
TAM 13S-03	875	39.87	7.09	3.59	20.72	10.26	4.96	1.09	81.35	29.20	6.03	8.68	48.25	53.25	54.00
TAM 12J-39	873	41.73	7.38	3.99	22.72	9.97	5.53	1.08	82.35	33.73	5.48	8.33	41.25	60.75	47.00
Ark 1112-59	860	41.13	7.06	4.18	24.43	9.68	5.09	1.09	81.48	30.43	5.70	8.95	48.00	56.50	55.25
13AFX13-12-5	855	36.29	5.71	3.51	22.64	9.68	4.67	1.11	80.50	30.85	5.23	9.80	56.50	55.50	65.25
CSX8308	850	44.94	6.75	3.17	21.15	7.99	5.28	1.16	80.03	32.08	5.33	9.38	60.50	52.00	69.75
Ark 1102-55	823	39.98	6.68	3.53	21.19	9.72	4.83	1.11	80.95	28.35	5.75	9.55	53.00	44.25	53.00
GA2016099	815	41.18	6.70	3.85	23.71	9.27	4.92	1.12	81.85	32.55	5.98	8.98	60.00	64.25	66.00
GA2016103	810	41.10	6.19	3.26	22.05	8.53	5.29	1.10	80.83	30.65	5.65	9.50	46.00	50.75	54.75
Ark 1114-21	808	41.89	6.41	3.92	25.69	8.73	4.73	1.13	80.95	30.85	5.83	9.30	59.00	52.00	61.00
13AFX6-27-2	799	36.36	6.24	4.13	24.14	10.53	5.04	1.19	82.90	36.95	6.10	8.13	81.00	83.25	84.25
UA 222 CK	771	39.09	6.21	3.64	23.04	9.39	5.01	1.11	81.78	31.62	6.18	8.90	57.25	62.25	62.75
Ark 1124-50	737	41.82	6.52	3.74	24.01	8.74	5.13	1.14	81.85	30.93	5.48	8.78	61.50	64.50	66.75
FM 958 CK	681	38.38	6.28	3.82	23.69	9.78	4.99	1.11	81.73	29.15	5.43	9.00	54.25	55.50	56.25
GA2016024	662	40.93	6.97	3.61	21.63	9.74	4.77	1.12	81.98	31.50	5.38	8.63	64.25	66.00	68.75
TAMLBB15905	571	37.38	5.92	3.91	24.69	9.66	4.76	1.18	82.85	35.90	5.80	7.88	84.25	84.00	87.75
TAMLBB16507	519	38.02	6.14	4.00	24.86	9.72	4.56	1.11	79.88	31.05	5.58	9.75	55.25	50.25	66.25
Mean	808	40.65	6.57	3.73	23.33	9.24	5.02	1.12	81.55	31.41	5.70	8.95	57.14	59.89	62.48
LSD (.05)	162	1.14	1.20	0.44	4.62	1.32	0.37	0.06	1.80	3.16	0.36	1.01	21.68	21.23	19.53
Entry (P>F)	<0.0001	<0.0001	0.1645	0.0012	0.5870	0.0003	<0.0001	0.0016	0.0052	<0.0001	<0.0001	0.0004	0.0017	0.0018	0.0009
CV(%)	14.14	1.99	12.92	8.38	14.00	10.10	5.19	3.54	1.56	7.12	4.44	8.01	26.82	25.06	22.10
R-Square	0.60	0.93	0.32	0.50	0.27	0.53	0.57	0.50	0.45	0.56	0.64	0.53	0.49	0.48	0.50
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).