

Preliminary results from the 2024 small grain Virginia official variety trials

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Abstract

Heat and drought during the grain fill period led to rapid maturation and reduced test weight for the 2023-2024 growing season. Fortunately, precipitation throughout the region during mid- to late grain fill largely saved the crop, with another period of heat and low precipitation at maturation helped mature the crop 1-2 weeks earlier than typical, and allowed growers to get into the field to harvest with plenty of time. Disease pressure was high in some regions. Barley Yellow Dwarf Virus had very high infection rates in eastern and southern Virginia, and especially in fields that were planted early. Leaf rust came in earlier than typical in eastern Virginia and the eastern shore, and was particularly detrimental for eastern growers who did not apply fungicide to treat fusarium head blight (scab) infection. Powdery mildew was observed in Eastern Virginia but low pressure due to high temperatures and dry conditions shortly after disease onset. Fusarium head blight (scab) pressure was moderate across most of the state, and came on slightly later than typical years.

Table 1: Virginia state soft winter wheat official variety test at 5 sites across Virginia in 2024. Sites included Blacksburg, Blackstone, Orange, Painter, and Warsaw VA. Holland was not included due to poor establishment and excessive deer damage. Plots at Shenandoah valley were not harvested due to excessive lodging.

Line	Grain Yield bu/ac (6)	Test Weight lb/bu (6)	Heading Date Julian (2)	Height in (2)	Lodging 0-9 (2)	Leaf Rust 0-9 (3)	BYDV 0-9 (2)	Awns A-TA-AL
USG 3463	101.3+	56.7	116	36	1.6	2.5	3	A
USG 3673	99.6+	58.2	115-	37	1.0	0.2-	2	AL
VA20FHB-18	99.4+	58.0	113-	40+	0.5	0.9	2	A
Southern Harvest 5123	99.2+	58.0	116	37	1.1	0.4-	2	AL
18VTK10-23	99.0+	59.8+	112-	39+	0.9	1.6	1-	A
MAS #226	98.3+	57.5	114-	33-	0.8	2.0	3	A
Dyna-Gro 9551	97.7+	55.7-	112-	35-	0.6	6.2+	4	A
MAS #86	97.6+	56.7	117	40+	1.0	4.6	2	A
USG 3354	96.3	56.5	113-	38	3.1+	3.9	2	TA
InSpire FS 745	96.3	56.6	118+	38	0.8	4.6	2	A
VA20W-142	96.2	58.0	116	39	1.2	1.0	2	TA
MAS #155	96.0	56.6	117	39	0.8	6.8+	3	A
Liberty 5658	95.9	58.4	114-	41+	0.8	2.4	1	A
Dyna-Gro 9533	95.8	55.3-	117	36	1.1	6.2+	1	AL
AgriMAXX 545	95.8	55.5-	119+	36	0.8	5.0+	3	A
Revere 2347	95.7	57.5	117	39+	0.8	4.9+	2	A
mean	89.7	57.4	116	37	1.1	2.8	2	NA
LSD	7.1	1.3	1	2	0.9	1.9	2	NA
CV	13.5	3.7	1	4	88.1	61.1	47	NA

continued ...

A plus or minus sign indicates a performance significantly above or below the test average.

The 0-9 ratings indicate a genotype's response to disease or lodging where 0 = highly resistant and 9 = highly susceptible.

FHB = Fusarium Head Blight Score (0-9)

FDK = Fusarium Diseased Kernels (percent)

DON = Deoxynivalenol concentration in the kernels (ppm)

Awns, A = Awned, TA = Tip-Awned, and AL = Awnless

Line	Grain Yield	Test Weight	Heading Date	Height	Lodging	Leaf Rust	BYDV	Awns
Dyna-Gro 9570	95.7	56.5	116	38	2.0+	4.2	4+	A
Revere 2169	95.6	57.0	118	39	0.7	5.5+	2	A
Dyna-Gro 9553	95.3	57.0	119+	36	0.5	2.2	2	A
VT Pitman	95.2	59.1+	114-	37	0.8	0.2-	1	A
USG 3352	95.2	57.4	119+	39	1.1	3.0	3	A
Dyna-Gro 9290	95.0	57.8	114-	37	0.6	3.8	4+	A
18VTK18-112	94.7	57.3	115-	41+	1.1	1.5	2	TA
VA20FHB-20	94.6	59.7+	114-	39	0.5	3.5	3	A
Southern Harvest 9520	94.5	57.4	120+	37	0.6	3.0	3	A
16VDH-SRW03-023	94.4	57.0	114-	39	0.5	0.0-	2	TA
NC18-16900	94.2	57.7	117	39+	1.1	0.2-	1	AL
26R33	94.2	57.5	117	37	0.7	4.7	4+	A
USG 3363	94.2	57.4	118	39	0.8	4.2	2	A
ω Dyna-Gro 9393	94.1	57.5	118+	36	0.6	3.4	3	A
USG 3451	94.0	58.4	114-	37	2.4+	1.8	1	AL
Revere 2277	94.0	57.2	120+	37	0.6	3.7	2	A
USG 3661	93.7	57.6	117	35-	2.5+	0.4-	4	TA
InSpire FS 891	93.7	57.4	118	37	0.9	3.7	2	A
Dyna-Gro 9422	93.6	57.0	117	38	1.1	5.6+	4	A
Dyna-Gro 9593	93.3	57.1	115	35-	0.6	3.8	4	A
GP 543	93.2	56.2	112-	38	2.5+	2.7	3	TA
EPIX 4480	93.2	56.9	119+	36	0.6	4.0	2	A
mean	89.7	57.4	116	37	1.1	2.8	2	NA
LSD	7.1	1.3	1	2	0.9	1.9	2	NA
CV	13.5	3.7	1	4	88.1	61.1	47	NA

continued ...

A plus or minus sign indicates a performance significantly above or below the test average.

The 0-9 ratings indicate a genotype's response to disease or lodging where 0 = highly resistant and 9 = highly susceptible.

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Line	Grain Yield	Test Weight	Heading Date	Height	Lodging	Leaf Rust	BYDV	Awns
MAS #139	93.1	56.2	117	36	0.6	5.8+	3	A
AGS 4043	93.1	58.7+	115-	34-	0.9	0.9	1	A
Phoenix 29	93.1	57.8	118+	37	0.7	2.6	1	A
MAS #228	93.1	57.1	118+	37	0.9	4.5	3	A
MBX 127	93.0	57.1	118	37	0.5	5.2+	2	A
GA15490ID-19-5-21LE2	92.9	57.6	117	38	0.7	1.9	1	A
AgriMAXX EXP 2404	92.8	57.2	119+	35-	0.6	4.0	3	A
VA22W-196	92.8	56.4	112-	35-	1.0	0.7-	2	AL
Dyna-Gro 9231	92.7	56.8	117	40+	0.9	4.7	3	A
MAS #225	92.7	56.8	118+	36	0.5	3.9	2	A
AgriMAXX 516	92.6	56.6	118	38	0.8	4.9+	3	A
EPIX 3489	92.6	57.8	117	35-	1.1	4.3	2	A
NC15305-43	92.4	59.2+	116	37	0.8	0.5-	1	A
AgriMAXX 535	92.1	58.3	118+	36	0.5	3.3	3	A
KWS543	92.1	57.4	118+	36	0.8	4.3	2	A
VA22W-201	92.1	58.8+	114-	34-	1.5	1.4	2	A
USG 3472	92.1	56.7	118+	36	0.8	6.0+	2	A
InSpire FS 743	92.0	57.7	118	39	0.6	4.0	3	A
InSpire FS 747	92.0	56.8	115-	37	0.6	2.3	3	AL
EPIX 4372	91.8	57.0	118	37	0.8	5.1+	3	A
AgriMAXX 544	91.8	56.9	115-	38	0.8	2.6	2	TA
DH19SRW07-321	91.6	57.7	117	38	0.8	2.4	1-	A
mean	89.7	57.4	116	37	1.1	2.8	2	NA
LSD	7.1	1.3	1	2	0.9	1.9	2	NA
CV	13.5	3.7	1	4	88.1	61.1	47	NA

continued ...

A plus or minus sign indicates a performance significantly above or below the test average.

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Line	Grain Yield	Test Weight	Heading Date	Height	Lodging	Leaf Rust	BYDV	Awns
InSpire FS 855	91.6	56.9	118	38	0.6	3.4	3	A
DH19SRW08-020	91.6	58.7+	112-	35-	0.8	1.4	1	A
EPIX 3498	91.5	57.9	118+	37	0.9	4.6	2	A
MAS #227	91.4	57.4	119+	36	1.4	3.4	3	A
19VTK7-66	91.2	56.9	117	41+	1.9	0.4-	2	A
Dyna-Gro 9172	91.1	56.5	118+	37	0.9	6.4+	3	A
AgriMAXX 525	90.8	56.6	119+	35-	0.7	4.9+	5+	A
VA22W-21	90.6	56.1-	119+	34-	0.5	1.9	3	A
Dyna-Gro 9120	90.6	58.3	116	36	0.5	4.0	2	A
DH20SRW02-073	90.5	57.6	118+	36	2.1+	0.0-	2	TA
CP8045	90.4	56.5	118+	38	0.9	5.8+	2	A
18VTK10-110	90.4	58.8+	118+	36	0.5	1.2	1-	A
VA18HRW-58	90.3	58.3	121+	40+	2.1+	2.4	3	A
NC14757LDH-44	90.1	57.6	114-	38	1.8	0.6-	1-	TA
19VDH-FHB-MAS05-27	90.1	56.2	118+	39+	2.3+	2.5	1	TA
NC20-21971	90.1	58.6+	114-	40+	2.4+	0.6-	1-	TA
VA20W-135	90.0	57.8	116	40+	0.9	1.0	2	A
18VTK6-3	89.9	58.2	118+	37	0.7	0.9-	1-	A
17VDH-SRW02-125	89.8	58.8+	119+	37	0.7	0.8-	2	A
UMD-VTWVT24-2	89.8	57.8	117	38	1.0	2.0	3	TA
GP 381	89.7	56.6	114-	36	0.7	1.9	1-	AL
Southern Harvest 7200	89.6	58.7+	113-	41+	1.5	0.7-	3	A
mean	89.7	57.4	116	37	1.1	2.8	2	NA
LSD	7.1	1.3	1	2	0.9	1.9	2	NA
CV	13.5	3.7	1	4	88.1	61.1	47	NA

continued ...

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Line	Grain Yield	Test Weight	Heading Date	Height	Lodging	Leaf Rust	BYDV	Awns
Featherstone 3000	89.6	58.2	117	37	0.7	1.0	3	AL
19VTK5-167	89.4	56.9	116	33-	1.5	0.6-	2	A
MAS #190	89.4	57.3	120+	36	0.5	5.1+	2	A
KWS527	89.3	57.1	118+	38	1.0	4.4	3	A
18VTK15-27	89.1	55.9-	111-	38	4.1+	2.0	2	TA
Southern Harvest 4222	89.0	57.7	117	39	0.9	5.0+	3	A
KWS542	89.0	57.2	116	40+	1.1	2.2	2	A
EPIX 1375	89.0	57.9	112-	37	1.9	0.5-	3	TA
Phoenix 96	89.0	58.2	120+	41+	0.7	2.5	2	A
AgriMAXX 513	88.9	57.2	118	37	0.6	4.0	2	A
Dyna-Gro 9151	88.7	58.5	118	38	0.9	5.0+	4	A
MBX 230	88.6	57.6	117	39	0.9	5.1+	4+	A
17VTK4-29	88.6	57.4	114-	35-	2.0+	1.6	2	AL
NC16VT30-7-47	88.6	58.9+	113-	36	1.9	0.2-	1	TA
DH19SRW07-309	88.5	57.7	117	39	0.6	3.4	1	A
Dyna-Gro Shirley	88.5	56.4	117	35-	0.8	1.0	2	TA
MAS #178	88.4	56.6	118+	39+	0.9	2.2	2	AL
Southern Harvest 7222	88.4	59.2+	118	38	0.6	1.0	1-	A
18VTK10-5	88.3	58.7+	117	37	0.6	1.2	1-	A
GA151313-LDH-192 -20E48	88.2	57.9	119+	32-	0.5	0.9-	2	A
AgriMAXX 505	87.9	58.5	118	37	1.6	4.9+	4+	A
USG 3884	87.8	57.4	116	35-	0.8	2.4	3	A
mean	89.7	57.4	116	37	1.1	2.8	2	NA
LSD	7.1	1.3	1	2	0.9	1.9	2	NA
CV	13.5	3.7	1	4	88.1	61.1	47	NA

continued ...

