Table 7. Least square means for yield and fiber quality traits in the 2024 RBTN at Suffolk, VA. Planted on 3 May 2024 and harvested on 6 November 2024. (Cooperator: W.H. Frame)

				HVI data				Fibrogram Data										
Genotype	**LINT YIELD**	**LINT PERCENT**	**MIC**	**UHM**	**UI**	**STR**	**ELO**	**Short Fiber Index**	**UHMLf**	**MLf**	**UQLf**	**LHMLf**	**LQLf**	**Uif**	**SFCf**	**QS1[1]**	**QS2[1]**	**QS3[1]**
units	**lb/acre**	**%**	**units**	**in**	**%**	**g/tex**	**%**	**%**	**in**	**in**	**in**	**in**	**in**	**%**	**%**			
ACX167-27-347	1538	42.1	**4.7**	1.21	84.5	30.8	7.0	6.85	1.138	0.852	1.108	0.589	0.628	74.8	20.76	49.25	61.25	59.25
Ark1620-030	**1629**	39.6	4.6	1.25	85.5	32.2	7.0	5.88	1.184	0.901	**1.160**	0.638	0.683	76.0	19.23	65.75	69.75	71.25
Ark1620-055	1468	40.6	**4.8**	1.25	85.2	32.7	7.5	5.98	1.182	0.884	1.153	0.608	0.636	74.7	21.28	60.50	66.50	67.00
Ark1620-098	**1661**	39.3	**5.0**	1.21	85.3	31.5	8.0	6.45	1.154	0.875	1.123	0.615	0.656	75.8	19.42	46.25	63.50	53.50
Ark1622-058	**1584**	39.8	**5.1**	1.21	85.3	32.4	7.6	6.08	1.160	0.895	1.131	0.645	**0.721**	77.2	17.65	45.75	63.00	52.50
Ark1622-086	**1559**	40.9	4.6	1.21	85.7	30.7	**8.5**	5.78	1.162	0.906	1.133	**0.665**	**0.760**	77.9	16.22	56.00	69.25	62.25
AU17014-45-250	**1663**	41.9	4.5	1.21	84.9	31.3	7.7	5.88	1.150	0.893	1.121	0.649	**0.744**	77.5	17.54	52.75	64.75	61.25
AU17016-19-285	1507	40.8	4.5	1.25	85.6	32.4	6.8	5.70	1.195	0.919	**1.163**	**0.666**	**0.739**	76.8	17.81	68.00	71.25	73.25
DP393	**1639**	41.4	**4.9**	1.19	85.0	30.2	8.0	6.63	1.135	0.863	1.105	0.612	0.653	75.9	19.60	44.00	62.25	52.50
DP493	1505	42.3	**4.7**	1.18	84.0	30.6	6.7	7.03	1.117	0.832	1.082	0.572	0.579	74.5	22.45	41.00	56.75	52.75
FM958	1269	40.4	4.4	**1.28**	**86.1**	32.9	7.0	4.93	**1.231**	**0.960**	**1.198**	**0.717**	**0.781**	77.9	**14.37**	**78.50**	76.25	81.75
GA2021049	**1697**	42.2	4.6	1.24	85.0	30.4	7.7	6.13	1.175	0.891	1.142	0.640	0.673	75.9	18.37	62.00	66.75	69.25
GA2021058	**1688**	41.8	4.5	1.25	85.6	29.9	8.3	5.48	1.197	**0.928**	**1.164**	**0.684**	**0.778**	77.5	16.09	67.00	71.00	72.25
GA2022052	**1755**	43.1	**4.7**	**1.29**	86.6	32.0	7.5	**4.33**	**1.249**	**0.989**	1.218	**0.752**	**0.849**	**79.2**	**13.58**	**79.50**	78.50	80.50
KS2202	**1562**	40.7	**4.7**	1.25	**85.8**	30.2	**8.9**	4.90	**1.201**	**0.960**	**1.166**	0.741	**0.841**	**79.9**	**12.73**	66.00	71.75	70.25
OA-24107	1415	39.1	4.5	1.23	85.0	29.8	**8.5**	5.88	1.174	0.906	1.145	0.658	**0.735**	77.2	16.96	62.25	67.00	70.00
OA-24108	1474	40.3	4.6	1.25	85.4	**34.5**	6.3	5.63	1.192	0.917	**1.162**	0.664	**0.752**	76.9	16.91	68.75	73.50	76.00
OA-24109	1400	41.2	4.3	**1.28**	84.7	**35.0**	6.5	5.05	**1.211**	**0.926**	1.174	**0.670**	**0.750**	76.4	17.10	76.00	72.25	**84.75**
PD2018041	1033	40.6	4.4	**1.27**	**86.0**	33.2	6.5	4.95	**1.221**	**0.946**	**1.189**	**0.694**	**0.772**	77.4	15.82	75.50	75.00	79.00
PD2018060	1087	40.7	4.5	**1.29**	85.6	32.2	6.9	**4.70**	**1.226**	**0.955**	**1.194**	**0.708**	**0.788**	77.8	15.06	**78.25**	73.25	82.25
TAM18SHB-08	**1643**	41.8	4.5	1.15	84.6	31.9	7.4	6.38	1.100	0.839	1.067	0.599	0.654	76.3	20.06	39.50	60.00	50.50
TAM18WSL-37	1228	38.0	3.9	**1.30**	**87.0**	**36.1**	7.1	**4.15**	**1.267**	**1.021**	**1.235**	**0.799**	**0.895**	**80.6**	**11.29**	**87.75**	**91.50**	**90.50**
TAMYDC255	1231	37.6	4.1	**1.32**	**87.0**	**36.1**	6.7	**3.93**	**1.281**	**1.018**	**1.243**	**0.789**	**0.880**	**79.4**	**12.84**	**91.50**	**90.00**	**94.25**
UA222	**1672**	42.1	**4.7**	1.23	84.7	30.4	**9.1**	6.15	1.164	0.882	1.128	0.627	0.676	75.8	18.05	55.25	63.50	64.00
Mean	**1496**	**40.8**	**4.6**	**1.24**	**85.4**	**32.0**	**7.4**	**5.62**	**1.186**	**0.915**	**1.154**	**0.667**	**0.734**	**77.1**	**17.13**	**63.21**	**69.94**	**69.61**
Entry (P>F)	**<0.0001**	**0.0524**	**<0.0001**	**<0.0001**	**0.0005**	**<0.0001**	**<0.0001**	**<0.0001**	**<0.0001**	**<0.0001**	**<0.0001**	**<0.0001**	**<0.0001**	**<0.0001**	**<0.0001**	**<0.0001**	**<0.0001**	**<0.0001**
R-square	**0.72**	**0.31**	**0.76**	**0.77**	**0.47**	**0.87**	**0.89**	**0.69**	**0.73**	**0.70**	**0.73**	**0.65**	**0.62**	**0.54**	**0.59**	**0.76**	**0.69**	**0.79**
Entry LSD (0.05)	**214**	**NS**	**0.4**	**0.06**	**1.3**	**2.2**	**0.9**	**1.72**	**0.083**	**0.102**	**0.082**	**0.134**	**0.196**	**2.3**	**3.80**	**13.25**	**9.20**	**10.25**
CV (%)	**13.2**	**3.3**	**5.7**	**3.2**	**0.8**	**5.8**	**10.6**	**14.9**	**3.8**	**5.5**	**3.8**	**9.0**	**11.2**	**2.1**	**16.6**	**23.3**	**12.1**	**18.0**

[1]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).
[2]NS- Not significant at the 0.05 level of probability.