

Table 1: Relative yields of cotton varieties tested at four locations in 2022 and the average relative yield across all locations.

Entry. No.	Variety	TAREC	IOW	SHC	SUX	Avg. Relative Yield
24	PHY 400 W3FE	0.89	0.87	1.00	0.89	0.91
11	21R622B3XF	1.00	0.89	0.77	0.95	0.90
14	ST 4550GLTP	0.96	1.00	0.73	0.92	0.90
12	NG 3195 B3XF	0.89	0.90	0.83	0.98	0.90
17	ST 5091B3XF	0.93	0.86	0.85	0.93	0.89
25	PHY 411 W3FE	0.94	0.86	0.89	0.86	0.89
5	DP 2115 B3XF	0.87	0.88	0.92	0.86	0.88
22	PHY 332 W3FE	0.88	0.84	0.85	0.93	0.87
9	20R733B3XF	0.89	0.83	0.94	0.82	0.87
4	DP 2038 B3XF	0.92	0.86	0.90	0.79	0.87
26	PHY 443 W3FE	0.90	0.82	0.85	0.89	0.87
35	DG 3570 B3XF	0.91	0.88	0.76	0.91	0.87
32	PX 1150A450-04 W3FE	0.87	0.80	0.79	1.00	0.86
13	NG 3299 B3XF	0.93	0.75	0.85	0.92	0.86
15	ST 4595B3XF	0.87	0.87	0.78	0.92	0.86
1	DP 1646 B2XF	0.97	0.88	0.75	0.79	0.85
2	DP 2012 B3XF	0.85	0.95	0.85	0.73	0.84
29	PHY 415 W3FE	0.80	0.83	0.84	0.90	0.84
38	DG 3519 B3XF	0.82	0.83	0.79	0.92	0.84
31	PX 1140B373-04 W3FE	0.92	0.75	0.91	0.76	0.84
16	ST 4990B3XF	0.79	0.78	0.86	0.92	0.84
34	DG 3456 B3XF	0.77	0.81	0.78	0.99	0.84
23	PHY 360 W3FE	0.81	0.79	0.87	0.87	0.83
6	DP 2127 B3XF	0.98	0.81	0.73	0.77	0.82
28	PX 1130B336-04 W3FE	0.86	0.72	0.89	0.81	0.82
37	DG 3511 B3XF	0.87	0.82	0.72	0.86	0.82
19	BX 2394B3XF	0.86	0.82	0.80	0.78	0.82
30	PX 1140A385-04 W3FE	0.85	0.81	0.83	0.76	0.81
8	DP 2239 B3XF	0.90	0.92	0.75	0.67	0.81
27	PX 1130B333-04 W3FE	0.76	0.81	0.84	0.82	0.81
10	21R618B3XF	0.84	0.85	0.71	0.78	0.80
3	DP 2020 B3XF	0.82	0.80	0.78	0.78	0.80
36	DG 3535 B3XF	0.86	0.79	0.69	0.78	0.78
18	BX 2392B3XF	0.87	0.80	0.77	0.64	0.77
7	DP 2141NR B3XF	0.87	0.69	0.79	0.74	0.77
33	PX 1150B437-04 W3FE	0.84	0.67	0.84	0.71	0.76
20	BX 2396B3XF	0.95	0.66	0.67	0.71	0.75

21	BX 2398B3XF	0.75	0.69	0.62	0.62	0.67
39	PHY 764WRF	0.65	-	-	-	-
40	DG 3520B3XF	0.77	-	-	-	-
41	FM 1830GLT	0.68	-	-	-	-
42	NG 4936B3XF	0.83	-	-	-	-
	Trial Avg.	0.86	0.82	0.81	0.83	0.83
	Standard Error	0.05	0.06	0.08	0.10	-
	Minimum RY	0.65	0.66	0.62	0.62	-

Table 2: Two-year (2021-2022) relative yield averages for varieties tested each year