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Line	Grain Yield	Test Weight	Heading Date	Height	Lodging	Leaf Rust	BYDV	Awns
19VDH-FHB-MAS03-29	87.7	57.6	115-	37	0.7	0.5-	2	AL
18VDH-FHB-MAS07-173-03	87.2	56.8	116	40+	2.7+	0.5-	3	A
15VTK-1-101	87.1	57.4	116	34-	0.7	0.0-	2	A
KWS529	86.9	55.5-	116	36	1.6	4.3	2	AL
17VDH-SRW01-077	86.7	58.5	113-	38	0.6	0.3-	4	A
MAS #189	86.4	58.0	112-	40+	2.8+	4.9+	2	A
DH17SRW136-066	86.4	56.4	115-	37	1.4	3.9	3	TA
MAS #316	86.2	56.4	119+	39	1.1	5.2+	5+	A
26R59	86.1	56.5	116	34-	0.6	4.6	3	TA
VA21W-112	86.0	56.2	115-	36	0.6	0.6-	2	A
MAS #106	85.8	57.4	110-	35-	2.5+	3.4	2	TA
GA131246LDH-86-21E2	85.8	55.6-	118	37	0.8	0.6-	3	A
USG 3574	85.8	55.4-	114-	34-	1.4	5.0+	1	AL
15VDH-FHB-MAS25-15	85.6	58.1	114-	36	0.5	0.6-	2	A
MAS #2	85.4	58.8+	119+	45+	3.9+	4.5	2	AL
UMD-VTWVT24-3	85.4	57.8	116	37	1.2	2.4	3	A
AgriMAXX 503	85.3	57.3	118+	37	1.6	4.0	3	AL
VA21W-39	85.1	57.3	115-	40+	1.1	3.2	2	A
DH19SRW09-073	84.7	56.3	116	41+	1.4	2.2	3	AL
AGS 3026	84.7	56.4	120+	37	0.8	1.2	1-	A
VA19FHB-36	84.6	59.0+	115-	41+	0.7	2.3	2	A
19VDH-FHB-MAS01-29	84.6	54.9-	117	32-	0.5	1.0	2	A
mean	89.7	57.4	116	37	1.1	2.8	2	NA
LSD	7.1	1.3	1	2	0.9	1.9	2	NA
CV	13.5	3.7	1	4	88.1	61.1	47	NA

continued ...

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Line	Grain Yield	Test Weight	Heading Date	Height	Lodging	Leaf Rust	BYDV	Awns
MAS #67	84.4	55.9-	113-	36	0.9	4.8+	3	AL
26R45	84.4	56.2	117	39	1.6	3.7	3	AL
GA141045-9-3-2-21LE7	84.3	58.6	118+	40+	0.8	0.8-	2	A
GANC12915-167-21E3	84.0	57.6	115-	37	0.9	0.6-	1	TA
VA22FHB-90	83.9	58.4	120+	40+	1.7	1.0	2	AL
NC11546-14	83.8	59.9+	114-	39	2.2+	1.4	3	A
HILLIARD	83.8	58.1	114-	39+	0.5	1.5	3	A
VA19W-29	83.8	57.2	115-	40+	0.9	4.8+	2	A
MERL	83.3	58.4	113-	37	0.7	4.2	3	TA
EPIX 1365	82.8	56.1-	116	37	0.6	2.2	5+	A
19VDH-FHB-MAS02-06	82.5-	58.4	119+	35-	0.5	2.4	2	A
MAS #133	82.2-	55.0-	118+	38	0.8	5.3+	4	A
CP8024	82.0-	58.7+	119+	36	0.9	3.6	2	AL
∞ 18VTK12-111	81.9-	58.0	120+	35-	0.5	0.7-	1	TA
18VTK5-95	81.1-	57.6	116	35-	1.0	1.0	2	AL
VA19HRW-17	80.7-	57.0	122+	38	0.5	1.0	2	A
KWS525	80.3-	56.8	119+	35-	0.5	4.7	4	A
DH19SRW08-001	80.0-	56.0-	118+	35-	1.3	2.2	3	TA
VA19MAS7-519-1WS-R110	78.8-	57.9	118+	37	0.5	2.7	3	A
VA20HRW-50	78.5-	57.5	119+	42+	0.8	2.8	1	A
17VTK18-13	76.0-	55.7-	118+	38	0.6	1.0	2	A
MASSEY	70.4-	57.5	114-	41+	2.4+	8.3+	3	TA
mean	89.7	57.4	116	37	1.1	2.8	2	NA
LSD	7.1	1.3	1	2	0.9	1.9	2	NA
CV	13.5	3.7	1	4	88.1	61.1	47	NA

continued ...

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Line	Grain Yield	Test Weight	Heading Date	Height	Lodging	Leaf Rust	BYDV	Awns
15VTK-1-101-BS112	65.4-	54.2-	120+	35-	0.5	3.6	3	TA
mean	89.7	57.4	116	37	1.1	2.8	2	NA
LSD	7.1	1.3	1	2	0.9	1.9	2	NA
CV	13.5	3.7	1	4	88.1	61.1	47	NA

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Table 2: Virginia state soft winter wheat official variety test in Blacksburg, VA in 2024.

Line	Grain Yield bu/ac	Test Weight lb/bu	Heading Date Julian	Height in	Lodging 0-9	Awns A-TA-AL
USG 3463	128.0	56.0-	119	35	2.3	A
16VDH-SRW03-023	127.8	56.3	118-	40	-0.0	TA
DH20SRW02-073	127.0	56.9	120+	38	2.7+	TA
19VTK7-66	125.0	56.9	120	42+	2.5	A
Dyna-Gro 9570	124.8	55.3-	120	37	2.7+	A
AgriMAXX 545	124.6	54.9-	121+	37	0.5	A
18VTK10-23	123.3	58.6+	115-	38	0.7	A
VA20W-142	122.5	57.3+	120	39	1.2	TA
MAS #226	122.4	57.1	118-	36	0.5	A
Southern Harvest 9520	122.2	56.8	122+	36	0.3	A
MAS #155	122.2	55.9-	119	39	0.5	A
Southern Harvest 5123	121.7	56.8	120	39	1.2	AL
USG 3673	121.7	56.8	119-	36	1.0	AL
GP 543	121.6	56.0-	116-	40	3.5+	TA
InSpire FS 891	121.6	57.2	120+	36	0.7	A
EPIX 4480	120.4	56.6	121+	35	0.3	A
VA20FHB-18	119.7	57.4+	118-	40	-0.0	A
Revere 2169	119.6	56.0-	120	38	0.2	A
18VTK18-112	119.5	57.4+	118-	40	0.7	TA
Dyna-Gro 9551	119.2	54.9-	115-	35	-0.0	A
InSpire FS 743	119.1	57.2	120	38	0.3	A
USG 3661	119.0	56.4	120	35	3.7+	TA
EPIX 3489	118.9	56.8	120	35	1.0	A
26R33	118.9	57.1	120	38	0.5	A
MAS #139	118.5	55.1-	120	36	0.2	A
USG 3354	118.1	55.8-	117-	37	3.8+	TA
17VTK4-29	118.1	56.9	118-	35	2.5	TA
InSpire FS 745	118.0	56.0-	119	38	0.5	A
AgriMAXX EXP 2404	117.7	56.5	121+	34-	0.2	A
Southern Harvest 7222	117.3	57.9+	120	38	0.3	A
KWS543	117.0	56.0-	121+	37	0.5	A
mean	109.8	56.6	119	37	1.0	NA
LSD	18.9	0.6	1	3	1.6	NA
CV	12.3	0.7	0	4	119.0	NA

continued ...

A plus or minus sign indicates a performance significantly above or below the test average.
The 0-9 ratings indicate a genotype's response to disease or lodging where 0 = highly resistant and 9 = highly susceptible.
FHB = Fusarium Head Blight Score (0-9)
FDK = Fusarium Diseased Kernels (percent)
DON = Deoxynivalenol concentration in the kernels (ppm)
Awns, A = Awned, TA = Tip-Awned, and AL = Awnless

Line	Grain Yield	Test Weight	Heading Date	Height	Lodging	Awns
Dyna-Gro 9593	116.9	56.1	119	35	-0.0	A
InSpire FS 747	116.9	55.6-	119	37	0.2	TA
DH19SRW07-309	116.7	57.2	120	38	-0.0	A
MBX 230	116.7	56.9	120	39	0.7	A
VA19MAS7-519-1WS-R110	116.3	58.8+	120+	39	-0.0	A
Dyna-Gro 9231	116.0	57.2	119	40	0.7	A
Phoenix 29	116.0	57.8+	121+	37	0.5	A
MBX 127	115.6	56.0-	120	36	-0.0	A
Dyna-Gro 9533	115.5	54.9-	120	34	1.0	AL
KWS529	115.4	54.9-	119	37	2.2	TA
18VTK10-110	115.3	59.0+	120	35	-0.0	A
Liberty 5658	114.9	57.5+	117-	42+	0.2	A
Dyna-Gro 9172	114.6	55.9-	120	38	0.7	A
USG 3352	114.1	56.1	121+	37	0.7	A
VA22W-21	114.0	55.2-	122+	34-	0.0	A
GA151313-LDH-192 -20E48	113.8	56.9	121+	33-	-0.0	A
MAS #178	113.8	55.6-	121+	40	0.7	AL
USG 3472	113.5	55.8-	120	36	0.5	A
DH17SRW136-066	113.4	56.3	119	36	1.5	TA
DH19SRW07-321	113.2	57.5+	120	37	0.5	A
MAS #227	113.2	55.2-	120	36	1.7	A
NC18-16900	113.2	56.7	120	40	1.2	TA
19VDH-FHB-MAS05-27	112.6	55.1-	121+	38	3.5+	TA
VA18HRW-58	112.5	58.3+	122+	40	3.2+	A
AgriMAXX 535	112.2	57.8+	121+	34	-0.0	A
19VTK5-167	112.0	55.8-	120	33-	1.8	A
USG 3363	111.8	56.9	119	38	0.5	A
15VTK-1-101	111.7	56.9	121+	32-	0.2	A
DH19SRW09-073	111.6	56.5	118-	41+	1.0	TA
EPIX 3498	111.5	56.4	121+	36	0.7	A
Revere 2277	111.4	56.4	121+	35	-0.0	A
MAS #86	111.3	55.2-	119	41+	1.0	A
Dyna-Gro 9120	111.2	58.1+	119	35	-0.0	A
DH19SRW08-020	110.9	57.8+	117-	35	0.5	A
mean	109.8	56.6	119	37	1.0	NA
LSD	18.9	0.6	1	3	1.6	NA
CV	12.3	0.7	0	4	119.0	NA

continued ...

A plus or minus sign indicates a performance significantly above or below the test average.

The 0-9 ratings indicate a genotype's response to disease or lodging where 0 = highly resistant and 9 = highly susceptible.

