Table 5. Least square means for yield and fiber quality traits in the 2025 RBTN at Portageville, MO. Planted on 5 May 2025.(Cooperator: Bradley Wilson)

	Agronomic Data				HVI Data[3]				Quality Score		
Genotype	Entry	Lint Yield	Lint Percent	Mic	UHML	UI	Str	Elo	QS1[1]	QS2[1]	QS3[1]
	units:	lb/acre	%		in	%	g/tex	%			
Ark 1704-53	1	1436	36.9	4.4	1.26	85.4	30.7	**6.6**	67	67	72
Ark 1706-45	2	1426	37.3	4.5	1.22	84.3	32.4	**6.8**	56	54	65
Ark 1704-26	3	1382	37.2	4.7	1.21	85.0	32.2	**6.6**	51	58	58
Ark 1720-52	4	1483	36.8	4.8	1.21	85.1	31.8	6.2	50	58	57
Ark 1706-34	5	1262	**38.2**	4.3	1.22	84.8	31.6	**6.5**	58	59	65
TAM 18J-13	6	1045	30.1	4.1	**1.34**	**87.0**	**35.9**	6.0	**96**	**93**	**96**
TAM 19J-04	7	1075	30.1	3.9	**1.35**	85.9	33.7	5.5	**91**	80	**92**
TAM 19O-09	8	937	33.1	4.4	1.26	85.1	**34.8**	6.2	72	68	78
OA-25110	9	1473	36.7	4.6	1.25	84.7	33.5	5.5	60	60	68
OA-25111	10	**1703**	37.0	4.5	1.23	85.6	33.1	5.4	65	67	70
OA-25112	11	1332	37.7	4.6	1.23	84.5	33.7	5.5	59	59	68
OA-25113	12	1335	36.8	4.4	1.26	84.2	33.0	5.7	68	59	76
OA-25114	13	1493	**38.3**	4.8	1.24	85.4	31.8	**6.6**	58	64	63
Chee-1	14	1376	34.1	5.0	1.22	84.6	33.2	6.3	48	54	56
DP 393	15	1395	33.9	4.6	1.23	84.6	32.6	**6.5**	56	57	64
DP 493	16	1062	36.5	4.9	1.19	84.1	33.7	5.5	38	47	49
FM 958	17	1227	35.8	4.7	1.24	85.1	33.1	5.6	59	62	65
UA 222	18	1406	34.9	4.6	1.25	85.6	33.4	**6.6**	66	69	70
Mean		**1325**	**35.6**	**4.5**	**1.25**	**85.0**	**33.0**	**6.1**	**62**	**63**	**68**
Entry (P>F)		**<0.0001**	**<0.0001**	**<0.0001**	**<0.0001**	**<0.0001**	**<0.0001**	**<0.0001**	**<0.0001**	**<0.0001**	**<0.0001**
R-square		**0.7636**	**0.7681**	**0.6031**	**0.7725**	**0.6006**	**0.7165**	**0.8141**	**0.7413**	**0.7250**	**0.7189**
Entry LSD (0.05)		**158**	**1.9**	**0.3**	**0.03**	**0.8**	**1.1**	**0.3**	**11**	**9**	**10**
CV (%)		**10.1**	**4.5**	**5.9**	**2.1**	**0.8**	**2.8**	**4.7**	**15.5**	**11.9**	**12.4**

[1]QS1, QS2,and QS3 (Quality Score)-a measurement very similar to a selection index, adds the weighted values of selected fiber traits (lenth, mic, UI, strength) to provide a single measure (0-100) of desirable fiber qualities, and was calculated by weighting the 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)

[2]NS-Not significant at the 0.05 level of probablity.

[3] Fiber testing done at the Texas Tech FBRI. Lubbock, Texas.