Seed Company	Variety[†]	Avg. Relative Yield
Bayer	DP 2038 B3XF	0.92
BASF	ST 4550GLTP	0.91
Americot	NG 3299 B3XF	0.90
Corteva	PHY 400 W3FE	0.90
Corteva	PHY 411W3FE	0.90
BASF	ST 4595 B3XF	0.89
BASF	ST 5091B3XF	0.89
Bayer	DP 2115 B3XF	0.88
Corteva	PHY 360 W3FE	0.87
Bayer	DP 1646 B2XF	0.87
Corteva	PHY 443 W3FE	0.87
Bayer	DP 2012 B3XF	0.87
Corteva	PHY 415 W3FE	0.87
Bayer	DP 2239 B3XF	0.86
Americot	NG 3195 B3XF	0.86
Bayer	DP 2127 B3XF	0.86
Bayer	DP 2020 B3XF	0.86
BASF	ST 4990B3XF	0.85
Nutrien	DG 3535 B3XF	0.85
Corteva	PHY 332 W3FE	0.85
Nutrien	DG 3456 B3XF	0.84
Bayer	DP 2141NR B3XF	0.81
Nutrien	DG 3570 B3XF	0.81
	Mean	0.87

Table 3: Three-year (2020-2022) relative yield averages for varieties tested each year

Seed Company	Variety^{fl}	Avg. Relative Yield
Bayer	DP 2038 B3XF	0.92
Bayer	DP 2115 B3XF	0.91
BASF	ST 4550GLTP	0.90
BASF	ST 5091 B3XF	0.88
Corteva	PHY 400 W3FE	0.88
Corteva	PHY 411W3FE	0.87
Corteva	PHY 443 W3FE	0.86
Bayer	DP 1646 B2XF	0.86
Americot	NG 3195 B3XF	0.86
Bayer	DP 2012 B3XF	0.85
BASF	ST 4990B3XF	0.85
Nutrien	DG 3456 B3XF	0.85
Bayer	DP 2020 B3XF	0.84
Nutrien	DG 3570 B3XF	0.83
Corteva	PHY 360 W3FE	0.82
Corteva	PHY 332 W3FE	0.81
Nutrien	DG 3535 B3XF	0.80
	Mean	0.86

Table 4: Upland cotton lint yields and turnout from the Official Cotton Variety Testing program for four locations in 2022.

Entry No.	Variety ¹	TAREC*		SHC		SUSS		IOW		Avg. Lint Yield	Avg. Turnout
		Lint Yld. (lb/ac)	Turnout (%)	Lint Yld. (lb/ac)	Turnout (%)	Lint Yld. (lb/ac)	Turnout (%)	Lint Yld. (lb/ac)	Turnout (%)	lb/ac	(%)
11	21R622B3XF	2,596	45.9	988	40.41	1,158	44.1	1,558	45.5	1,575	44.0
14	ST 4550GLTP	2,485	46.6	935	40.95	1,122	45.4	1,747	46.6	1,572	44.9
24	PHY 400 W3FE	2,305	44.8	1,287	43.02	1,087	47.1	1,514	44.09	1,548	44.7
17	ST 5091B3XF	2,422	44.8	1,092	40.23	1,129	45.0	1,503	44.47	1,536	43.6
25	PHY 411 W3FE	2,442	46.1	1,151	44.46	1,050	46.8	1,502	46	1,536	45.8
12	NG 3195 B3XF	2,299	45.5	1,072	41.5	1,195	42.4	1,564	44.4	1,532	43.4
5	DP 2115 B3XF	2,256	46.7	1,189	43.57	1,048	46.4	1,531	45.47	1,506	45.5
4	DP 2038 B3XF	2,390	49.6	1,159	46.78	959	48.7	1,498	48.28	1,501	48.3
35	DG 3570 B3XF	2,373	46.2	981	38.84	1,104	42.6	1,535	44.31	1,498	43.0
22	PHY 332 W3FE	2,295	43.4	1,094	38.92	1,127	45.0	1,462	42.74	1,494	42.5
1	DP 1646 B2XF	2,511	50.6	960	40.07	959	44.9	1,539	45.44	1,492	45.3
26	PHY 443 W3FE	2,339	44.0	1,090	44.51	1,087	45.5	1,433	44.18	1,487	44.5
9	DP 2333 B3XF	2,300	47.7	1,205	43.42	996	45.0	1,447	47.11	1,487	45.8
13	NG 3299 B3XF	2,405	46.5	1,094	41.7	1,122	45.0	1,315	45.65	1,484	44.7
15	ST 4595B3XF	2,247	45.8	1,005	40.4	1,121	45.0	1,513	46.36	1,471	44.4
32	PX 1150A450-04 W3FE	2,253	45.6	1,020	42.21	1,215	48.6	1,389	44.74	1,469	45.3
2	DP 2012 B3XF	2,210	44.5	1,090	40.29	882	43.0	1,663	45.11	1,461	43.2
6	DP 2127 B3XF	2,533	47.5	943	42.61	933	46.0	1,417	47.3	1,457	45.9
31	PX 1140B373-04 W3FE	2,398	46.3	1,177	44.14	927	48.1	1,306	43.02	1,452	45.4
8	DP 2239 B3XF	2,326	46.5	961	43.33	819	48.5	1,613	46.26	1,430	46.2
29	PHY 415 W3FE	2,081	43.3	1,086	45.92	1,088	44.1	1,443	43.69	1,424	44.2
38	DG 3519 B3XF	2,116	40.9	1,010	41.5	1,118	45.3	1,450	44.22	1,424	43.0
37	DG 3511 B3XF	2,263	46.6	927	39.85	1,044	45.6	1,427	46.07	1,415	44.5