FHB = Fusarium Head Blight Score (0-9)

FDK = Fusarium Diseased Kernels (percent)

DON = Deoxynivalenol concentration in the kernels (ppm)

Awns, A = Awned, TA = Tip-Awned, and AL = Awnless

Line	Grain Yield	Test Weight	Heading Date	Height	Lodging	Awns
USG 3884	110.7	56.1	120	33-	0.5	A
Featherstone 3000	110.7	57.5+	119	37	0.3	AL
VA22FHB-90	110.7	57.6+	121+	40	2.0	TA
Dyna-Gro 9422	110.5	55.7-	120	38	1.2	A
AgriMAXX 503	110.4	55.9-	120	38	2.0	AL
VA22W-201	110.4	57.8+	118-	34	1.7	A
VT Pitman	110.3	57.5+	118-	34	0.5	A
HILLIARD	110.2	56.6	118-	39	-0.0	A
VA20W-135	109.9	57.0	119	41+	0.7	A
Dyna-Gro 9553	109.9	56.3	121+	35	-0.0	A
MAS #133	109.8	54.4-	120	38	0.5	A
VA20FHB-20	109.7	58.3+	119	37	-0.0	A
USG 3574	109.6	54.8-	120	34-	1.5	AL
GA131246LDH-86-21E2	109.5	56.7	121+	37	0.5	A
MAS #189	109.1	57.8+	116-	40	3.8+	A
CP8045	108.9	56.0-	120	38	0.7	A
MERL	108.9	57.9+	118-	37	0.2	TA
DH19SRW08-001	108.9	56.6	121+	35	1.2	TA
18VDH-FHB-MAS07-173-03	108.7	56.9	118-	40	3.7+	A
VA21W-112	108.4	55.5-	119	35	0.2	A
AgriMAXX 516	107.9	55.7-	120	37	0.5	A
VA21W-39	107.8	56.3	119	40	1.2	A
Dyna-Gro 9151	107.6	57.3+	120	39	0.7	A
MAS #190	107.6	56.9	121+	34-	-0.0	A
17VDH-SRW01-077	107.5	57.9+	116-	40	0.2	A
KWS527	107.5	56.2	120	38	1.0	A
MAS #228	107.3	56.5	121+	37	0.7	A
Southern Harvest 4222	107.0	56.7	120	38	0.7	A
VA19HRW-17	106.9	57.3+	123+	36	0.0	A
AgriMAXX 525	106.9	56.1	121+	33-	0.5	A
Revere 2347	106.9	57.1	119	38	0.5	A
26R45	106.8	55.3-	119	40	2.0	AL
Dyna-Gro Shirley	106.7	55.9-	119	35	0.5	TA
17VDH-SRW02-125	106.7	57.7+	121+	37	0.2	A
mean	109.8	56.6	119	37	1.0	NA
LSD	18.9	0.6	1	3	1.6	NA
CV	12.3	0.7	0	4	119.0	NA

continued ...

A plus or minus sign indicates a performance significantly above or below the test average.
The 0-9 ratings indicate a genotype's response to disease or lodging where 0 = highly resistant and 9 = highly susceptible.
FHB = Fusarium Head Blight Score (0-9)
FDK = Fusarium Diseased Kernels (percent)
DON = Deoxynivalenol concentration in the kernels (ppm)
Awns, A = Awned, TA = Tip-Awned, and AL = Awnless

Line	Grain Yield	Test Weight	Heading Date	Height	Lodging	Awns
Dyna-Gro 9393	106.5	56.4	121+	35	0.2	A
VA22W-196	106.2	56.0-	116-	35	1.0	TA
MAS #316	106.1	56.2	121+	40	1.2	A,AL
GA15490ID-19-5-21LE2	105.9	57.3+	121+	37	0.2	A
19VDH-FHB-MAS01-29	105.8	55.1-	120	31-	0.0	A
USG 3451	105.7	57.7+	118-	37	3.5+	AL
Dyna-Gro 9290	105.5	56.7	119-	37	0.0	A
AgriMAXX 513	105.4	56.3	120	37	0.2	A
EPIX 1365	105.1	55.0-	119	36	-0.0	A
GA141045-9-3-2-21LE7	105.0	58.5+	121+	39	0.5	A
19VDH-FHB-MAS03-29	104.9	56.2	119	36	0.5	TA
18VTK12-111	104.8	56.8	121+	36	-0.0	TA
NC14757LDH-44	104.8	56.9	118-	36	2.0	TA
MAS #67	104.5	55.3-	118-	37	0.7	AL
18VTK10-5	104.3	58.0+	120	36	0.2	A
26R59	104.1	55.8-	119-	33-	0.2	TA
EPIX 4372	104.0	56.1	120	36	0.5	A
NC11546-14	104.0	58.5+	118-	39	2.8+	A
GANC12915-167-21E3	103.9	57.2+	119	37	0.7	TA
GP 381	103.8	55.4-	118-	35	0.2	AL
AgriMAXX 544	103.7	55.4-	119-	37	0.3	TA
AGS 4043	103.7	57.5+	120	34	0.2	A
19VDH-FHB-MAS02-06	103.7	56.6	121+	35	-0.0	A
15VDH-FHB-MAS25-15	103.4	57.1	118-	36	-0.0	A
InSpire FS 855	103.0	56.0-	120	38	0.2	A
18VTK6-3	102.9	57.6+	120+	37	0.2	A
UMD-VTWVT24-2	102.8	57.8+	120	36	0.8	TA
CP8024	102.5	57.5+	121+	34	0.8	AL
AgriMAXX 505	102.3	57.5+	120	37	2.3	A
UMD-VTWVT24-3	101.7	57.0	119	36	1.4	A
NC16VT30-7-47	101.7	58.0+	117-	36	2.2	TA
18VTK15-27	101.5	54.5-	115-	37	6.2+	TA
Southern Harvest 7200	101.2	57.2+	117-	40	1.7	A
18VTK5-95	99.3	57.1	119	33-	0.7	AL
mean	109.8	56.6	119	37	1.0	NA
LSD	18.9	0.6	1	3	1.6	NA
CV	12.3	0.7	0	4	119.0	NA

continued ...

A plus or minus sign indicates a performance significantly above or below the test average.
The 0-9 ratings indicate a genotype's response to disease or lodging where 0 = highly resistant and 9 = highly susceptible.
FHB = Fusarium Head Blight Score (0-9)
FDK = Fusarium Diseased Kernels (percent)
DON = Deoxynivalenol concentration in the kernels (ppm)
Awns, A = Awned, TA = Tip-Awned, and AL = Awnless

Line	Grain Yield	Test Weight	Heading Date	Height	Lodging	Awns
EPIX 1375	99.0	57.8+	116-	38	2.0	TA
NC15305-43	99.0	57.2	119	37	0.5	A
MAS #2	98.9	56.9	120+	46+	5.0+	TA
VA19W-29	98.4	56.7	119	41+	0.7	A
MAS #225	98.3	55.5-	121+	35	-0.0	A
Phoenix 96	98.2	57.4+	121+	40	0.5	A
KWS525	96.6	55.9-	121+	33-	0.0	A
MAS #106	96.0	56.3	113-	36	3.5+	TA
VA20HRW-50	95.2	57.3+	121+	41+	0.5	A
17VTK18-13	94.7	55.4-	121+	37	0.2	A
KWS542	94.6	57.1	119	40	1.0	A
VA19FHB-36	94.1	57.4+	119	41+	0.2	A
NC20-21971	92.6	58.0+	118-	40	3.0+	TA
AGS 3026	85.5-	57.2	123+	37	0.5	A
15VTK-1-101-BS112	85.3-	54.5-	121+	34	-0.0	TA
MASSEY	81.9-	57.2	118-	41+	3.2+	TA
mean	109.8	56.6	119	37	1.0	NA
LSD	18.9	0.6	1	3	1.6	NA
CV	12.3	0.7	0	4	119.0	NA

A plus or minus sign indicates a performance significantly above or below the test average.
The 0-9 ratings indicate a genotype's response to disease or lodging where 0 = highly resistant and 9 = highly susceptible.
FHB = Fusarium Head Blight Score (0-9)
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Awns, A = Awned, TA = Tip-Awned, and AL = Awnless

Table 3: Virginia state soft winter wheat official variety test in Blackstone, VA in 2024.

Line	Grain Yield bu/ac	Test Weight lb/bu	Leaf Rust 0-9	BYDV 0-9	Awns A-TA-AL
17VDH-SRW02-125	79.3	60.9+	-0.1	2	A
VA20FHB-18	79.0	59.6+	0.2	3	A
19VTK7-66	77.8	59.0	0.1	3	A
18VTK10-5	76.1	60.7+	0.0	1-	A
USG 3463	74.5	57.4	1.4	4	A
VA20FHB-20	73.9	60.8+	0.2	4	A
MAS #86	73.9	56.9-	0.1	2	A
26R33	73.8	58.3	0.7	5+	A
USG 3352	73.8	57.5	0.1	2	A
Southern Harvest 5123	73.5	59.6+	0.2	3	AL
GA15490ID-19-5-21LE2	73.3	58.9	0.7	2	A
Southern Harvest 9520	73.2	58.3	0.7	4	A
18VTK10-23	73.1	61.1+	0.1	1-	A
Dyna-Gro 9553	73.0	57.6	0.1	3	A
Dyna-Gro 9551	72.9	55.7-	5.2+	6+	A
AGS 4043	72.5	58.9	0.7	2	A
Revere 2277	72.0	58.7	1.3	2	A
InSpire FS 855	71.9	57.9	0.7	4	A
Dyna-Gro 9593	71.5	57.4	2.1	6+	A
VA18HRW-58	71.4	60.1+	0.1	2	A
VT Pitman	71.3	59.6+	0.1	2	A
Phoenix 29	70.9	59.2	0.4	2	A
18VTK10-110	70.8	61.1+	0.2	1-	A
Southern Harvest 7200	70.8	59.4	-0.0	4	A
Dyna-Gro 9393	70.5	57.9	0.3	4	A
AgriMAXX 545	70.5	55.7-	2.7	4	A
NC14757LDH-44	70.4	59.2	-0.0	1-	TA
MAS #225	70.4	57.7	0.3	3	A
InSpire FS 745	70.3	56.2-	0.1	3	A
Dyna-Gro 9120	70.1	59.6+	0.7	2	A
mean	64.6	58.4	0.9	4	NA
LSD	15.9	1.2	2.5	2	NA
CV	15.7	1.4	141.2	25	NA

continued ...

A plus or minus sign indicates a performance significantly above or below the test average.

The 0-9 ratings indicate a genotype's response to disease or lodging where 0 = highly resistant and 9 = highly susceptible.

