Table 13. Least square means for lint yield, yield components, oil and protein content, and fiber quality traits in the 2020 RBTN at Tallassee, Alabama (Cooperator: Jenny Koebernick).

Entry	Lint Yield[1]	Lint Percent[1]	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 1207-11	**1201**	—	6.12	**5.31**	**32.22**	10.15	17.99	20.00	**4.88**	1.19	**85.63**	35.48	6.40	5.48	53.50	68.00	58.75
Ark 1207-32	**1176**	—	**6.81**	**5.57**	**31.18**	**10.63**	16.67	22.44	4.65	**1.27**	**85.95**	32.73	6.63	4.80	**80.50**	**79.25**	**81.00**
Ark 1208-39	**1164**	—	**6.91**	5.03	26.81	**11.15**	18.21	19.57	4.73	**1.25**	**85.58**	32.20	**7.30**	5.38	71.50	**73.25**	73.75
Ark 1208-21	**1121**	—	**6.54**	5.08	27.39	**10.98**	17.22	22.58	4.71	1.22	84.15	32.73	**7.43**	**6.45**	59.25	58.50	67.00
DP 493 CK	**1080**	—	5.55	4.87	**32.75**	8.63	15.51	21.98	**5.07**	1.12	83.00	32.03	5.38	**7.20**	24.75	36.25	38.25
Ark 1214-42	**1063**	—	**7.26**	**5.34**	29.83	10.38	14.34	23.79	4.47	**1.27**	84.60	33.63	6.08	5.30	**75.75**	**68.75**	**81.25**
TAM 14 B-72	1031	—	5.62	4.95	**30.76**	9.78	**21.06**	18.14	4.67	1.18	84.30	34.35	5.95	**6.40**	49.00	56.00	57.50
FM 958 CK	988	—	5.95	**5.31**	30.12	**11.13**	17.23	21.22	4.61	1.20	84.53	34.73	5.38	**6.40**	57.25	60.75	64.50
TAM 14 E-12	985	—	**6.38**	**5.47**	**30.81**	10.38	19.10	21.56	**4.86**	1.14	83.63	32.48	6.10	**7.03**	34.75	44.75	45.75
UA 222 CK	963	—	**6.48**	**5.37**	29.02	**11.03**	18.25	19.54	4.38	**1.27**	**85.15**	33.50	7.15	5.08	**78.00**	**72.50**	**81.25**
DP 393 CK	890	—	**6.74**	**5.55**	**31.10**	**10.58**	16.76	20.04	**4.97**	1.17	84.70	35.10	6.48	5.98	42.00	56.50	50.25
PD 2012011	875	—	5.50	**5.22**	**32.44**	10.10	15.64	20.09	4.39	**1.26**	**85.08**	**36.05**	5.53	5.33	**76.75**	**74.00**	**82.50**
PD 2013016	834	—	**6.50**	**5.55**	**31.24**	**10.60**	15.07	21.58	4.63	**1.28**	84.50	**37.23**	5.28	4.95	**80.50**	**73.00**	**88.25**
PD 2012037	818	—	5.56	5.14	**31.01**	10.28	14.75	21.69	4.42	**1.28**	84.25	35.08	5.70	4.90	**78.00**	67.50	**84.50**
PD 2013041	817	—	**6.56**	**5.53**	**30.81**	**11.13**	14.06	21.14	4.36	**1.29**	**85.18**	**37.38**	5.60	4.58	**86.25**	**80.00**	**91.75**
PD 2012066	814	—	**6.66**	4.85	29.16	10.08	16.08	21.92	4.54	1.23	83.73	32.98	5.85	**6.18**	63.50	56.75	71.75
Mean	989	—	6.32	5.26	30.41	10.43	16.75	21.08	4.65	1.23	84.62	34.23	6.14	5.71	63.20	64.11	69.88
LSD (.05)	154	—	0.97	0.40	2.05	0.68	1.24	—	0.29	0.04	1.07	1.36	0.27	1.03	14.41	11.84	12.26
Entry (P>F)	<0.0001	—	0.0075	0.0014	<0.0001	<0.0001	<0.0001	0.4900	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
CV(%)	10.91	—	10.72	5.28	4.72	4.54	5.21	13.66	4.34	2.30	0.89	2.80	3.07	12.61	16.01	13.00	12.32
R-Square	0.68	—	0.49	0.52	0.65	0.72	0.86	0.28	0.63	0.83	0.62	0.82	0.95	0.64	0.82	0.75	0.83
Reps	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] Due to missing lint percent values, lint yield was calculated using the trial average (10 locations) for lint percent at this location.

[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).