



Virginia Cooperative Extension

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Virginia Small Grain Official Variety Trials, 2023

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Introduction

This report presents results from barley and wheat trials conducted in Virginia in 2022-2023. In Virginia, small grain cultivar performance trials are conducted each year by the Virginia Tech School of Plant and Environmental Sciences and the Virginia Agricultural Experiment Station. The trials provide information to assist Virginia Cooperative Extension Service agents in formulating cultivar recommendations for small grain producers and to companies developing cultivars and/or marketing seed within the state. Yield data are reported for individual locations, and across locations and years. Performance of a given variety often varies widely over locations and years which makes multiple location-year averages a more reliable indication of expected performance than data from a single year or location. Details about management practices for barley and wheat are listed for each experiment location.

Acknowledgement

Appreciation is expressed to the Virginia Small Grains Check-Off Board, AgriMAXX, CORTEVA Agriscience Agriculture Division of DowDuPont, Eddie Mercer Agri-Services, Inc., Erwin-Keith, Inc., Featherstone Farm Seed, Inc., KWS Cereals, Limagrain Cereal Seeds, Local Seed Company, Meherrin Ag & Chemical, Mid-Atlantic Seeds, Nutrien Ag Solutions, Syngenta Seeds, Inc., UniSouth Genetics, Inc., Winfield United, and the Virginia Crop Improvement Association for their financial support of the Small Grains Variety Testing Program at Virginia Tech.

The 2022-23 Growing Season

The 2022-23 season growing conditions were variable across Virginia. Fall planting and early season growing conditions were great, following a relatively mild winter and favorable spring growing environment. Freeze damage and disease pressure was minimal this season. Drier and cooler than average spring 2023 promoted excellent yield potential. Producers in many areas harvested an outstanding to near record grain crop. On the other hand, weather challenges in late June/early July delayed harvest in some parts of the state, negatively impacting grain quality (lower test weights and preharvest grain sprouting).

Table 1. Companies Participating in the Virginia Small Grains Official Variety Trials, 2023

Table 1.1. Barley

Company	Address
Limagrain Cereal Seeds (LCS)	7099 Parkbrook Lane, Cordova, TN 38018
Oregon State University	253A Crop Science Building 3050 SW Campus Way Corvallis, OR 97330
Virginia Tech and Virginia Crop Improvement Association (VT and VCIA)	9142 Atlee Station Road, Mechanicsville, VA 23116

Table 1.2. Wheat

Company	Address
AgriMAXX Wheat Company	7167 Highbanks Road, Mascoutah, IL 62258
AgriPro	1521 N Convent Street Suite 200, Bourbonnais, IL 60914
CROPLAN	1080 County Road F West, MS 5850, Shoreview, MN 55126-2910
CORTEVA Agriscience Agriculture Division of DowDuPont (Pioneer)	974 Centre Rd, Chestnut Run Plaza Bldg. 735, Wilmington, DE 19805
Eddie Mercer Agri-Services, Inc. (Mercer Brand)	6900 Linganore Road, Frederick, MD 21701
Erwin-Keith, Inc. (Progeny Ag Products)	1529 Highway 193, Wynne, AR 72396
Featherstone Farm Seed, Inc.	13941 Genito Road, Amelia, VA 23002
University of Florida	3105 McCarty Hall B, Gainesville, FL 32611
University of Georgia	1109 Experiment Street, Griffin, GA 30223
GROWMARK (FS Wheat)	1701 Towanda Avenue, Bloomington, IL 61722
KWS Cereals	495 County Road 1300 N, Champaign, IL 61822
Local Seed Company LLC	802 Rozelle Street, Memphis, TN 38104
Meherrin Agricultural & Chemical Company (Southern Harvest)	4136 Severn Road, Severn, NC 27877
Mid-Atlantic Seeds	204 St. Charles Way, #163E, York, PA 17402
NC State University (SunGrains)	840 Method Road Unit 3, Raleigh, NC 27695-7629
Nutrien Ag Solutions (Dyna-Gro Seed)	15277 Richmond-Tappahannock Highway, St Stephens Church, VA 23148
UniSouth Genetics, Inc. (USG)	3205 C Highway 46S, Dickson, TN 37055
Virginia Tech and Virginia Crop Improvement Association (VT and VCIA)	9142 Atlee Station Road, Mechanicsville, VA 23116