FHB = Fusarium Head Blight Score (0-9)

FDK = Fusarium Diseased Kernels (percent)

DON = Deoxynivalenol concentration in the kernels (ppm)

Awns, A = Awned, TA = Tip-Awned, and AL = Awnless

Line	Grain Yield	Test Weight	Leaf Rust	BYDV	Awns
USG 3472	70.1	55.7-	1.1	4	A
Revere 2347	70.1	58.1	1.3	4	A
KWS542	69.6	58.3	1.3	4	A
KWS527	68.9	57.9	0.1	5	A
Dyna-Gro 9231	68.8	58.0	1.7	5	A
MAS #227	68.7	56.9-	0.3	4	A
Southern Harvest 7222	68.5	60.1+	0.1	1-	A
AgriMAXX 535	68.4	59.2	1.0	4	A
Dyna-Gro 9570	68.4	56.3-	0.7	6+	A
DH19SRW07-321	68.2	58.4	0.1	1-	A
Phoenix 96	68.1	58.3	0.2	3	A
MBX 127	68.0	56.9-	2.1	4	A
USG 3673	68.0	59.9+	0.1	2	AL
KWS543	68.0	57.7	2.0	3	A
NC11546-14	67.8	60.7+	0.1	4	A
EPIX 4372	67.8	57.1-	1.4	5	A
Liberty 5658	67.8	59.1	1.1	2	A
GA151313-LDH-192 -20E48	67.7	59.8+	0.3	2	A
DH19SRW09-073	67.6	57.5	1.1	5	AL
EPIX 1375	67.2	59.5	0.2	5	AL
USG 3451	67.1	58.3	0.1	2	AL
AgriMAXX 525	67.1	58.9	2.3	4	A
MAS #228	66.9	57.7	1.4	5+	A
VA19FHB-36	66.5	60.3+	0.3	4	A
CP8045	66.3	55.7-	0.1	4	A
VA22W-21	66.3	57.7	0.0	5	A
MAS #139	66.3	56.8-	2.4	3	A
AgriMAXX 516	66.2	56.5-	1.7	6+	A
USG 3884	66.2	58.3	1.1	5	A
VA20W-142	66.1	58.4	0.3	3	AL
AgriMAXX EXP 2404	66.0	58.4	1.0	4	A
NC18-16900	65.8	60.1+	0.1	2	AL
VA19HRW-17	65.8	59.1	0.1	4	A
mean	64.6	58.4	0.9	4	NA
LSD	15.9	1.2	2.5	2	NA
CV	15.7	1.4	141.2	25	NA

continued ...

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Line	Grain Yield	Test Weight	Leaf Rust	BYDV	Awns
EPIX 3489	65.8	58.9	0.3	4	A
Southern Harvest 4222	65.7	57.0-	1.4	5+	A
USG 3363	65.7	55.7-	1.2	3	A
18VTK6-3	65.7	59.6+	0.3	1-	A
DH19SRW07-309	65.6	58.1	1.7	2	A
17VDH-SRW01-077	65.3	60.5+	-0.1	5+	A
18VDH-FHB-MAS07-173-03	65.0	58.8	0.2	5+	A
MAS #316	65.0	57.1-	2.1	6+	A
MAS #133	65.0	55.0-	0.9	6+	A
15VDH-FHB-MAS25-15	64.8	59.9+	0.1	2	A
NC20-21971	64.8	61.1+	-0.1	1-	TA
USG 3354	64.6	57.1-	0.7	3	AL
EPIX 4480	64.5	58.6	0.1	3	A
EPIX 3498	64.5	57.7	1.4	3	A
InSpire FS 891	64.3	58.9	0.7	4	A
Dyna-Gro 9422	64.3	56.5-	2.9	4	A
Dyna-Gro 9290	64.1	57.6	1.4	7+	A
AgriMAXX 513	63.8	57.9	1.4	3	A
19VDH-FHB-MAS02-06	63.8	59.3	1.0	3	A
Dyna-Gro 9172	63.5	55.9-	3.3	5+	A
MBX 230	63.4	57.8	1.4	6+	A
GA141045-9-3-2-21LE7	63.4	60.5+	-0.1	3	A
VA22FHB-90	63.2	59.5	0.0	3	AL
UMD-VTWVT24-2	63.2	59.7+	0.1	4	AL
MAS #226	63.0	57.5	0.0	6+	A
AGS 3026	62.5	60.4+	2.7	1-	A
18VTK12-111	62.2	60.5+	-0.0	2	TA
AgriMAXX 544	62.2	57.2-	0.3	4	AL
InSpire FS 743	61.9	58.3	0.0	3	A
GA131246LDH-86-21E2	61.8	57.4	0.4	4	A
EPIX 1365	61.6	56.8-	0.2	6+	A
MAS #2	61.5	60.3+	3.7+	2	AL
VA20W-135	61.3	59.8+	0.4	2	A
mean	64.6	58.4	0.9	4	NA
LSD	15.9	1.2	2.5	2	NA
CV	15.7	1.4	141.2	25	NA

continued ...

A plus or minus sign indicates a performance significantly above or below the test average.

The 0-9 ratings indicate a genotype's response to disease or lodging where 0 = highly resistant and 9 = highly susceptible.

FHB = Fusarium Head Blight Score (0-9)

FDK = Fusarium Diseased Kernels (percent)

DON = Deoxynivalenol concentration in the kernels (ppm)

Awns, A = Awned, TA = Tip-Awned, and AL = Awnless

Line	Grain Yield	Test Weight	Leaf Rust	BYDV	Awns
Revere 2169	61.2	56.5-	1.7	2	A
19VTK5-167	61.1	57.3	-0.1	3	A
Featherstone 3000	61.0	59.7+	0.4	5+	AL
VA21W-39	60.4	58.3	1.0	4	A
MERL	60.4	59.7+	0.7	5	TA
NC15305-43	60.3	60.8+	-0.1	1-	A
MAS #190	60.2	57.3	1.9	2	A
InSpire FS 747	60.1	56.8-	0.3	5	AL
GP 543	59.9	58.3	0.2	4	AL
VA19W-29	59.9	58.3	1.1	3	A
VA22W-196	59.4	56.6-	0.2	4	AL
18VTK5-95	59.4	61.2+	-0.1	2	AL
CP8024	59.4	59.3	0.7	3	AL
MAS #155	59.4	55.5-	6.1+	3	A
VA22W-201	59.4	60.1+	0.7	3	A
Dyna-Gro 9151	59.2	59.1	1.2	5	A
Dyna-Gro Shirley	59.0	57.7	-0.1	4	TA
VA20HRW-50	59.0	59.7+	-0.1	2	A
15VTK-1-101	58.9	60.0+	0.1	3	A
17VTK4-29	58.8	59.9+	-0.0	3	AL
DH17SRW136-066	58.5	58.4	1.0	4	TA
UMD-VTWVT24-3	58.4	60.7+	-0.0	4	A,AL
16VDH-SRW03-023	58.2	59.4	0.1	3	TA
HILLIARD	57.5	59.2	0.2	5	A
VA21W-112	57.1	57.7	1.1	4	A
DH20SRW02-073	57.0	59.6+	0.1	2	AL
NC16VT30-7-47	56.8	60.6+	0.1	1-	TA
VA19MAS7-519-1WS-R110	56.6	61.4+	0.7	4	A
AgriMAXX 505	56.5	59.2	1.2	4	A
19VDH-FHB-MAS05-27	56.5	57.4	1.9	2	AL
DH19SRW08-020	56.0	59.0	0.1	2	A
19VDH-FHB-MAS01-29	55.5	56.9-	0.7	3	A
USG 3661	54.8	60.2+	1.1	5	AL
mean	64.6	58.4	0.9	4	NA
LSD	15.9	1.2	2.5	2	NA
CV	15.7	1.4	141.2	25	NA

continued ...

A plus or minus sign indicates a performance significantly above or below the test average.

The 0-9 ratings indicate a genotype's response to disease or lodging where 0 = highly resistant and 9 = highly susceptible.

FHB = Fusarium Head Blight Score (0-9)

FDK = Fusarium Diseased Kernels (percent)

DON = Deoxynivalenol concentration in the kernels (ppm)

Awns, A = Awned, TA = Tip-Awned, and AL = Awnless

Line	Grain Yield	Test Weight	Leaf Rust	BYDV	Awns
USG 3574	54.6	53.3-	4.4+	1-	AL
MAS #189	53.4	59.2	2.0	2	M
MAS #178	53.1	58.4	0.1	2	AL
Dyna-Gro 9533	53.1	53.8-	4.7+	2	AL
26R45	52.3	56.7-	0.7	5	AL
GANC12915-167-21E3	52.2	59.3	0.4	2	AL
KWS525	52.1	57.3	2.0	6+	A
18VTK18-112	51.8	58.5	0.9	3	AL
17VTK18-13	51.6	57.1-	0.1	3	A
GP 381	49.5	57.4	0.2	1-	AL
15VTK-1-101-BS112		56.6-	0.4	5+	AL
18VTK15-27		56.3-	0.1	3	TA
19VDH-FHB-MAS03-29		58.8	0.2	2	AL
26R59		58.8	0.4	5+	AL
AgriMAXX 503		58.9	1.3	6+	AL
DH19SRW08-001		57.1-	0.7	5	AL
KWS529		56.5-	0.9	3	AL
MAS #106		58.4	0.0	3	TA
MAS #67		55.9-	4.1+	5+	AL
MASSEY		59.3	7.4+	6+	TA
mean	64.6	58.4	0.9	4	NA
LSD	15.9	1.2	2.5	2	NA
CV	15.7	1.4	141.2	25	NA

A plus or minus sign indicates a performance significantly above or below the test average.

The 0-9 ratings indicate a genotype's response to disease or lodging where 0 = highly resistant and 9 = highly susceptible.

FHB = Fusarium Head Blight Score (0-9)

FDK = Fusarium Diseased Kernels (percent)

DON = Deoxynivalenol concentration in the kernels (ppm)

Awns, A = Awned, TA = Tip-Awned, and AL = Awnless

Table 4: Virginia state soft winter wheat official variety test in Holland, VA in 2024. Significant no-till establishment issues and excessive deer damage were observed at this location. This location was not included in the over location analysis.

Line	Grain Yield bu/ac	Test Weight lb/bu
18VTK10-23	98.3+	60.5+
KWS527	97.4+	58.0
Dyna-Gro 9172	96.6+	56.9
Southern Harvest 5123	95.9+	58.4
VA20FHB-18	95.1+	58.0
USG 3463	94.7+	56.5-
MAS #226	94.1+	57.4
Revere 2347	93.9+	56.4-
EPIX 4372	93.4+	56.8
Dyna-Gro 9570	93.1+	55.1-
Dyna-Gro 9593	92.7+	56.6
AgriMAXX EXP 2404	92.6+	57.9
18VTK10-5	92.4+	58.1
EPIX 3498	92.2+	57.3
17VDH-SRW02-125	91.8	59.7+
USG 3472	91.3	56.4-
VA22W-201	91.3	58.8+
NC15305-43	91.3	59.9+
CP8045	91.3	56.7
Dyna-Gro 9551	91.2	56.2-
Dyna-Gro 9120	91.0	59.1+
MAS #227	91.0	58.6
Dyna-Gro 9422	90.7	56.1-
26R33	90.4	58.7
MAS #190	90.4	58.5
MAS #228	90.3	57.2
NC11546-14	90.2	60.2+
mean	79.6	57.6
LSD	12.3	1.1
CV	10.5	1.4

continued . . .

A plus or minus sign indicates a performance significantly above or below the test average.

The 0-9 ratings indicate a genotype's response to disease or lodging where 0 = highly resistant and 9 = highly susceptible.

FHB = Fusarium Head Blight Score (0-9)

FDK = Fusarium Diseased Kernels (percent)

DON = Deoxynivalenol concentration in the kernels (ppm) 20

Awns, A = Awned, TA = Tip-Awned, and AL = Awnless

Line	Grain Yield	Test Weight
Dyna-Gro 9553	90.1	58.0
AgriMAXX 525	89.3	57.6
MAS #86	89.3	57.1
Revere 2169	89.0	56.7
VA20FHB-20	88.5	59.2+
Dyna-Gro 9290	88.2	57.2
Southern Harvest 7222	88.0	59.6+
KWS542	87.9	58.7+
18VTK6-3	87.9	57.2
18VTK12-111	87.7	59.5+
InSpire FS 743	87.6	56.8
USG 3352	87.5	57.4
InSpire FS 745	87.5	56.7
Dyna-Gro 9231	87.4	56.7
USG 3673	87.2	59.4+
VA19W-29	86.9	56.0-
Phoenix 96	86.9	58.6
Revere 2277	86.1	58.5
AgriMAXX 516	85.9	56.7
19VDH-FHB-MAS05-27	85.9	56.3-
18VTK10-110	85.8	59.9+
MBX 230	85.8	57.0
KWS543	85.6	57.3
Liberty 5658	85.6	58.6
AgriMAXX 505	85.3	58.8+
EPIX 3489	85.2	58.4
MBX 127	85.2	56.7
Dyna-Gro 9393	85.1	57.8
Southern Harvest 4222	84.9	56.9
AgriMAXX 545	84.9	55.6-
NC14757LDH-44	84.5	59.0+
19VTK7-66	84.4	57.6
mean	79.6	57.6
LSD	12.3	1.1
CV	10.5	1.4

continued ...

