

Table 1. Resistance of several flue-cured tobacco varieties to black shank in Rocky Mount, NC, 2023.

Variety	<i>Ph gene</i> ^a	<i>Wz gene</i> ^b	Survival (%) ^c	Disease Index ^d
CC 143	-	-	74.5	16.9
CC 145	-	-	90	6.4
CC 603		-	87	11
CC 607		-	23.4	41.2
CC 700	+	-	65.6	21.7
CC 1063	-	-	80.8	13.8
GF 318	+	-	36.9	48.3
GL 26H	-	-	23.4	64.1
GL 365	+	-	78.9	13.5
GL 386	-	-	24.7	61.3
GL 395	-	-	76	16.2
K 326	-	-	9.5	71
K 346	-	-	74.1	12.4
NC 196	+	-	84.1	10.5
NC 299	+	-	19.9	62.1
NC 606	-	-	60.8	24.7
NC 960	+	+	85.3	8.9
NC 1226	+	+	76.1	20.9
PVH 1452	+	-	46.9	41.3
PVH 1600	+	-	47.6	27.1
PVH 1920	+	-	36.4	42.1
PVH 2254	-	-	3.6	93
PVH 2310	+	-	1	90.9
PVH 2343	-	-	6.2	73.5

^aThe *Ph gene* from Tex-Mex tobacco (*Nicotiana plumbaginifolia*) has been incorporated into a large number of flue-cured tobacco cultivars to provide resistance against races 0 and 3 of *P. nicotianae*. Varieties with the *Ph gene* may vary in their resistance to race 1 depending on the polygenic resistance that is in their heritage.

^bThe *Wz gene* confers resistance to race 0 and race 1.

^cSurvival (%) ratings are the percent survival based on the number of observed healthy plants in fields heavily infested with disease. High survival ratings indicate higher levels of resistance.

^dDisease Index ratings reflect disease severity based on the number of observed healthy plants over multiple time periods in the season in fields heavily infested with disease. The lower the disease index rating, the higher the level of resistance in a given variety.

Table 2. Resistance of several flue-cured tobacco varieties to black shank in Rocky Mount, NC, 2023 - sorted by lowest to highest Disease Index

Variety	<i>Ph gene</i> ^a	<i>Wz gene</i> ^b	Survival (%) ^c	Disease Index ^d
CC 145	-	-	90	6.4
NC 960	+	+	85.3	8.9
NC 196	+	-	84.1	10.5
CC 603		-	87	11
K 346	-	-	74.1	12.4
GL 365	+	-	78.9	13.5
CC 1063	-	-	80.8	13.8
GL 395	-	-	76	16.2
CC 143	-	-	74.5	16.9
NC 1226	+	+	76.1	20.9
CC 700	+	-	65.6	21.7
NC 606	-	-	60.8	24.7
PVH 1600	+	-	47.6	27.1
CC 607		-	23.4	41.2
PVH 1452	+	-	46.9	41.3
PVH 1920	+	-	36.4	42.1
GF 318	+	-	36.9	48.3
GL 386	-	-	24.7	61.3
NC 299	+	-	19.9	62.1
GL 26H	-	-	23.4	64.1
K 326	-	-	9.5	71
PVH 2343	-	-	6.2	73.5
PVH 2310	+	-	1	90.9
PVH 2254	-	-	3.6	93

^aThe *Ph gene* from Tex-Mex tobacco (*Nicotiana glauca*) has been incorporated into a large number of flue-cured tobacco cultivars to provide resistance against races 0 and 3 of *P. nicotianae*. Varieties with the *Ph gene* may vary in their resistance to race 1 depending on the polygenic resistance that is in their heritage.

^b The *Wz gene* confers resistance to race 0 and race 1.

^c Survival (%) ratings are the percent survival based on the number of observed healthy plants in fields heavily infested with disease. High survival ratings indicate higher levels of resistance.

^dDisease Index ratings reflect disease severity based on the number of observed healthy plants over multiple time periods in the season in fields heavily infested with disease. The lower the disease index rating, the higher the level of resistance in a given variety.

