

Table 3. Least square means for lint yield, yield components and fiber quality traits in the 2022 RBTN at College Station, Texas (Cooperator: Lori Hinze).

Entry ¹	Lint Yield	Lint Percent	Lint Index	Boll Size	Seed per Boll	Seed Index	MIC	UHM	UI	STRN	ELO	SFC	QS1 ²	QS2 ²	QS3 ²
	lb/A	%	grams	grams	#	grams	mic	inch	%	g/tex	%	%			
Ark 1414-47	1288	40.66	7.15	5.27	30.02	10.26	4.61	1.190	84.5	33.5	5.3	6.9	68	71	71
TAM 17 WSH-12	1235	41.00	6.52	4.36	27.56	9.25	4.55	1.171	82.6	31.6	5.8	8.3	58	53	68
Ark 1414-43	1199	40.39	7.17	4.83	27.18	10.43	4.68	1.206	84.0	34.7	5.3	7.3	70	69	76
DP 493 CK	1186	42.10	6.69	4.90	30.89	9.02	5.03	1.150	83.2	32.5	4.9	7.9	46	54	55
Ark 1414-28	1135	41.56	7.03	5.00	29.64	9.70	4.51	1.156	83.6	34.2	5.5	6.9	57	61	65
Ark 1410-32	1083	38.21	7.23	5.32	28.16	11.54	4.31	1.167	84.1	33.8	5.1	7.1	62	66	69
FM 958 CK	1054	38.46	6.97	5.17	28.53	11.01	4.79	1.183	83.6	33.8	5.1	7.3	62	63	69
AU90098	1049	42.05	7.80	5.27	28.38	10.58	4.75	1.145	83.2	31.6	5.2	7.8	49	53	58
MS 2010-87-42	1028	40.25	7.07	5.16	29.33	10.27	5.02	1.183	84.3	33.1	5.2	6.6	57	65	62
MS2010-87-44	1022	41.47	6.77	4.90	30.05	9.44	4.85	1.154	83.8	33.0	5.3	7.6	54	61	61
AU72028	1010	41.60	7.00	4.87	28.94	9.69	4.94	1.141	84.1	33.3	5.2	7.4	48	60	54
CSX5432	991	46.22	9.00	4.49	23.12	10.31	4.81	1.207	83.7	34.2	5.1	6.8	68	66	74
Ark 1410-56	989	38.41	6.78	5.14	29.10	10.77	4.59	1.164	84.4	34.5	5.3	6.3	62	68	67
DP 393 CK	986	41.47	7.23	4.78	27.41	10.07	4.92	1.130	83.4	32.5	5.8	7.3	45	53	53
UA 222 CK	976	40.04	7.31	4.88	26.77	10.75	4.98	1.155	83.9	31.3	6.3	6.8	51	59	57
MS 2010-87-37	971	41.99	7.13	5.07	29.81	9.72	4.79	1.201	84.5	34.7	5.0	6.3	69	72	73
Ark 1406-21	968	41.01	6.56	5.06	31.61	9.29	4.69	1.178	83.9	33.6	5.5	6.7	62	65	69
MS 2010-66-16	900	45.07	7.68	4.90	28.76	9.20	4.82	1.086	82.9	32.4	5.2	7.7	39	48	49
MS 2010-96-8	887	39.91	7.02	5.20	29.61	10.44	4.91	1.121	83.4	32.8	5.4	7.1	44	53	53
OA-22-3	887	43.19	6.45	4.50	30.04	8.34	4.81	1.152	83.9	33.5	5.0	6.8	53	62	60
MS 2010-28-27	875	40.61	6.83	4.91	29.23	9.83	4.76	1.170	83.8	34.5	5.5	6.7	60	64	67
TAM 17 SHK-43	852	39.54	7.27	5.36	29.11	11.02	4.62	1.199	82.8	31.4	5.6	7.8	66	58	75
OA-22-2	802	42.08	6.80	4.47	27.72	9.23	4.84	1.232	84.1	34.3	5.0	6.5	76	71	80
OA-22-1	764	38.70	5.84	4.21	27.88	9.12	4.67	1.150	82.8	30.9	5.6	8.2	50	47	56
TAM 17 WSE-68	750	36.58	6.98	5.44	28.34	12.00	4.18	1.290	84.2	33.3	5.4	5.6	87	76	90
TAM 17 WSG-51	661	34.63	6.38	5.50	29.65	11.90	4.31	1.324	83.9	35.5	5.4	5.4	90	77	95
TAM 17 WSE-66	654	37.17	7.53	5.29	26.14	12.56	4.37	1.328	84.3	36.4	5.2	4.8	92	82	97
Mean	970	40.53	7.05	4.97	28.63	10.21	4.71	1.183	83.72	33.36	5.34	6.94	60.75	62.76	67.39
LSD (.05)	344	1.45	0.59	0.53	2.71	0.90	0.26	0.047	1.33	2.47	0.25	1.49	14.59	15.47	12.06
Entry (P>F)	0.0284	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.1691	0.0027	<0.0001	0.0018	<0.0001	0.0005	<0.0001
CV(%)	25.21	2.54	6.00	7.62	6.72	6.23	3.92	2.84	1.13	5.27	3.28	15.30	17.05	17.51	12.71
R-Square	0.65	0.88	0.74	0.63	0.52	0.81	0.70	0.84	0.42	0.57	0.81	0.54	0.76	0.58	0.78
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 Entry "TAM 18 SHA-27" not included at this location.

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).