A plus or minus sign indicates a performance significantly above or below the test average.

The 0-9 ratings indicate a genotype's response to disease or lodging where 0 = highly resistant and 9 = highly susceptible.

FHB = Fusarium Head Blight Score (0-9)

FDK = Fusarium Diseased Kernels (percent)

DON = Deoxynivalenol concentration in the kernels (ppm)

Awns, A = Awned, TA = Tip-Awned, and AL = Awnless

Line	Grain Yield	Test Weight
EPIX 4480	84.3	58.1
AgriMAXX 513	84.2	57.3
MAS #225	84.1	57.3
MAS #155	83.9	56.2-
MAS #139	83.9	56.5
AgriMAXX 535	83.9	58.4
Southern Harvest 9520	82.8	58.7+
17VDH-SRW01-077	82.6	59.6+
USG 3884	82.2	57.2
GA151313-LDH-192 -20E48	82.0	58.7
GA131246LDH-86-21E2	81.7	56.2-
15VTK-1-101	81.4	58.0
Phoenix 29	81.1	58.4
EPIX 1365	80.5	55.5-
19VTK5-167	80.4	55.8-
DH19SRW07-309	80.3	57.1
AGS 4043	80.3	58.9+
InSpire FS 891	80.2	58.1
VA21W-112	80.1	56.0-
KWS525	80.0	56.7
18VDH-FHB-MAS07-173-03	79.8	58.8+
18VTK18-112	79.8	57.5
15VDH-FHB-MAS25-15	79.7	58.1
VA18HRW-58	79.4	58.7+
DH17SRW136-066	79.3	56.0-
Dyna-Gro 9151	79.3	58.7+
VA20HRW-50	79.1	58.2
NC18-16900	78.6	58.1
AGS 3026	78.1	59.8+
VA20W-142	78.1	58.9+
VA19HRW-17	78.0	58.8+
VA22W-21	78.0	55.8-
mean	79.6	57.6
LSD	12.3	1.1
CV	10.5	1.4

continued ...

A plus or minus sign indicates a performance significantly above or below the test average.

The 0-9 ratings indicate a genotype's response to disease or lodging where 0 = highly resistant and 9 = highly susceptible.

FHB = Fusarium Head Blight Score (0-9)

FDK = Fusarium Diseased Kernels (percent)

DON = Deoxynivalenol concentration in the kernels (ppm)

Awns, A = Awned, TA = Tip-Awned, and AL = Awnless

Line	Grain Yield	Test Weight
USG 3363	77.9	57.1
DH19SRW07-321	77.7	57.1
InSpire FS 855	77.6	57.6
VA20W-135	77.2	58.5
VA19FHB-36	77.2	58.5
MAS #133	76.5	54.8-
Southern Harvest 7200	76.4	58.5
MAS #316	75.3	57.1
GA15490ID-19-5-21LE2	75.2	58.5
15VTK-1-101-BS112	74.8	55.9-
NC16VT30-7-47	74.5	60.4+
GANC12915-167-21E3	74.4	58.1
NC20-21971	74.1	60.7+
VA19MAS7-519-1WS-R110	74.1	60.0+
VT Pitman	73.8	58.5
GA141045-9-3-2-21LE7	73.5	59.6+
Featherstone 3000	73.4	59.1+
19VDH-FHB-MAS02-06	73.0	58.7
19VDH-FHB-MAS01-29	72.7	55.8-
DH20SRW02-073	72.5	56.5-
DH19SRW08-020	72.5	58.1
Dyna-Gro Shirley	72.2	56.9
USG 3661	72.2	58.5
16VDH-SRW03-023	72.0	57.6
17VTK18-13	71.0	56.7
18VTK15-27	70.1	54.8-
GP 543	69.7	56.2-
26R59	69.4	56.4-
HILLIARD	69.2	57.7
USG 3354	68.3	56.7
UMD-VTWVT24-3	68.2	59.0+
MAS #189	67.0-	59.1+
mean	79.6	57.6
LSD	12.3	1.1
CV	10.5	1.4

continued ...

A plus or minus sign indicates a performance significantly above or below the test average.

The 0-9 ratings indicate a genotype's response to disease or lodging where 0 = highly resistant and 9 = highly susceptible.

FHB = Fusarium Head Blight Score (0-9)

FDK = Fusarium Diseased Kernels (percent)

DON = Deoxynivalenol concentration in the kernels (ppm)

Awns, A = Awned, TA = Tip-Awned, and AL = Awnless

Line	Grain Yield	Test Weight
MAS #2	66.9-	59.1+
VA21W-39	66.9-	56.3-
USG 3574	66.1-	55.3-
DH19SRW08-001	65.6-	55.4-
VA22W-196	65.6-	54.7-
UMD-VTWVT24-2	65.3-	58.2
MASSEY	64.9-	58.9+
CP8024	64.0-	59.7+
MAS #67	63.4-	53.9-
MERL	63.3-	58.7+
VA22FHB-90	63.1-	58.5
17VTK4-29	62.7-	57.4
Dyna-Gro 9533	62.5-	54.2-
19VDH-FHB-MAS03-29	62.4-	57.7
18VTK5-95	61.1-	57.7
DH19SRW09-073	60.4-	56.0-
EPIX 1375	59.9-	58.1
USG 3451	59.5-	57.5
AgriMAXX 503	55.1-	58.0
26R45	54.7-	56.6
GP 381	54.1-	56.1-
KWS529	52.5-	55.2-
MAS #106	52.1-	57.6
AgriMAXX 544		55.2-
InSpire FS 747		54.9-
MAS #178		56.7
mean	79.6	57.6
LSD	12.3	1.1
CV	10.5	1.4

A plus or minus sign indicates a performance significantly above or below the test average.

The 0-9 ratings indicate a genotype's response to disease or lodging where 0 = highly resistant and 9 = highly susceptible.

FHB = Fusarium Head Blight Score (0-9)

FDK = Fusarium Diseased Kernels (percent)

DON = Deoxynivalenol concentration in the kernels (ppm)

Awns, A = Awned, TA = Tip-Awned, and AL = Awnless

Table 5: Virginia state soft winter wheat official variety test in Orange, VA in 2024.

Line	Grain Yield bu/ac	Test Weight lb/bu
NC18-16900	125.1+	61.2
18VTK10-23	124.4+	62.8+
18VTK18-112	124.1+	60.0
VA22W-196	122.6+	60.7
Revere 2169	122.0+	60.1
VA20W-142	121.5+	61.1
InSpire FS 891	120.4+	61.2
USG 3463	120.1+	59.8
Revere 2347	119.6	60.2
AgriMAXX 544	119.6	60.1
DH19SRW08-020	119.1	61.8
Dyna-Gro 9533	118.8	58.1-
16VDH-SRW03-023	118.2	60.7
USG 3673	117.8	61.5
USG 3574	117.2	58.6-
Dyna-Gro 9151	117.1	61.5
Liberty 5658	116.9	61.6
MAS #226	116.8	60.2
MAS #155	116.6	60.0
MBX 127	115.7	60.1
Revere 2277	115.6	60.6
NC15305-43	114.8	62.2+
EPIX 4372	114.3	60.1
USG 3451	114.3	60.3
19VTK5-167	114.0	60.2
Dyna-Gro 9551	113.8	57.9-
Dyna-Gro 9172	113.4	59.1
Dyna-Gro 9570	113.2	58.6-
USG 3363	112.8	59.8
mean	103.5	60.3
LSD	16.2	1.5
CV	11.3	1.7

continued ...

A plus or minus sign indicates a performance significantly above or below the test average.

The 0-9 ratings indicate a genotype's response to disease or lodging where 0 = highly resistant and 9 = highly susceptible.

FHB = Fusarium Head Blight Score (0-9)

FDK = Fusarium Diseased Kernels (percent)

DON = Deoxynivalenol concentration in the kernels (ppm)

25

Awns, A = Awned, TA = Tip-Awned, and AL = Awnless

Line	Grain Yield	Test Weight
InSpire FS 745	112.5	60.0
DH19SRW07-321	112.4	61.2
USG 3661	112.3	61.0
AgriMAXX 545	112.3	59.0
AgriMAXX 516	111.7	59.7
Dyna-Gro 9290	111.7	60.6
MAS #228	111.2	59.8
InSpire FS 747	111.2	59.6
Dyna-Gro 9553	110.9	59.8
MAS #189	110.7	60.3
MAS #86	110.7	59.5
Southern Harvest 5123	110.5	61.2
AgriMAXX 505	110.4	61.7
MAS #190	109.9	60.6
VA20FHB-18	109.8	61.7
MAS #225	109.3	60.0
AGS 4043	109.0	60.9
Dyna-Gro 9393	108.6	59.5
VA20W-135	108.5	61.4
VT Pitman	108.4	61.7
AgriMAXX EXP 2404	107.9	58.9
18VTK6-3	107.9	61.7
MAS #139	107.7	59.3
Southern Harvest 4222	107.6	59.9
Southern Harvest 7200	107.6	60.9
AGS 3026	107.6	61.7
DH19SRW07-309	107.3	61.4
USG 3472	106.8	59.6
Southern Harvest 7222	106.5	62.1+
MAS #106	106.3	60.6
19VDH-FHB-MAS03-29	106.2	60.9
KWS542	106.1	61.4
mean	103.5	60.3
LSD	16.2	1.5
CV	11.3	1.7

continued ...

A plus or minus sign indicates a performance significantly above or below the test average.

The 0-9 ratings indicate a genotype's response to disease or lodging where 0 = highly resistant and 9 = highly susceptible.

FHB = Fusarium Head Blight Score (0-9)

FDK = Fusarium Diseased Kernels (percent)

DON = Deoxynivalenol concentration in the kernels (ppm)

Awns, A = Awned, TA = Tip-Awned, and AL = Awnless

Line	Grain Yield	Test Weight
VA22W-21	106.0	59.3
17VDH-SRW02-125	106.0	60.0
USG 3354	105.7	59.8
UMD-VTWVT24-2	105.3	61.1
GA15490ID-19-5-21LE2	105.1	60.8
Southern Harvest 9520	105.0	60.5
InSpire FS 743	105.0	60.2
GP 381	104.9	60.0
CP8045	104.9	59.4
NC16VT30-7-47	104.8	61.7
MAS #178	104.7	59.5
Featherstone 3000	104.1	61.4
18VTK10-5	104.0	62.0+
Phoenix 29	103.9	61.3
VA19W-29	103.3	60.7
USG 3352	103.0	60.6
AgriMAXX 513	102.7	58.7-
EPIX 4480	102.7	59.7
26R45	102.7	59.6
Dyna-Gro 9120	101.9	61.8+
CP8024	101.7	62.5+
18VTK5-95	101.7	62.3+
VA20FHB-20	101.6	61.9+
InSpire FS 855	101.6	59.2
Dyna-Gro 9422	101.5	59.3
18VDH-FHB-MAS07-173-03	100.8	59.6
18VTK10-110	100.6	61.1
MAS #227	100.6	59.9
26R33	100.6	60.6
KWS527	100.1	59.6
VA22W-201	99.9	61.3
VA21W-39	99.7	60.3
mean	103.5	60.3
LSD	16.2	1.5
CV	11.3	1.7

continued ...

A plus or minus sign indicates a performance significantly above or below the test average.

The 0-9 ratings indicate a genotype's response to disease or lodging where 0 = highly resistant and 9 = highly susceptible.