Virginia Tech Barley Varieties

For more than ten years, the Virginia Tech Barley Breeding program has been conducting barley research funded by commodity boards (Virginia Small Grains Board, Maryland Grain Producer Utilization Board, and Kentucky Small Grains Growers Association), American Malting Barley Association, Brewers Association and the US Wheat and Barley Scab Initiative. The goal of the breeding program is to develop high yielding, disease resistant barley cultivars adapted to the mid-Atlantic and southeastern US region and with qualities designed for specific end uses (feed, malt, food and others). Overall, our intent is to make winter barley a more competitive crop in the eastern US by implementing a program to develop barley cultivars with greater marketability in both domestic and foreign markets.

Virginia Tech 2023 Barley Test Yields

Table 2. Performance of entries in the Virginia Tech Barley Test, 2023 harvest

Line	Grain Yield bu/ac	Test Weight lb/bu	Heading Date Julian	Height in	Lodging 0-9	Leaf Rust 0-9	Fusarium Head Blight (Scab) 0-9
Marouetta	162.0 (+)	49.3 (-)	113	40.0 (+)	0.7	1.0 (-)	4.0 (+)
VA21BFHB- 19DH0143	157.9 (+)	51.2	115 (+)	32.9 (-)	0.1 (-)	3.0 (-)	1.0 (-)
VA20B-35 LA	155.1 (+)	51.8	115 (+)	38.6	1.3	7.3 (+)	2.0
VA20BFHB- 18DH495 LX	150.3 (+)	52.0	107 (-)	40.6 (+)	2.8 (+)	6.0	2.0
VA18B-34	148.6 (+)	52.3	111	36.9	1.3	3.8	3.5
Thoroughbred	148.5 (+)	51.2	113	39.6	0.8	8.0 (+)	3.0
VA20B-37 LA	148.4 (+)	51.0	111	40.8 (+)	1.4	2.7 (-)	1.5
VA20B-40 LA	148.2 (+)	51.4	114 (+)	40.0 (+)	1.2	8.0 (+)	2.5
VA20BFHB- 18DH442 SA	147.5 (+)	51.3	110 (-)	35.0 (-)	2.1	5.8	4.0 (+)
VA21B-7 LA	146.1	51.1	112	39.9 (+)	1.3	3.5	3.0
VA18B-39	145.6	51.9	111	36.4	1.4	2.5 (-)	2.0
VA19B-20 LA	145.1	51.5	114 (+)	37.8	0.7	3.5	4.0 (+)
Hirondella	144.2	48.1 (-)	116 (+)	35.5 (-)	0.8	1.3 (-)	2.0
VA21BFHB- 19DH0303	144.0	50.2	118 (+)	35.4 (-)	1.5	1.8 (-)	1.0 (-)
VA17B-166 LA	143.2	53.0 (+)	110 (-)	37.5	1.7	5.5	3.0
SB255	142.7	52.7 (+)	112	41.0 (+)	1.3	5.2	2.5
VA21BFHB- 19DH0184	142.6	50.9	116 (+)	31.9 (-)	0.1 (-)	3.3 (-)	0.5 (-)
VA18B-52 LA (Dec.)	141.5	52.9 (+)	110 (-)	36.0	1.4	2.8 (-)	3.5
VA21B-6 LA	141.5	53.1 (+)	110 (-)	40.5 (+)	1.5	3.0 (-)	2.5
FS 945	141.4	52.4	113	40.6 (+)	1.4	3.8	3.5
Mean	135.7	51.0	112	37.8	1.5	4.7	2.6
LSD	11.6	1.6	1	1.9	1.0	1.4	1.3
CV	12.3	4.4	1	5.0	99.8	20.8	23.8

