Table 3. Least square means for yield components, oil and protein content, and fiber quality traits in the 2020 RBTN at Alexandria, Louisiana (Cooperator: Gerald Myers).

Entry	Lint Yield[1]	Lint Percent	Lint Index	Boll Size	Seed per Boll	Seed Index	Seed Oil[2]	Seed Protein[2]	MIC	UHM	UI	STRN	ELO	SFC	QS1[3]	QS2[3]	QS3[3]
	lb/A	%	grams	grams	#	grams	%	%	mic	inch	%	g/tex	%	%			
Ark 1208-39	**901**	**41.35**	**7.61**	5.21	28.39	10.70	18.93	19.60	4.70	1.22	85.68	32.20	7.10	**6.83**	61.50	**63.50**	68.00
Ark 1214-42	**837**	**41.93**	**7.74**	5.90	32.00	10.59	16.45	19.62	4.50	1.22	85.25	33.68	7.35	**6.58**	61.50	60.25	**69.50**
FM 958 CK	717	**40.63**	**7.46**	5.70	31.16	10.78	18.46	20.34	4.68	1.20	85.23	33.55	5.63	**6.58**	53.50	56.25	61.25
Ark 1207-32	679	**40.92**	7.05	5.53	32.10	10.12	**19.19**	20.31	4.50	**1.26**	86.35	32.55	**7.85**	5.83	**75.00**	**73.25**	**78.25**
Ark 1207-11	663	**41.79**	**7.13**	5.36	31.38	9.81	**19.66**	20.02	4.68	1.20	85.00	33.65	**8.05**	**6.65**	52.50	55.00	61.00
Ark 1208-21	640	**41.77**	**7.94**	5.48	28.78	11.03	**19.62**	18.63	4.70	**1.24**	85.53	32.60	**8.65**	**6.58**	**63.75**	**62.75**	**69.75**
TAM 14 B-72	633	40.05	**7.32**	5.35	29.57	10.72	**21.13**	21.05	4.63	1.21	86.20	32.48	7.25	6.15	60.25	**66.75**	65.25
DP 493 CK	626	**41.30**	6.72	4.96	30.35	9.50	16.91	19.38	4.70	1.20	84.83	32.08	5.80	**6.80**	51.00	52.75	60.00
PD 2012066	603	37.97	6.51	5.14	29.89	10.54	18.59	21.66	4.48	1.23	85.10	32.40	6.83	**6.88**	**64.00**	59.75	**71.75**
PD 2013016	588	39.98	6.89	5.69	32.94	10.25	15.70	23.17	4.60	**1.26**	86.10	**36.18**	6.23	**6.33**	**75.00**	**74.00**	**80.75**
PD 2012011	583	38.58	6.38	5.18	31.34	10.09	17.42	19.87	4.43	**1.25**	85.73	**34.75**	5.90	**6.23**	**72.75**	**68.25**	**78.50**
PD 2012037	570	40.23	**7.40**	5.56	30.25	10.90	16.02	21.07	4.45	**1.26**	86.05	34.03	7.28	5.98	**75.75**	**71.50**	**80.00**
TAM 14 E-12	550	**42.21**	**7.60**	5.42	30.10	10.34	**20.08**	20.46	4.50	1.18	84.28	33.90	**7.68**	**6.80**	48.00	49.50	59.50
DP 393 CK	536	39.31	**7.29**	5.62	30.34	11.17	18.78	20.22	4.80	1.21	86.40	**34.50**	**8.35**	6.18	58.50	**67.50**	62.75
UA 222 CK	517	40.25	**7.22**	5.74	32.03	10.60	**20.19**	19.81	4.80	**1.24**	85.88	33.85	**8.08**	6.10	**64.25**	**65.75**	**69.75**
PD 2013041	490	39.91	**7.39**	5.75	31.07	11.09	16.38	21.75	4.50	**1.27**	86.30	**34.53**	6.33	6.18	**78.00**	**75.50**	**81.75**
Mean	633	40.51	7.23	5.47	30.73	10.51	18.34	20.43	4.60	1.23	85.62	33.56	7.15	6.41	63.45	63.89	69.86
LSD (.05)	152	1.85	0.89	—	—	—	2.16	—	—	0.04	—	2.09	1.06	0.66	16.48	15.11	13.22
Entry (P>F)	0.0022	0.0006	0.0460	0.2889	0.0616	0.1955	<0.0001	0.91	0.3462	0.0009	0.1601	0.0139	<0.0001	0.0289	0.0047	0.0215	0.0028
CV(%)	11.26	3.21	8.68	8.65	6.03	7.57	8.2700	14.7200	5.03	2.36	1.20	4.38	10.41	7.21	18.24	16.61	13.29
R-Square	0.83	0.55	0.40	0.29	0.39	0.32	0.62	0.19	0.33	0.57	0.41	0.50	0.69	0.42	0.53	0.48	0.54
Reps	2	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] Caution, only two replications included in analysis of lint yield. Four plots were adjusted for yield based on nearest neighbor analysis. Location was excluded from the analysis over locations.

[2] 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)

[3] 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).