FHB = Fusarium Head Blight Score (0-9)

FDK = Fusarium Diseased Kernels (percent)

DON = Deoxynivalenol concentration in the kernels (ppm)

Awns, A = Awned, TA = Tip-Awned, and AL = Awnless

Line	Grain Yield	Test Weight
AgriMAXX 525	99.6	59.7
GA151313-LDH-192 -20E48	99.6	59.7
GP 543	99.4	57.4-
MAS #67	99.3	58.3-
Dyna-Gro Shirley	99.3	58.7-
USG 3884	99.0	59.7
DH19SRW09-073	98.8	60.8
MBX 230	98.7	58.9
Dyna-Gro 9593	98.4	59.5
18VTK15-27	98.3	57.6-
VA22FHB-90	98.2	60.8
KWS529	98.2	58.4-
EPIX 3489	97.9	61.1
EPIX 1375	97.7	62.3+
EPIX 3498	97.3	60.1
26R59	97.2	58.5-
DH20SRW02-073	96.9	60.4
17VDH-SRW01-077	96.7	60.4
Phoenix 96	96.7	60.4
19VDH-FHB-MAS01-29	96.7	59.3
Dyna-Gro 9231	96.6	60.2
VA18HRW-58	96.6	62.1+
VA19FHB-36	96.5	61.9+
GA131246LDH-86-21E2	96.2	59.5
NC14757LDH-44	95.8	60.3
17VTK4-29	95.7	59.4
GANC12915-167-21E3	95.7	60.9
MAS #2	95.0	61.3
NC20-21971	94.8	61.8+
19VTK7-66	94.4	59.2
AgriMAXX 535	94.2	61.4
KWS543	93.9	60.1
mean	103.5	60.3
LSD	16.2	1.5
CV	11.3	1.7

continued ...

A plus or minus sign indicates a performance significantly above or below the test average.

The 0-9 ratings indicate a genotype's response to disease or lodging where 0 = highly resistant and 9 = highly susceptible.

FHB = Fusarium Head Blight Score (0-9)

FDK = Fusarium Diseased Kernels (percent)

DON = Deoxynivalenol concentration in the kernels (ppm)

Awns, A = Awned, TA = Tip-Awned, and AL = Awnless

Line	Grain Yield	Test Weight
AgriMAXX 503	93.4	59.6
VA21W-112	92.6	60.5
NC11546-14	92.4	61.7
VA19MAS7-519-1WS-R110	92.1	62.0+
EPIX 1365	91.9	58.5-
15VDH-FHB-MAS25-15	91.9	61.8+
DH17SRW136-066	91.9	58.5-
15VTK-1-101	90.9	61.5
DH19SRW08-001	90.3	60.1
VA19HRW-17	89.8	60.9
MAS #316	89.4	60.5
MAS #133	89.2	57.4-
18VTK12-111	88.8	61.3
19VDH-FHB-MAS05-27	88.4	58.1-
19VDH-FHB-MAS02-06	87.9	61.8
UMD-VTWVT24-3	86.8-	60.9
17VTK18-13	86.2-	59.9
KWS525	84.5-	58.0-
GA141045-9-3-2-21LE7	83.9-	60.3
VA20HRW-50	83.1-	60.4
MERL	81.1-	60.0
HILLIARD	80.2-	60.6
MASSEY	79.5-	59.4
15VTK-1-101-BS112	71.6-	59.6
mean	103.5	60.3
LSD	16.2	1.5
CV	11.3	1.7

A plus or minus sign indicates a performance significantly above or below the test average.

The 0-9 ratings indicate a genotype's response to disease or lodging where 0 = highly resistant and 9 = highly susceptible.

FHB = Fusarium Head Blight Score (0-9)

FDK = Fusarium Diseased Kernels (percent)

DON = Deoxynivalenol concentration in the kernels (ppm)

Awns, A = Awned, TA = Tip-Awned, and AL = Awnless

Table 6: Virginia state soft winter wheat official variety test in Painter, VA in 2024.

Line	Grain Yield bu/ac	Test Weight lb/bu	Leaf Rust 0-9
VA21W-112	98.1+	56.3	-0.0-
USG 3673	97.2+	55.3	0.0-
GP 543	95.5+	54.0	1.0
18VTK6-3	92.4+	54.6	0.0-
USG 3354	92.3+	53.6	1.5
VT Pitman	92.0+	59.9	-0.0-
Southern Harvest 5123	91.8	54.5	-0.0-
AGS 4043	91.4	57.1	0.0-
EPIX 1375	91.1	56.5	-0.0-
NC16VT30-7-47	91.1	57.4	0.0-
VA20FHB-18	90.8	53.4	-0.0-
VA22W-201	90.6	56.5	0.0-
19VDH-FHB-MAS01-29	90.0	52.2	-0.0-
Dyna-Gro Shirley	90.0	58.0	-0.0-
NC15305-43	89.6	57.2	0.0-
GANC12915-167-21E3	89.3	58.2	0.0-
Southern Harvest 7200	89.3	59.7	0.0-
MAS #226	89.2	55.8	-0.0-
GA15490ID-19-5-21LE2	88.6	55.8	0.5
15VTK-1-101	88.3	54.4	-0.0-
HILLIARD	88.0	57.8	-0.0-
Dyna-Gro 9290	87.9	56.3	1.0
Dyna-Gro 9393	87.6	57.9	1.5
Dyna-Gro 9553	87.4	55.3	-0.0-
15VDH-FHB-MAS25-15	86.8	54.5	-0.0-
NC20-21971	86.7	56.4	0.0-
VA20W-135	86.5	56.7	0.0-
InSpire FS 747	86.2	55.2	-0.0-
VA20FHB-20	86.1	58.9	3.5+
VA22W-21	85.7	54.9	-0.0-
mean	76.7	55.1	1.6
LSD	15.1	6.8	1.3
CV	13.8	7.8	40.6

continued ...

A plus or minus sign indicates a performance significantly above or below the test average.

The 0-9 ratings indicate a genotype's response to disease or lodging where 0 = highly resistant and 9 = highly susceptible.

FHB = Fusarium Head Blight Score (0-9)

FDK = Fusarium Diseased Kernels (percent)

DON = Deoxynivalenol concentration in the kernels (ppm)

Awns, A = Awned, TA = Tip-Awned, and AL = Awnless

Line	Grain Yield	Test Weight	Leaf Rust
InSpire FS 855	85.5	54.4	0.5
18VDH-FHB-MAS07-173-03	85.3	53.3	-0.0-
MAS #86	85.2	55.4	3.5+
19VDH-FHB-MAS05-27	84.9	55.7	0.5
UMD-VTWVT24-2	84.8	51.1	0.0-
AgriMAXX 544	84.7	56.7	0.5
EPIX 4480	84.7	54.3	2.5
19VDH-FHB-MAS03-29	84.2	56.2	-0.0-
UMD-VTWVT24-3	83.9	54.4	0.5
AGS 3026	83.6	51.4	-0.0-
GA131246LDH-86-21E2	83.4	53.9	0.0-
USG 3661	83.2	57.5	0.0-
USG 3451	82.7	57.1	0.5
VA22W-196	82.3	56.2	-0.0-
USG 3463	81.3	53.3	2.0
18VTK10-110	81.2	55.0	-0.0-
GA141045-9-3-2-21LE7	81.1	55.3	0.5
17VTK4-29	80.9	50.9	0.0-
DH20SRW02-073	80.6	55.3	-0.0-
MAS #225	80.6	53.8	3.0+
17VDH-SRW01-077	80.5	57.0	-0.0-
VA18HRW-58	80.3	52.7	-0.0-
18VTK10-23	80.2	57.9	-0.0-
AgriMAXX EXP 2404	79.9	57.2	2.5
Dyna-Gro 9593	79.8	58.2	0.5
19VTK5-167	79.6	55.9	0.5
DH19SRW07-321	79.4	57.4	0.5
VA19FHB-36	79.4	58.0	-0.0-
Phoenix 96	78.9	58.4	0.5
MAS #178	78.7	54.2	2.0
18VTK10-5	78.6	57.3	-0.0-
Phoenix 29	78.4	55.6	0.5
Featherstone 3000	78.4	55.6	0.0-
mean	76.7	55.1	1.6
LSD	15.1	6.8	1.3
CV	13.8	7.8	40.6

continued ...

A plus or minus sign indicates a performance significantly above or below the test average.

The 0-9 ratings indicate a genotype's response to disease or lodging where 0 = highly resistant and 9 = highly susceptible.

FHB = Fusarium Head Blight Score (0-9)

FDK = Fusarium Diseased Kernels (percent)

DON = Deoxynivalenol concentration in the kernels (ppm)

Awns, A = Awned, TA = Tip-Awned, and AL = Awnless

Line	Grain Yield	Test Weight	Leaf Rust
Southern Harvest 9520	78.4	54.9	1.5
GA151313-LDH-192 -20E48	78.2	56.6	-0.0-
17VDH-SRW02-125	78.1	56.3	0.0-
Liberty 5658	77.8	55.2	0.5
KWS543	77.8	56.1	2.5
VA20W-142	77.1	57.7	-0.0-
GP 381	77.1	52.7	1.5
USG 3884	76.5	57.4	-0.0-
USG 3363	76.4	55.4	4.0+
MERL	76.2	55.7	3.0+
15VTK-1-101-BS112	76.2	50.3	1.5
EPIX 3498	76.0	57.8	4.0+
VA21W-39	75.9	55.7	0.5
MAS #67	75.9	54.6	2.0
USG 3352	75.8	56.7	2.5
VA19HRW-17	75.6	51.0	1.0
MAS #227	75.5	59.6	2.5
26R59	75.1	54.3	4.0+
NC14757LDH-44	74.9	53.1	-0.0-
AgriMAXX 503	74.9	58.0	2.5
18VTK15-27	74.5	56.3	0.0-
19VDH-FHB-MAS02-06	74.5	57.5	0.5
19VTK7-66	74.1	55.4	0.0-
DH17SRW136-066	74.1	52.7	1.5
EPIX 1365	74.0	55.5	2.0
16VDH-SRW03-023	73.8	53.5	-0.0-
AgriMAXX 535	73.5	55.8	2.0
VA19W-29	73.3	57.6	3.5+
EPIX 3489	73.3	59.6	4.0+
DH19SRW09-073	73.0	51.7	0.0-
VA22FHB-90	72.8	62.2+	-0.0-
Revere 2347	72.8	53.4	4.5+
26R33	72.6	55.1	4.0+
mean	76.7	55.1	1.6
LSD	15.1	6.8	1.3
CV	13.8	7.8	40.6

continued ...

A plus or minus sign indicates a performance significantly above or below the test average.

The 0-9 ratings indicate a genotype's response to disease or lodging where 0 = highly resistant and 9 = highly susceptible.