Line	Grain Yield bu/ac	Test Weight lb/bu	Heading Date Julian	Height in	Lodging 0-9	Leaf Rust 0-9	Fusarium Head Blight (Scab) 0-9
VA18BFHB-80 LA	140.4	52.5	112	39.1	1.6	3.0	2.0
Flavia	139.6	50.3	117 (+)	31.5 (-)	0.5	4.3 (-)	3.5
VA21BFHB- 19DH0314	139.3	50.6	119 (+)	34.8 (-)	2.0	1.0 (-)	1.0 (-)
VA21B-10 LA	139.3	50.8	111 (-)	38.0	1.7	5.5	2.0
VA21B-5 LA	139.2	50.8	113	40.0	2.7 (+)	7.3 (+)	3.0
Secretariat	138.6	49.8	110 (-)	34.9 (-)	2.2	1.0 (-)	4.0 (+)
VA20BFHB- 18DH362 SA	134.9	51.2	106 (-)	31.5 (-)	1.6	7.3 (+)	2.5
VA18B-43 LA	134.8	52.1	112	36.9	0.2 (-)	3.5	2.5
VA21B-11 LA	134.0	51.1	112	41.3 (+)	1.2	5.0	3.0
Atlantic	133.3	50.4	107 (-)	33.6 (-)	2.5 (+)	7.0 (+)	4.5 (+)
VA21BFHB- 19DH0300	132.5	52.8 (+)	115 (+)	34.6 (-)	0.0 (-)	5.8	1.0 (-)
Avalon	131.7	52.6 (+)	114 (+)	38.6	1.8	4.0	1.0 (-)
VA21BFHB- 19DH0302	131.3	53.4 (+)	115 (+)	33.4 (-)	0.3 (-)	6.0	1.0 (-)
VA18B-23 LA	129.0	51.2	112	38.4	2.1	4.2	3.5
VA17M-13DH1720 (LX)	128.7	48.9 (-)	116 (+)	36.0	3.1 (+)	4.3	3.0
VA20BFHB- 18DH480 SA	127.1	49.9	108 (-)	33.3 (-)	0.6	6.3 (+)	3.5
VA21B-12 LA	125.4	50.0	109 (-)	37.1	1.8	7.0 (+)	3.0
Barsoy	121.3 (-)	51.2	108 (-)	37.6	2.7 (+)	7.0 (+)	3.5
VA21BFHB-14 NA	115.6 (-)	47.3 (-)	112	45.3 (+)	1.1	5.5	2.0
VA16BFHB-266 NA- 19	113.0 (-)	47.2 (-)	111	43.1 (+)	1.1	3.7	2.5
VT Beahm	112.8 (-)	48.0 (-)	107 (-)	44.6 (+)	1.1	5.3	3.5
Wysor	107.4 (-)	48.3 (-)	109 (-)	40.9 (+)	2.9 (+)	8.0 (+)	4.0 (+)
Mean	135.7	51.0	112	37.8	1.5	4.7	2.6
LSD	11.6	1.6	1	1.9	1.0	1.4	1.3
CV	12.3	4.4	1	5.0	99.8	20.8	23.8

Line	Grain Yield bu/ac	Test Weight lb/bu	Heading Date Julian	Height in	Lodging 0-9	Leaf Rust 0-9	Fusarium Head Blight (Scab) 0-9
20211573 (Greg)	106.7 (-)	59.7 (+)	116 (+)	40.8 (+)	1.4	6.5 (+)	0.5 (-)
Nomini	106.0 (-)	46.8 (-)	106 (-)	39.9 (+)	1.9	7.5 (+)	3.5
VA92-42-46	101.6 (-)	48.2 (-)	110 (-)	39.9 (+)	2.9 (+)	4.7	3.0
Mean	135.7	51.0	112	37.8	1.5	4.7	2.6
LSD	11.6	1.6	1	1.9	1.0	1.4	1.3
CV	12.3	4.4	1	5.0	99.8	20.8	23.8

Table 3. Performance of entries in the Virginia Tech Barley Test, Kentland Farm, Blacksburg, VA, 2023 harvest.