19	BX 2394B3XF	2,239	43.2	1,033	42.92	947	45.2	1,438	43.33	1,414	43.7
23	PHY 360 W3FE	2,098	44.5	1,125	41.85	1,053	45.8	1,381	43.73	1,414	43.9
16	ST 4990B3XF	2,045	42.0	1,112	38.03	1,117	40.4	1,356	42.13	1,408	40.6
28	PX 1130B336-04 W3FE	2,225	45.3	1,151	40.52	982	45.5	1,262	42.51	1,405	43.4
30	PX 1140A385-04 W3FE	2,205	47.5	1,070	43.89	923	48.3	1,410	45.14	1,402	46.2
34	DG 3456 B3XF	1,993	45.6	1,002	42.62	1,198	44.1	1,414	45.65	1,402	44.5
10	21R618B3XF	2,186	44.7	920	43.95	950	45.7	1,481	46.03	1,384	45.1
3	DP 2020 B3XF	2,124	43.2	1,006	38.35	951	41.5	1,397	42.38	1,369	41.4
27	PX 1130B333-04 W3FE	1,965	44.6	1,082	39.88	996	47.1	1,408	43.17	1,363	43.7
18	BX 2392B3XF	2,269	45.8	995	44.03	775	43.2	1,406	45.16	1,361	44.6
36	DG 3535 B3XF	2,228	42.9	890	41.81	952	41.0	1,373	44.82	1,361	42.6
7	DP 2141NR B3XF	2,248	44.1	1,016	43.2	899	45.3	1,198	45.29	1,340	44.5
20	BX 2396B3XF	2,453	46.0	862	43.54	865	45.0	1,147	45.72	1,332	45.1
33	PX 1150B437-04 W3FE	2,181	43.7	1,078	40.71	862	44.2	1,168	43.13	1,322	42.9
21	BX 2398B3XF	1,943	42.6	795	36.58	754	43.7	1,205	43.42	1,174	41.6
39	PHY 764WRF	1,687	41.4	-	-	-	-	-	-	-	-
40	DG 3520B3XF	1,995	41.2	-	-	-	-	-	-	-	-
41	FM 1830GLT	1,768	42.1	-	-	-	-	-	-	-	-
42	NG 4936B3XF	2,155	41.3	-	-	-	-	-	-	-	-
	Trial Avg.	2,235	44.9	1,043	41.9	1,014	45.1	1,432	44.8	1,440	44.3
	Standard Error	126	0.7	107	1.2	111	1.1	109	0.4	-	-
	Max	2596	50.6	1287	46.8	1215	48.7	1747	48.3	1575	48.3
	Min	1687	40.9	795	36.6	754	40.4	1147	42.1	1174	40.6