FHB = Fusarium Head Blight Score (0-9)

FDK = Fusarium Diseased Kernels (percent)

DON = Deoxynivalenol concentration in the kernels (ppm)

Awns, A = Awned, TA = Tip-Awned, and AL = Awnless

Line	Grain Yield	Test Weight	Leaf Rust
MAS #106	72.5	57.1	2.0
AgriMAXX 513	72.2	52.9	2.5
AgriMAXX 525	72.2	49.8	3.0+
NC11546-14	71.7	61.6	-0.0-
DH19SRW07-309	71.3	54.5	0.5
MAS #139	70.8	52.8	5.5+
Dyna-Gro 9570	70.8	57.0	3.0+
Dyna-Gro 9231	70.5	49.6	3.5+
DH19SRW08-020	70.5	58.0	0.5
MAS #228	70.4	53.8	2.5
KWS542	70.3	50.8	0.5
Dyna-Gro 9551	70.1	54.0	4.5+
MAS #189	69.9	53.3	5.0+
InSpire FS 891	69.8	51.9	2.5
Dyna-Gro 9422	69.8	55.1	4.5+
Dyna-Gro 9533	69.6	56.6	4.0+
18VTK12-111	69.3	52.9	-0.0-
NC18-16900	69.2	51.8	-0.0-
MAS #2	69.1	57.1	1.0
AgriMAXX 545	69.1	49.7	3.0+
Revere 2277	69.0	54.0	1.0
KWS529	68.8	49.7	2.5
18VTK18-112	68.6	48.1-	1.0
InSpire FS 743	68.3	53.8	4.0+
KWS527	68.3	53.5	2.5
VA20HRW-50	68.1	52.8	1.0
CP8024	68.0		1.5
MAS #316	67.7	44.8-	3.5+
18VTK5-95	67.7	51.3	-0.0-
AgriMAXX 516	67.6	56.1	4.5+
26R45	67.5	58.1	2.0
InSpire FS 745	67.2	52.3	3.0+
MBX 230	67.1	58.4	4.5+
mean	76.7	55.1	1.6
LSD	15.1	6.8	1.3
CV	13.8	7.8	40.6

continued ...

A plus or minus sign indicates a performance significantly above or below the test average.

The 0-9 ratings indicate a genotype's response to disease or lodging where 0 = highly resistant and 9 = highly susceptible.

FHB = Fusarium Head Blight Score (0-9)

FDK = Fusarium Diseased Kernels (percent)

DON = Deoxynivalenol concentration in the kernels (ppm)

Awns, A = Awned, TA = Tip-Awned, and AL = Awnless

Line	Grain Yield	Test Weight	Leaf Rust
KWS525	66.9	56.9	3.0+
MAS #190	66.7	54.8	4.0+
Southern Harvest 4222	66.7	57.6	4.0+
MAS #155	66.6	52.5	6.0+
CP8045	66.3	58.0	6.0+
AgriMAXX 505	66.2	54.4	4.0+
Revere 2169	65.2	56.8	5.5+
EPIX 4372	65.0	56.0	4.5+
MAS #133	64.4	54.9	5.5+
Southern Harvest 7222	63.5	61.6	-0.0-
Dyna-Gro 9120	62.9	51.1	2.5
MASSEY	62.2		8.0+
VA19MAS7-519-1WS-R110	61.7	51.7	0.0-
MBX 127	61.6	57.0	4.0+
DH19SRW08-001	61.0-	52.4	-0.0-
USG 3472	59.7-	56.1	6.0+
USG 3574	58.5-	49.0	5.0+
Dyna-Gro 9151	58.0-	54.8	4.5+
Dyna-Gro 9172	56.2-	56.0	7.0+
17VTK18-13	54.2-	50.4	0.0-
mean	76.7	55.1	1.6
LSD	15.1	6.8	1.3
CV	13.8	7.8	40.6

A plus or minus sign indicates a performance significantly above or below the test average.

The 0-9 ratings indicate a genotype's response to disease or lodging where 0 = highly resistant and 9 = highly susceptible.

FHB = Fusarium Head Blight Score (0-9)

FDK = Fusarium Diseased Kernels (percent)

DON = Deoxynivalenol concentration in the kernels (ppm)

Awns, A = Awned, TA = Tip-Awned, and AL = Awnless

Table 7: Virginia state soft winter wheat official variety test in Holland, VA in 2024.

Line	Grain Yield bu/ac	Test Weight lb/bu
Dyna-Gro 9422	106.6+	59.0
AgriMAXX 535	104.1+	59.9
26R33	103.6+	59.7
Dyna-Gro 9290	102.7+	59.1
Dyna-Gro 9593	101.3+	58.0
MAS #86	100.7+	58.1
MAS #228	99.5+	58.9
MAS #155	98.9+	59.3
USG 3472	98.5	58.6
Dyna-Gro 9231	98.5	58.8
Revere 2347	97.6	59.8
InSpire FS 745	97.3	57.1
EPIX 3489	97.1	57.3
AgriMAXX 525	96.3	59.5
AgriMAXX 516	96.2	58.9
EPIX 3498	96.1	59.2
Dyna-Gro 9172	96.1	58.7
Dyna-Gro 9551	96.1	57.3
MAS #316	95.9	57.9
MAS #227	95.9	59.6
USG 3352	95.6	58.4
AgriMAXX 545	95.6	58.0
AgriMAXX 513	95.3	59.9
Revere 2169	95.2	58.1
MAS #225	95.1	58.4
AgriMAXX 505	94.9	61.1
Dyna-Gro 9570	94.4	57.0
KWS543	93.9	58.4
CP8045	93.8	57.7
mean	82.1	58.0
LSD	16.4	3.2
CV	14.1	3.8

continued ...

A plus or minus sign indicates a performance significantly above or below the test average.

The 0-9 ratings indicate a genotype's response to disease or lodging where 0 = highly resistant and 9 = highly susceptible.

FHB = Fusarium Head Blight Score (0-9)

FDK = Fusarium Diseased Kernels (percent)

DON = Deoxynivalenol concentration in the kernels (ppm)

35

Awns, A = Awned, TA = Tip-Awned, and AL = Awnless

Line	Grain Yield	Test Weight
MBX 230	93.6	59.8
USG 3463	93.3	58.0
KWS542	93.2	58.3
InSpire FS 891	92.8	59.9
InSpire FS 855	92.8	58.8
InSpire FS 743	92.6	60.1
Dyna-Gro 9553	91.8	58.6
MAS #2	91.6	60.6
USG 3363	91.6	60.0
Dyna-Gro 9120	91.1	60.8
MAS #226	90.8	58.0
MAS #190	90.4	59.5
AgriMAXX EXP 2404	90.0	58.1
NC18-16900	89.6	60.3
18VTK15-27	89.4	57.2
MAS #139	89.3	58.1
VA20FHB-20	89.1	60.6
KWS525	89.0	59.0
Revere 2277	88.8	56.7
EPIX 4372	87.9	57.9
KWS527	87.9	59.8
MBX 127	87.9	58.0
Phoenix 96	87.3	58.6
Dyna-Gro 9393	87.1	58.6
Phoenix 29	87.0	56.5
NC15305-43	86.8	61.0
Southern Harvest 9520	86.7	59.1
NC14757LDH-44	86.5	58.2
26R59	86.5	58.1
VT Pitman	86.4	60.4
NC20-21971	86.2	59.0
Dyna-Gro 9151	85.8	60.9
mean	82.1	58.0
LSD	16.4	3.2
CV	14.1	3.8

continued ...

A plus or minus sign indicates a performance significantly above or below the test average.

The 0-9 ratings indicate a genotype's response to disease or lodging where 0 = highly resistant and 9 = highly susceptible.

FHB = Fusarium Head Blight Score (0-9)

FDK = Fusarium Diseased Kernels (percent)

DON = Deoxynivalenol concentration in the kernels (ppm)

Awns, A = Awned, TA = Tip-Awned, and AL = Awnless

Line	Grain Yield	Test Weight
Liberty 5658	85.8	59.6
Southern Harvest 5123	85.2	60.3
Dyna-Gro 9533	84.8	57.4
Featherstone 3000	84.6	58.0
VA20W-142	84.4	57.7
Southern Harvest 4222	84.3	59.5
AGS 4043	84.2	59.7
EPIX 4480	84.2	58.7
GP 543	84.0	57.1
USG 3661	83.9	55.1
UMD-VTWVT24-2	83.6	60.2
UMD-VTWVT24-3	83.4	58.8
USG 3451	83.3	60.4
VA20FHB-18	83.2	59.7
19VDH-FHB-MAS05-27	82.8	55.6
USG 3884	82.6	57.7
MAS #106	82.5	58.1
GP 381	82.3	56.3
EPIX 1375	81.8	55.1
Dyna-Gro Shirley	81.6	54.5-
VA18HRW-58	81.3	58.6
18VTK10-23	81.0	60.3
VA22W-201	80.8	59.5
USG 3354	80.8	56.5
18VTK18-112	80.7	59.6
DH19SRW08-020	80.3	58.7
18VTK12-111	79.3	58.3
VA20HRW-50	79.3	58.7
MAS #133	79.0	55.7
MAS #189	78.5	60.5
18VTK10-110	78.1	60.5
17VDH-SRW01-077	77.7	59.8
mean	82.1	58.0
LSD	16.4	3.2
CV	14.1	3.8

continued ...

A plus or minus sign indicates a performance significantly above or below the test average.

The 0-9 ratings indicate a genotype's response to disease or lodging where 0 = highly resistant and 9 = highly susceptible.

FHB = Fusarium Head Blight Score (0-9)

FDK = Fusarium Diseased Kernels (percent)

DON = Deoxynivalenol concentration in the kernels (ppm)

Awns, A = Awned, TA = Tip-Awned, and AL = Awnless

Line	Grain Yield	Test Weight
MERL	77.4	59.5
DH17SRW136-066	77.1	57.2
DH20SRW02-073	76.8	57.0
26R45	75.7	57.1
MAS #178	75.7	56.6
GA141045-9-3-2-21LE7	75.3	59.9
NC11546-14	75.1	61.1
USG 3673	75.1	59.3
AgriMAXX 544	75.1	58.4
VA19W-29	75.0	56.9
EPIX 1365	74.9	56.8
GA15490ID-19-5-21LE2	74.7	56.7
USG 3574	74.6	58.3
InSpire FS 747	74.6	59.1
NC16VT30-7-47	74.2	60.3
VA20W-135	74.2	55.6
MASSEY	74.0	59.2
17VTK4-29	74.0	58.9
VA22W-196	73.4	53.3
VA19FHB-36	73.2	59.6
18VTK6-3	73.1	58.7
GA151313-LDH-192 -20E48	73.1	57.8
17VTK18-13	72.8	55.0
Southern Harvest 7200	72.6	58.4
15VTK-1-101	72.5	56.8
Southern Harvest 7222	72.3	59.0
KWS529	72.3	57.5
17VDH-SRW02-125	72.0	60.6
19VDH-FHB-MAS02-06	71.8	60.0
HILLIARD	71.6	58.2
18VTK10-5	70.4	57.6
MAS #67	70.2	57.6
mean	82.1	58.0
LSD	16.4	3.2
CV	14.1	3.8

continued ...

A plus or minus sign indicates a performance significantly above or below the test average.

The 0-9 ratings indicate a genotype's response to disease or lodging where 0 = highly resistant and 9 = highly susceptible.

FHB = Fusarium Head Blight Score (0-9)

FDK = Fusarium Diseased Kernels (percent)

DON = Deoxynivalenol concentration in the kernels (ppm)

Awns, A = Awned, TA = Tip-Awned, and AL = Awnless

Line	Grain Yield	Test Weight
18VDH-FHB-MAS07-173-03	70.2	59.3
16VDH-SRW03-023	69.4	56.3
19VTK7-66	69.3	56.7
19VTK5-167	69.2	57.7
15VDH-FHB-MAS25-15	68.3	58.4
VA22FHB-90	66.2	56.8
CP8024	66.2	59.7
DH19SRW07-321	64.9-	55.8
DH19SRW08-001	64.9-	53.0-
DH19SRW07-309	64.8-	58.1
VA19HRW-17	64.8-	55.3
19VDH-FHB-MAS03-29	64.3-	58.3
18VTK5-95	63.7-	55.8
VA21W-39	62.2-	57.7
GA131246LDH-86-21E2	60.9-	51.8-
GANC12915-167-21E3	60.3-	55.4
VA21W-112	59.6-	51.7-
DH19SRW09-073	59.3-	55.8
VA22W-21	58.4-	53.3-
VA19MAS7-519-1WS-R110	58.2-	56.7
AGS 3026	49.9-	49.5-
19VDH-FHB-MAS01-29	49.9-	50.9-
15VTK-1-101-BS112		49.4-
AgriMAXX 503		56.2
mean	82.1	58.0
LSD	16.4	3.2
CV	14.1	3.8

A plus or minus sign indicates a performance significantly above or below the test average.