Line	Grain Yield bu/ac	Test Weight lb/bu	Heading Date Julian	Height In	Lodging 0- 9
Marouetta	171.1 (+)	47.4	123 (+)	43.3 (+)	1
VA20B-40 LA	166.1 (+)	50.5	123 (+)	43.5 (+)	0
Thoroughbred	165.4 (+)	49.5	121	41.8	0
VA20BFHB-18DH495 LX	164.8 (+)	51.3	117 (-)	44.5 (+)	2
VA20BFHB-18DH442 SA	164.7 (+)	49.2	118 (-)	38.3 (-)	0
VA21B-7 LA	163.2 (+)	50.7	120	43.5 (+)	1
VA21B-10 LA	160.5	48.9	120 (-)	41.5	0
Hirondella	159.9	45.7 (-)	126 (+)	37.5 (-)	0
VA21BFHB-19DH0143	158.1	49.7	124 (+)	35 (-)	0
VA18B-39	156.9	50.3	119 (-)	38.8 (-)	1
VA20B-37 LA	156.7	51.1	120	44.5 (+)	1
VA19B-20 LA	154.6	49.1	123 (+)	41	0
VA21B-5 LA	154.4	48.8	122	45.3 (+)	5 (+)
VA17B-166 LA	153.4	51.7	119 (-)	40	1
VA21BFHB-19DH0303	153.3	47.8	129 (+)	38.3 (-)	3 (+)
FS 945	153	50.8	121	43.5 (+)	0
VA18B-34	151.1	52	120 (-)	39.8	0
Secretariat	151.1	50.5	118 (-)	38.8 (-)	2
VA18BFHB-80 LA	150	51.2	121	42.5	0
VA20B-35 LA	149.2	48.2	124 (+)	41.8	1
VA20BFHB-18DH362 SA	149.2	48.8	116 (-)	34 (-)	1
Flavia	149.2	48.1	126 (+)	33.3 (-)	0
SB255	147.6	51.2	121	44.5 (+)	0
VA21B-11 LA	147.5	51	120	44.8 (+)	0
VA18B-52 LA (Dec.)	143.9	51.5	118 (-)	39	0
Atlantic	143.6	48.5	116 (-)	37.8 (-)	3
VA21B-12 LA	142.8	47.5	118 (-)	39.5	0
VA20BFHB-18DH480 SA	142.6	48.9	117 (-)	35 (-)	0
VA21BFHB-19DH0184	141.7	48.9	125 (+)	34.5 (-)	0
VA21B-6 LA	140.8	51.3	119 (-)	43.3 (+)	0
VA21BFHB-19DH0300	140.6	52 (+)	125 (+)	37 (-)	0
Mean	142.4	49.3	121	41.1	1

