Table 8. Least square means for lint yield, yield components, oil and protein content, and fiber quality traits in the 2020 RBTN at Lubbock, Texas (Cooperator: Jane Dever).

Entry	Lint Yield	Lint Percent	Lint Index	Boll Size	Seed per Boll	Seed Index	Seed Oil[1]	Seed Protein[1]	MIC	UHM	UI	STRN	ELO	SFC	QS1[2]	QS2[2]	QS3[2]
	lb/A	%	grams	grams	#	grams	%	%	mic	inch	%	g/tex	%	%			
Ark 1208-21	**1247**	**39.24**	8.44	5.19	24.13	**10.85**	19.69	22.63	4.99	**1.18**	**83.10**	31.18	**7.55**	7.43	**66.75**	**68.00**	70.50
TAM 14 B-72	**1235**	37.84	7.51	4.83	24.53	9.55	**21.71**	23.62	4.74	1.09	82.60	32.13	6.28	7.88	50.50	58.00	57.50
FM 958 CK	**1195**	37.71	8.43	5.32	23.95	10.53	18.77	21.63	4.79	1.13	82.65	32.85	5.60	7.70	56.50	**61.00**	63.00
TAM 14 E-12	**1192**	**39.74**	8.55	5.11	23.90	9.35	20.30	21.28	4.77	1.08	81.60	31.38	6.98	8.65	39.75	46.50	50.75
UA 222 CK	**1167**	37.89	8.16	**5.50**	**25.66**	**11.08**	20.54	20.91	5.00	**1.16**	**82.95**	32.75	**7.70**	7.43	**62.75**	**65.50**	67.50
DP 393 CK	**1148**	38.42	8.45	5.42	24.66	10.40	17.66	21.97	5.00	1.11	82.55	33.25	7.28	7.30	47.50	56.50	54.50
Ark 1207-32	**1146**	**39.42**	8.69	5.45	**24.84**	10.28	18.50	21.62	**5.06**	**1.17**	**83.53**	31.58	6.80	6.63	**65.00**	**70.25**	67.50
DP 493 CK	**1126**	**40.04**	7.95	4.61	23.37	8.15	16.51	23.33	4.84	1.09	81.50	31.70	5.85	**10.00**	40.00	46.00	51.00
Ark 1208-39	**1125**	39.18	**8.93**	5.12	23.81	**10.80**	19.73	22.43	4.84	1.15	82.28	30.75	7.15	7.78	61.25	**60.00**	68.00
Ark 1207-11	**1120**	38.10	**9.55**	5.21	20.77	9.98	18.97	21.75	**5.26**	1.15	**83.65**	32.18	6.55	6.63	55.50	**67.25**	58.25
PD 2012011	1062	36.39	7.41	5.26	**25.93**	9.85	16.86	22.61	4.53	**1.18**	82.68	34.38	6.08	7.68	**75.50**	**69.25**	**80.50**
PD 2013016	1031	37.36	7.64	5.31	**26.03**	10.08	16.06	22.14	4.78	**1.19**	82.60	**35.43**	5.90	7.23	**75.50**	**70.25**	**82.25**
Ark 1214-42	974	39.12	8.50	**5.69**	**26.30**	10.43	14.78	23.10	4.76	**1.16**	**83.13**	33.43	6.43	7.00	**67.00**	**68.25**	**71.25**
PD 2012037	876	36.93	7.24	4.90	**25.07**	9.78	14.85	24.39	4.45	**1.20**	81.80	32.88	6.00	6.88	**76.75**	**62.75**	**83.75**
PD 2012066	850	37.33	7.98	4.87	22.83	9.98	17.57	23.21	4.83	1.13	82.43	31.25	6.38	7.70	55.00	58.75	62.25
PD 2013041	842	36.02	7.24	5.40	**26.89**	10.45	14.49	23.65	4.40	**1.18**	**82.78**	**34.43**	6.03	7.10	**76.25**	**70.25**	**81.25**
Mean	1084	38.17	8.17	5.20	24.54	10.09	17.94	22.52	4.81	1.15	82.61	32.59	6.53	7.56	60.72	62.41	66.86
LSD (.05)	157	0.85	0.71	0.23	2.22	0.42	1.05	—	0.26	0.04	0.90	1.04	0.23	0.83	14.76	11.05	12.51
Entry (P>F)	<0.0001	<0.0001	<0.0001	<0.0001	0.0003	<0.0001	<0.0001	0.6794	<0.0001	<0.0001	0.0003	<0.0001	<0.0001	<0.0001	<0.0001	0.0001	0.0001
CV(%)	10.14	1.57	6.07	3.09	6.36	2.90	4.12	9.73	3.86	2.26	0.76	2.24	2.45	7.74	17.06	12.43	13.14
R-Square	0.87	0.85	0.73	0.84	0.71	0.90	0.92	0.31	0.69	0.82	0.67	0.82	0.96	0.75	0.77	0.73	0.78
Reps	4	4	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] Percent oil and protein (by weight) determined by low-field ^{1}H time-domain nuclear magnetic resonance (TD-NMR) methodology (Horn, et al, 2011, J Am Oil Chem Soc, 88: 1521-1529)

[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).