The 0-9 ratings indicate a genotype's response to disease or lodging where 0 = highly resistant and 9 = highly susceptible.

FHB = Fusarium Head Blight Score (0-9)

FDK = Fusarium Diseased Kernels (percent)

DON = Deoxynivalenol concentration in the kernels (ppm)

Awns, A = Awned, TA = Tip-Awned, and AL = Awnless

Table 8: Virginia state soft winter wheat official variety test in Warsaw, VA in 2024.

Line	Grain Yield bu/ac	Test Weight lb/bu	Heading Date Julian	Height in	Lodging 0-9
VA20FHB-18	116.1+	56.6	109-	42+	1.0
NC20-21971	115.4+	55.5	110-	41	1.7+
USG 3354	115.0+	56.1	109-	39	2.4+
USG 3673	114.8+	56.2	111-	39	1.0
Dyna-Gro 9533	114.4+	53.6	115+	38	1.2
InSpire FS 745	112.4+	57.1	116+	40	1.0
MAS #155	112.2+	55.7	115	40	1.1
18VTK10-23	111.7+	58.3+	109-	41+	1.0
DH19SRW07-321	111.7+	56.2	115	40	1.0
Liberty 5658	111.6+	57.5	110-	41+	1.2
19VDH-FHB-MAS05-27	111.2+	55.0	116+	41+	1.1
Southern Harvest 5123	111.1+	56.0	112-	38	1.0
Dyna-Gro 9551	111.1+	54.6	110-	36-	1.1
VA22W-196	110.6+	55.4	108-	37	1.0
18VTK18-112	110.1+	56.7	111-	42+	1.5
USG 3463	110.0+	55.0	114	38	1.0
GA15490ID-19-5-21LE2	109.7+	56.3	113	40	1.1
16VDH-SRW03-023	109.4+	55.2	110-	40	1.0
GP 381	109.3+	57.0	110-	37	1.1
USG 3451	109.2+	57.1	109-	39	1.4
Revere 2169	109.2+	55.4	116+	41	1.1
MBX 127	109.1+	55.0	116+	39	1.0
USG 3352	108.7	55.9	117+	41	1.4
EPIX 4372	108.6	56.0	115+	40	1.1
NC14757LDH-44	108.3	56.6	110-	40	1.6+
Dyna-Gro 9422	108.2	56.2	114	40	1.0
VA20FHB-20	108.2	57.7	110-	41	1.0
VA22W-201	107.9	57.3	111-	35-	1.2
DH19SRW08-020	107.5	57.1	108-	37	1.1
Revere 2347	107.4	56.0	116+	41+	1.0
mean	101.2	55.6	114	39	1.2
LSD	7.7	2.2	1	2	0.4
CV	5.5	2.9	1	4	23.7

continued ...

A plus or minus sign indicates a performance significantly above or below the test average.

The 0-9 ratings indicate a genotype's response to disease or lodging where 0 = highly resistant and 9 = highly susceptible.

FHB = Fusarium Head Blight Score (0-9)

FDK = Fusarium Diseased Kernels (percent)

DON = Deoxynivalenol concentration in the kernels (ppm)

Awns, A = Awned, TA = Tip-Awned, and AL = Awnless

Line	Grain Yield	Test Weight	Heading Date	Height	Lodging
VA22W-21	107.3	55.3	117+	35-	1.0
Revere 2277	106.6	56.4	119+	39	1.1
Dyna-Gro 9120	106.4	56.1	114	38	1.0
18VTK15-27	106.4	54.7	108-	39	1.9+
DH19SRW07-309	106.0	57.0	115	41+	1.1
AgriMAXX 516	106.0	54.1	116+	39	1.1
MAS #139	105.9	54.3	115	37	1.0
VA20W-142	105.8	56.2	112-	40	1.1
USG 3363	105.1	56.4	116+	40	1.0
USG 3661	105.0	55.1	114	37	1.2
MAS #226	104.8	56.3	111-	34-	1.0
17VTK4-29	104.7	55.2	110-	36-	1.5
Dyna-Gro 9393	104.4	54.6	115+	38	1.0
19VDH-FHB-MAS03-29	104.2	55.7	111-	39	1.0
AgriMAXX 544	104.2	54.4	111-	40	1.4
Dyna-Gro 9231	104.1	55.8	115+	42+	1.1
MAS #86	104.0	55.5	115+	41	1.0
InSpire FS 743	103.9	56.4	116+	41	1.0
GA131246LDH-86-21E2	103.6	53.9	114	38	1.1
AgriMAXX 525	103.4	54.8	118+	37	1.0
EPIX 3498	103.3	56.6	116+	38	1.0
KWS529	103.3	53.9	113	37	1.0
KWS527	103.3	55.1	117+	39	1.0
MAS #228	103.1	55.8	116+	38	1.0
VT Pitman	103.0	55.7	110-	39	1.1
19VTK7-66	103.0	54.0	114	42+	1.4
15VDH-FHB-MAS25-15	103.0	56.0	110-	37	1.0
DH20SRW02-073	103.0	55.7	116+	37-	1.5
18VTK10-5	102.9	56.6	114	38	1.0
Southern Harvest 4222	102.9	55.6	115+	41+	1.0
CP8045	102.8	54.8	116+	39	1.0
AgriMAXX 545	102.7	54.7	117+	36-	1.1
MAS #225	102.5	55.2	116+	38	1.0
mean	101.2	55.6	114	39	1.2
LSD	7.7	2.2	1	2	0.4
CV	5.5	2.9	1	4	23.7

continued ...

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Line	Grain Yield	Test Weight	Heading Date	Height	Lodging
Dyna-Gro 9172	102.5	54.5	116+	38	1.0
NC15305-43	102.4	56.7	113	39	1.0
EPIX 3489	102.4	55.0	114	37-	1.2
DH17SRW136-066	102.3	54.5	111-	39	1.2
KWS543	102.2	56.1	115+	37	1.0
Phoenix 29	102.2	56.2	115	38	1.0
Dyna-Gro 9570	102.0	55.4	113	40	1.2
Phoenix 96	101.9	56.6	119+	42+	1.0
EPIX 4480	101.6	53.7	118+	38	1.0
NC18-16900	101.5	55.3	114	40	1.0
Southern Harvest 7222	101.4	56.7	115+	39	1.0
Southern Harvest 9520	101.3	54.7	118+	38	1.0
VA21W-39	101.2	55.3	110-	41	1.0
NC16VT30-7-47	101.1	55.1	110-	37	1.6+
19VTK5-167	100.7	54.8	112	34-	1.2
GP 543	100.5	54.2	108-	39	1.5
UMD-VTWVT24-2	100.5	55.5	115	40	1.2
AgriMAXX 535	100.5	55.6	115+	38	1.0
VA21W-112	100.4	55.3	111-	37	1.0
17VDH-SRW02-125	100.3	56.7	116+	38	1.1
USG 3574	100.1	56.2	109-	36-	1.2
VA19FHB-36	100.0	56.4	110-	42+	1.1
Dyna-Gro 9151	100.0	57.4	116+	38	1.1
MAS #190	99.9	54.8	119+	38	1.0
VA18HRW-58	99.7	57.1	120+	41+	1.0
15VTK-1-101	99.6	54.8	112-	36-	1.1
InSpire FS 747	99.6	55.3	111-	38	1.0
GANC12915-167-21E3	99.5	54.7	110-	39	1.0
MAS #178	99.5	55.2	115+	40	1.0
18VTK10-110	99.3	55.8	116+	38	1.0
AGS 4043	99.2	57.8	110-	36-	1.5
USG 3472	99.1	55.2	117+	38	1.0
Dyna-Gro 9553	98.8	54.4	117+	38	1.0
mean	101.2	55.6	114	39	1.2
LSD	7.7	2.2	1	2	0.4
CV	5.5	2.9	1	4	23.7

continued ...

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Line	Grain Yield	Test Weight	Heading Date	Height	Lodging
KWS542	98.4	55.4	114	41+	1.1
VA20W-135	98.4	56.6	113	42+	1.0
AGS 3026	98.2	56.5	117+	39	1.0
Dyna-Gro 9290	98.0	56.3	110-	38	1.1
Featherstone 3000	97.9	57.1	115	38	1.1
Southern Harvest 7200	97.7	56.7	108-	42+	1.2
UMD-VTWVT24-3	97.6	55.0	112	39	1.1
18VTK6-3	97.3	56.7	116+	38	1.1
GA141045-9-3-2-21LE7	97.3	56.9	115	42+	1.0
EPIX 1375	97.2	56.5	108-	38	1.7+
GA151313-LDH-192 -20E48	97.0	56.7	117+	33-	1.0
MAS #106	96.9	54.5	108-	36-	1.5
MAS #2	96.9	56.6	117+	45+	2.7+
Dyna-Gro Shirley	96.8	54.2	115	37	1.1
17VTK18-13	96.6	55.0	115+	40	1.0
InSpire FS 855	96.5	54.8	115+	39	1.0
18VTK5-95	96.4	57.8	113	38	1.2
DH19SRW08-001	96.3	56.1	115+	36-	1.4
MERL	96.2	57.4	109-	38	1.1
26R33	95.9	54.2	115	39	1.0
19VDH-FHB-MAS01-29	95.9	54.9	114	33-	1.0
MAS #227	95.7	55.2	117+	37	1.0
26R45	95.6	53.5	115+	40	1.2
AgriMAXX EXP 2404	95.5	54.1	118+	38	1.0
MAS #67	95.3	53.4	109-	37	1.0
MAS #189	95.1	56.2	108-	41+	1.7+
HILLIARD	95.1	55.8	110-	41	1.0
AgriMAXX 503	94.7	55.4	116+	38	1.1
NC11546-14	94.3	56.9	110-	40	1.6+
18VDH-FHB-MAS07-173-03	94.0	52.8-	114	41	1.6+
CP8024	93.5-	56.7	117+	39	1.0
19VDH-FHB-MAS02-06	93.4-	55.3	117+	37	1.0
17VDH-SRW01-077	93.3-	55.2	109-	38	1.0
mean	101.2	55.6	114	39	1.2
LSD	7.7	2.2	1	2	0.4
CV	5.5	2.9	1	4	23.7

continued ...

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DH19SRW09-073	93.2-	54.2	113	43+	1.9+
AgriMAXX 505	93.1-	56.6	116+	38	1.0
AgriMAXX 513	93.0-	57.0	116+	39	1.0
VA19W-29	92.9-	54.5	111-	41	1.0
USG 3884	92.9-	55.2	112	37-	1.0
26R59	92.6-	53.2-	113	35-	1.0
InSpire FS 891	92.4-	54.3	115	39	1.0
MBX 230	92.3-	55.8	115+	40	1.0
MAS #316	91.8-	55.0	117+	40	1.0
Dyna-Gro 9593	91.6-	54.2	111-	36-	1.1
KWS525	91.5-	55.3	117+	37	1.0
VA22FHB-90	90.1-	55.0	119+	42+	1.4
18VTK12-111	90.0-	56.9	119+	36-	1.0
VA19MAS7-519-1WS-R110	89.4-	56.0	117+	38	1.0
EPIX 1365	89.3-	54.0	112	38	1.2
VA19HRW-17	88.6-	56.3	121+	40	1.0
MAS #133	88.3-	53.0-	116+	40	1.0
VA20HRW-50	87.5-	56.2	117+	43+	1.1
MASSEY	81.8-	54.9	109-	42+	1.5
15VTK-1-101-BS112		51.0-	119+	36-	1.0
mean	101.2	55.6	114	39	1.2
LSD	7.7	2.2	1	2	0.4
CV	5.5	2.9	1	4	23.7

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