Line	Grain Yield bu/ac	Test Weight lb/bu	Heading Date Julian	Height In	Lodging 0- 9
LSD	20.7	2.7	1	2.1	2
CV	10.4	3.9	1	3.7	35
Barsoy	138.1	49.3	116 (-)	42.5	2
VA18B-23 LA	137.6	49.3	121	41.8	0
VA17M-13DH1720 (LX)	135.9	45.3 (-)	127 (+)	40.5	5 (+)
VA21BFHB-19DH0302	135.4	51.8	124 (+)	35.5 (-)	0
VA21BFHB-19DH0314	135	47.9	130 (+)	37.5 (-)	5 (+)
VA18B-43 LA	132.3	49	121	37.5 (-)	0
Avalon	125.8	51.1	123 (+)	43	1
20211573 (Greg)	120 (-)	57.9 (+)	126 (+)	45.3 (+)	2
Wysor	108.1 (-)	47.4	118 (-)	46.3 (+)	2
VA16BFHB-266 NA-19	107.7 (-)	46.1 (-)	120	46.5 (+)	1
VT Beahm	106.6 (-)	44.2 (-)	117 (-)	48.3 (+)	2
VA21BFHB-14 NA	100.5 (-)	43.7 (-)	119 (-)	49 (+)	0
VA92-42-46	92.8 (-)	46.8	119 (-)	46 (+)	2
Nomini	87 (-)	44.4 (-)	116 (-)	43.3 (+)	3 (+)
Mean	142.4	49.3	121	41.1	1
LSD	20.7	2.7	1	2.1	2
CV	10.4	3.9	1	3.7	35

Table 4. Performance of entries in the Virginia Tech Barley Test, Southern Piedmont AREC, Blackstone, VA, 2023 harvest.

Line	Grain Yield bu/ac	Test Weight lb/bu	Lodging 0-9
VA20B-35 LA	170.4 (+)	54.9 (+)	0
VA21BFHB-19DH0143	162.7	53.2	0
VA20BFHB-18DH495 LX	158.6	54.5	2
Marouetta	157.4	51.4 (-)	0
VA18BFHB-80 LA	154.1	54.8 (+)	0
VA21BFHB-19DH0303	154	53.1	0
Hirondella	153.5	51.5 (-)	0
VA18B-34	153.2	54	0
VA21BFHB-19DH0314	151.2	52.4	0
FS 945	150.3	54.6 (+)	1
Thoroughbred	149.1	53.8	0
Flavia	148.9	52.5	0
VA17B-166 LA	147.5	54.8 (+)	0
VA20BFHB-18DH442 SA	146.4	53	0
Secretariat	145.8	53.8	0
SB255	145.6	55 (+)	0
VA21B-7 LA	145.1	54	1
VA20B-37 LA	144.3	53.5	0
VA21BFHB-19DH0184	142.2	53.4	0
VA21B-6 LA	141.7	54.1	0
VA20B-40 LA	141.2	53.6	0
VA18B-52 LA (Dec.)	140.6	55.3 (+)	0
VA20BFHB-18DH362 SA	140.3	52.9	0
Avalon	139.4	53.9	1
Atlantic	137.8	52.5	0
VA19B-20 LA	136.9	53.9	0
VA18B-39	136.4	54.1	0
VA21BFHB-14 NA	135.8	48 (-)	0
VA21B-11 LA	135.1	54.5	0
VA21B-5 LA	132.6	53.2	0
VA16BFHB-266 NA-19	129.4	51.4 (-)	0
Barsoy	127.3	52.8	1
VA21BFHB-19DH0302	123.4	54.3	0
VA18B-43 LA	123.1	54.4	0
Mean	137	53.4	0
LSD	27.3	1.2	N/A
CV	14.1	1.6	N/A

Line	Grain Yield bu/ac	Test Weight lb/bu	Lodging 0-9
VA18B-23 LA	123	53.8	1
VA21BFHB-19DH0300	122	54.3	0
VA21B-12 LA	121.9	52.4	1
VA20BFHB-18DH480 SA	119.3	53	0
VA21B-10 LA	119.2	52.5	1
VA17M-13DH1720 (LX)	119.1	52.5	1
VT Beahm	116.2	51.5 (-)	0
Wysor	107.5 (-)	51.8 (-)	1
Nomini	106.3 (-)	51.5 (-)	0
20211573 (Greg)	106 (-)	60.7 (+)	0
VA92-42-46	102 (-)	51 (-)	1
Mean	137	53.4	0
LSD	27.3	1.2	N/A
CV	14.1	1.6	N/A

Table 5. Performance of entries in the Virginia Tech Barley Test, Tidewater AREC, Holland, VA, 2023 harvest.