*TAREC = Tidewater Agricultural Research and Extension Center (Suffolk City, VA); SHC = Southampton County, VA (Sunbeam); SUSS = Sussex County, VA (Gray); IOW = Isle of Wight, VA (Isle of Wight Courthouse)

[†]PHY = PhytoGen, Corteva Agriscience; DP = DeltaPine, Bayer Cropscience; NG = NexGen, Americot/NexGen; ST = Stoneville, BASF

Table 5: Cotton lint yields and turnouts for 10 cotton varieties entered in the on-farm variety testing locations in 2022.

Variety [¶]	Location												Average		% Top 3	% Top 5
	Isle of Wight		Southampton-Darden		Southampton-Barnes		Suffolk		Surry		Sussex		Lint Yield	Turnout		
	<i>Lint Yield</i>	<i>Turnout</i>	<i>Lint Yield</i>	<i>Turnout</i>	<i>Lint Yield</i>	<i>Turnout</i>	<i>Lint Yield</i>	<i>Turnout</i>	<i>Lint Yield</i>	<i>Turnout</i>	<i>Lint Yield</i>	<i>Turnout</i>	lb/ac			
	<i>lb/ac</i>		<i>lb/ac</i>	<i>lb/ac</i>		<i>lb/ac</i>		<i>lb/ac</i>		<i>lb/ac</i>		<i>lb/ac</i>				
ST 4595 B3XF	1,477	46.6	1,510	46.6	1,807	46.8	1,578	45.7	1,779	41.6	1,568	47.5	1,620	45.8	50	83
NG 3195 B3XF	1,507	44.2	1,499	45.2	1,662	45.1	1,446	44.9	1,794	46.7	1,506	45.9	1,569	45.3	33	67
DG 3456 B3XF	1,556	46.6	1,545	45.9	1,546	46.7	1,542	46.2	1,616	43.1	1,510	46.7	1,552	45.9	50	67
ST 5091 B3XF	1,524	44.8	1,462	45.5	1,660	44.4	1,649	45.5	1,490	42.1	1,487	45.5	1,545	44.6	50	67
PHY 400 W3FE	1,342	43.3	1,485	46.0	1,430	48.4	1,455	46.3	1,764	44.7	1,724	47.3	1,533	46.0	17	33
DP 2038 B3XF	1,517	48.1	1,563	49.7	1,601	50.2	1,459	50.6	1,642	46.7	1,395	49.8	1,529	49.2	33	50
DP 2115 B3XF	1,333	44.2	1,558	47.9	1,347	45.3	1,682	47.5	1,855	46.7	1,299	46.7	1,512	46.4	50	50
NG 3299 B3XF	1,303	44.0	1,520	46.2	1,528	45.5	1,648	46.2	1,598	42.9	1,393	46.2	1,498	45.2	17	33
PHY 443 W3FE	1,400	43.2	1,467	45.5	1,483	45.9	1,509	45.5	1,584	45.3	1,459	47	1,484	45.4	0	0
PHY 360 W3FE	1,330	43.5	1,543	45.0	1,367	44.3	1,545	45.2	1,650	44.1	1,382	46.4	1,469	44.8	0	50
DP 2239 B3XF	1,383	44.6	1,348	46.7	1,454	47.1	1,537	46.0	1,619	45.3	1,405	48.4	1,458	46.4	0	0
DG 3570 B3XF	1,371	39.9	1,473	44.1	1,129	42.7	1,370	44.2	1,384	42.5	1,476	44.9	1,367	43.1	0	0
Average	1,420	44.4	1,498	46.2	1,501	46.0	1,535	46.2	1,648	44.3	1,467	46.9	1,511	45.7	-	-

[¶] PHY = PhytoGen, Corteva Agriscience; DP = DeltaPine, Bayer Cropsience; NG = NexGen, Americot/NexGen; ST = Stoneville, BASF