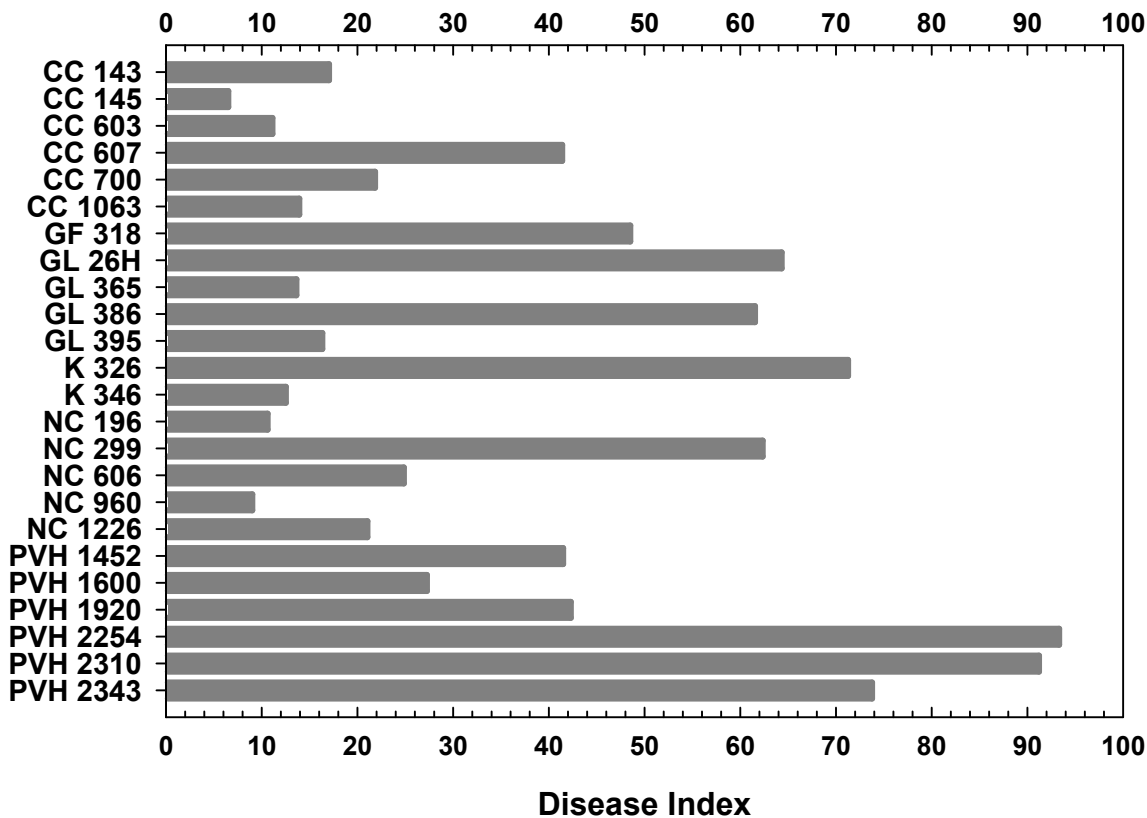


Figure 1. Resistance of several flue-cured tobacco varieties to black shank in Rocky Mount, NC, 2023. Disease Index ratings reflect disease severity based on the number of observed healthy plants over multiple time periods in the season in fields heavily infested with *Phytophthora nicotinae*. The lower the disease index rating, the higher the level of resistance in a given variety.

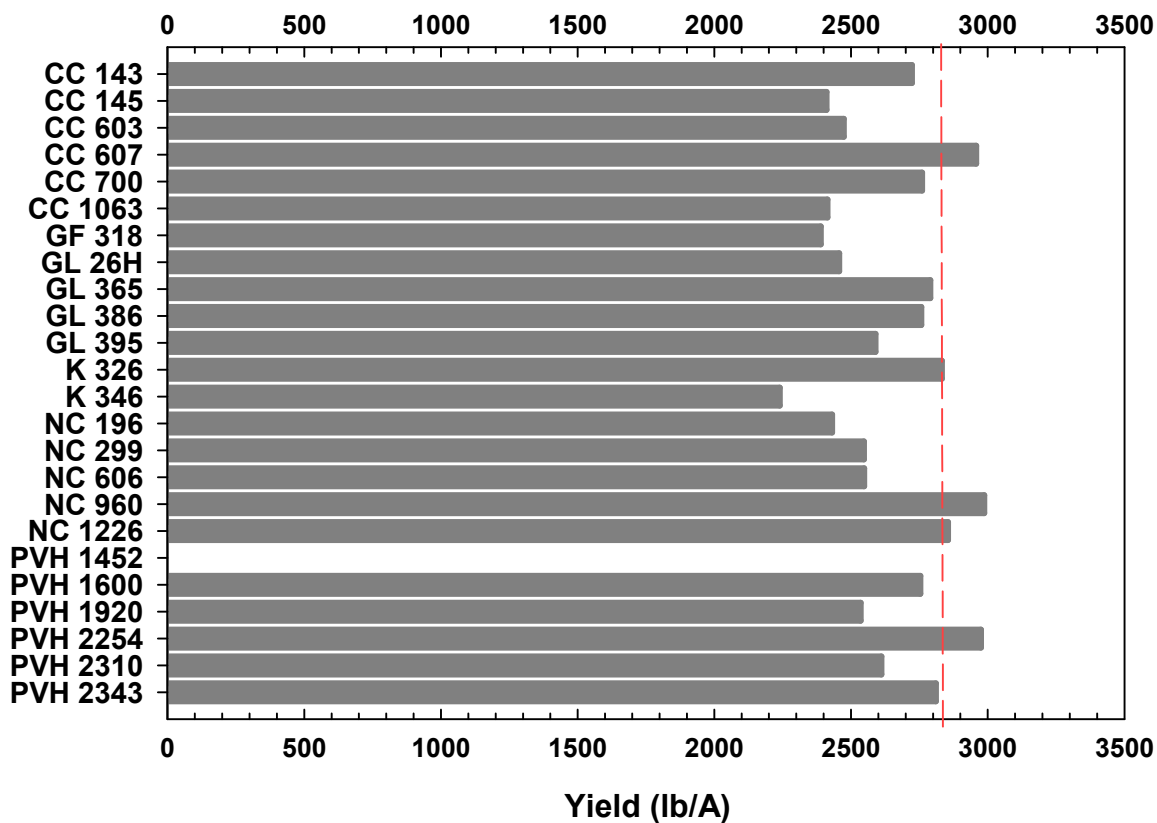


Figure 2. Performance of commercial varieties in the North Carolina Official Variety Test, Rocky Mount, NC, 2023.
*Dashed, red line marks yield of K326