Line	Grain Yield bu/ac	Test Weight lb/bu	Lodging 0-9
Flavia	122.9 (+)	51.3	0
VA20B-35 LA	122.6 (+)	52.8	0
VA21B-5 LA	118.5	53.2	2
VA20BFHB-18DH495 LX	115.8	53.1	0
VA21BFHB-19DH0300	113.6	53.4	0
VA20B-40 LA	110.5	52.7	0
VA21B-7 LA	109.4	52.1	0
VA20B-37 LA	109.3	49.8 (-)	0
VA18B-23 LA	108.2	51.9	0
VA18B-52 LA (Dec.)	105.4	52.9	0
VA21B-10 LA	105	51.7	0
20211573 (Greg)	104.4	60.4 (+)	0
VA18B-43 LA	103.5	52.9	0
VA21BFHB-19DH0143	103.1	52	0
VA21B-6 LA	100.5	54.5 (+)	0
VA21BFHB-19DH0184	100.4	48.3 (-)	0
VA19B-20 LA	99.4	53.1	0
Thoroughbred	99.3	51.9	0
VA21BFHB-19DH0314	98.9	50.3	0
VA21B-11 LA	98.3	53.5	0
VA21BFHB-19DH0303	97.6	51	0
SB255	97.3	53.6	0
FS 945	94.9	54.2	0
Avalon	94.8	53.4	0
VA18BFHB-80 LA	92.8	52.8	0
VA21B-12 LA	91.7	51.6	0
Secretariat	90.6	51.4	0
Marouetta	90.3	50.1	0
VA21BFHB-19DH0302	88.1	53.7	0
VA18B-34	87.4	52.5	0
VA17B-166 LA	86.5	53.4	0
Atlantic	86.3	50.6	0
Barsoy	82.2	51.2	0
VA17M-13DH1720 (LX)	81.4	50.8	7
Hirondella	72.1 (-)	50.1	0
Mean	95.8	52.2	0.2
LSD	22.9	2.2	N/A
CV	16.6	3	N/A

Line	Grain Yield bu/ac	Test Weight lb/bu	Lodging 0-9
VA20BFHB-18DH442 SA	68.8 (-)	51.8	0
VA18B-39	67.6 (-)	52.4	0
VA20BFHB-18DH480 SA	66 (-)	51	0
VA20BFHB-18DH362 SA	49.3 (-)	48.9 (-)	0
Nomini	NA	NA	0
VA16BFHB-266 NA-19	NA	NA	0
VA21BFHB-14 NA	NA	NA	0
VA92-42-46	NA	52	0
VT Beahm	NA	NA	0
Wysor	NA	NA	0
Mean	95.8	52.2	0.2
LSD	22.9	2.2	N/A
CV	16.6	3	N/A

Table 6. Performance of entries in the Virginia Tech Barley Test, Northern Piedmont Center, Orange, VA, 2023 harvest.

Line	Grain Yield bu/ac	Test Weight lb/bu	Lodging 0-9
VA20BFHB-18DH442 SA	206.6 (+)	52.9	0
VA20B-35 LA	205.6 (+)	53.1	0
VA17M-13DH1720 (LX)	199.5	53.7	0
VA21B-12 LA	193.2	53.7	0
VA17B-166 LA	192.7	56.2 (+)	0
VA20BFHB-18DH495 LX	189.6	54	0
VA21B-11 LA	188.2	54.1	0
VA19B-20 LA	186.6	53.6	0
Thoroughbred	184.4	54.1	0
VA21B-5 LA	183	54.8 (+)	0
VA21B-10 LA	183	53.6	5
VA21B-7 LA	182.7	54.3	0
FS 945	181.3	53.9	0
Marouetta	179.2	52.4	0
Barsoy	178.9	53.7	0
VA20B-37 LA	178.9	54.2	0
VA21BFHB-19DH0143	178.8	53.8	0
Hirondella	174.9	52.9	0
VA18B-52 LA (Dec.)	174.1	54.6	NA
VA18B-39	173.2	52.7	5
VA18B-34	173.2	53.7	0
VA21B-6 LA	169.4	54.8 (+)	0
Secretariat	168.5	54.2	0
VA21BFHB-19DH0302	167.1	54.6	0
VA20BFHB-18DH362 SA	165.5	53.2	0
VA18B-43 LA	163.3	53.9	0
VA18B-23 LA	162.5	53.4	0
SB255	162.5	54.4	0
Atlantic	161.5	53.6	0
VA18BFHB-80 LA	160.2	53.9	0
Flavia	159.3	54.4	0
VA21BFHB-19DH0300	159.2	54.7	0
VA21BFHB-19DH0314	156.7	53	0
VA20BFHB-18DH480 SA	156.7	52.3	0
Mean	166.1	53.4	NA
LSD	35.1	1.4	NA
CV	15	1.8	NA
VA20B-40 LA	156.4	53.6	0

Line	Grain Yield bu/ac	Test Weight lb/bu	Lodging 0-9
VA21BFHB-19DH0303	155.8	52.3	0
Avalon	152.1	55.7 (+)	0
VA21BFHB-19DH0184	149.9	53.1	0
VA21BFHB-14 NA	139.8	49.5 (-)	0
VT Beahm	132.9	49.5 (-)	0
Wysor	132.3	48.6 (-)	0
Nomini	125.3 (-)	49 (-)	0
20211573 (Greg)	116.1 (-)	60.2 (+)	0
VA16BFHB-266 NA-19	110.7 (-)	49.6 (-)	0
VA92-42-46	101.4 (-)	49.9 (-)	0
Mean	166.1	53.4	NA
LSD	35.1	1.4	NA
CV	15	1.8	NA

Table 7. Performance of entries in the Virginia Tech Barley Test, Eastern Virginia AREC, Warsaw, VA, 2023 harvest.

Line	Grain Yield bu/ac	Test Weight lb/bu	Heading Date Julian	Height In	Lodging 0-9
Marouetta	178.8 (+)	49.6 (-)	103	36.8	2
VA20B-40 LA	177.4 (+)	51.5	105 (+)	36.5	3
VA21BFHB-19DH0143	175.7 (+)	52.8 (+)	106 (+)	30.8 (-)	1 (-)
VA21BFHB-19DH0184	173.1 (+)	52.6 (+)	107 (+)	29.3 (-)	0 (-)
VA20B-35 LA	169.9 (+)	52	106 (+)	35.5	3
Thoroughbred	165.7 (+)	51.6	105 (+)	37.5 (+)	2
Hirondella	165.5 (+)	48.9 (-)	106 (+)	33.5	3
VA20B-37 LA	162.5	51.7	103	37	4
VA19B-20 LA	161.9	51.8	105 (+)	34.5	2
VA21B-10 LA	160.1	50.7	102 (-)	34.5	4
VA20BFHB-18DH495 LX	159.4	52 (+)	97 (-)	36.8	5
VA21B-7 LA	159.3	51.7	104 (+)	36.3	3
VA18B-34	158.7	51.9	102	34	4
VA18B-39	158.1	52.4 (+)	103	34	3
VA18B-43 LA	157.3	52.1 (+)	103	36.3	0 (-)
VA18B-52 LA (Dec.)	156.4	51.5	102	33	5
VA21BFHB-19DH0300	156.3	54 (+)	106 (+)	32.3	0 (-)
Flavia	154.7	50.1 (-)	107 (+)	29.8 (-)	2
VA20BFHB-18DH442 SA	154.6	51.5	101 (-)	31.8 (-)	6
VA17B-166 LA	154.2	52.6 (+)	102 (-)	35	3
VA21BFHB-19DH0303	153.7	51.6	108 (+)	32.5	3
VA21B-5 LA	153	50.4	104 (+)	34.8	5
VA21BFHB-19DH0302	152.6	54.3 (+)	106 (+)	31.3 (-)	1
FS 945	152.2	52.3 (+)	104 (+)	37.8 (+)	3
VA21B-6 LA	152	53.5 (+)	102	37.8 (+)	4
VA21BFHB-19DH0314	151.9	51.6	108 (+)	32 (-)	2
VA21B-11 LA	150.5	52 (+)	103	37.8 (+)	3
Secretariat	145.7	50.3	102	31 (-)	6 (+)
VA18B-23 LA	145.5	49.6 (-)	104	35	6
SB255	145	52 (+)	103	37.5 (+)	3
VA20BFHB-18DH480 SA	141.2	50.4	99 (-)	31.5 (-)	2
Avalon	140.9	52.6 (+)	105 (+)	34.3	5
VA18BFHB-80 LA	139	51.3	104	35.8	4
Mean	149.1	51.1	103	34.6	3
LSD	13.5	0.9	1	2.5	2
CV	6.5	1.3	1	5.1	49
Atlantic	135.7	49.8 (-)	98 (-)	29.5 (-)	4

Line	Grain Yield bu/ac	Test Weight lb/bu	Heading Date Julian	Height In	Lodging 0-9
VA21B-12 LA	135.6 (-)	49.5 (-)	101 (-)	34.8	4
VA17M-13DH1720 (LX)	135.4 (-)	48.6 (-)	105 (+)	31.5 (-)	6
VA20BFHB-18DH362 SA	135.2 (-)	52.1 (+)	95 (-)	29 (-)	5
VA21BFHB-14 NA	133.2 (-)	48.4 (-)	104 (+)	41.5 (+)	3
Barsoy	128.1 (-)	50.5	99 (-)	32.8	4
Nomini	128 (-)	46.6 (-)	96 (-)	36.5	2
VT Beahm	126.9 (-)	47.9 (-)	98 (-)	41 (+)	2
VA16BFHB-266 NA-19	125.1 (-)	47.9 (-)	102	39.8 (+)	3
20211573 (Greg)	118.4 (-)	60.1 (+)	106 (+)	36.3	3
VA92-42-46	116 (-)	47 (-)	101 (-)	33.8	7 (+)
Wysor	111.2 (-)	45.8 (-)	101 (-)	35.5	6 (+)
Mean	149.1	51.1	103	34.6	3
LSD	13.5	0.9	1	2.5	2
CV	6.5	1.3	1	5.1	49

Table 8. Performance of entries in the Virginia Tech Barley Test, Eastern Shore AREC, Painter, VA, 2023 harvest.

Line	Grain Yield bu/ac	Test Weight lb/bu	Lodging Julian	Leaf Rust 0-9
Marouetta	140.8 (+)	48.9	0	1 (-)
VA21BFHB-19DH0143	135.2	48.9	0	3 (-)
SB255	132.7	52.5	2	5
VA21B-6 LA	131.4	53.7	2	3 (-)
VA18B-34	131.3	51.5	2	4
VA20B-35 LA	130.7	52.1	1	7 (+)
VA20B-37 LA	130.1	47.6	1	3 (-)
VA18B-39	128.5	50.6	2	2 (-)
VA19B-20 LA	127	51.3	1	3
VA18B-43 LA	126.4	52.6	1	4
VA18B-52 LA (Dec.)	125.2	53.2	1	3 (-)
VA17M-13DH1720 (LX)	124.4	49.3	0	4
VA20BFHB-18DH442 SA	124.2	51.7	3 (+)	6
Avalon	120.6	52.8	0	4
VA21BFHB-19DH0314	119.3	50.6	0	1 (-)
VA18BFHB-80 LA	118.4	52.5	2	3 (-)
VA20BFHB-18DH495 LX	118.3	50.1	2	6
VA17B-166 LA	117.7	53	3	5
VA21B-10 LA	117.3	51	2	6
VA21B-5 LA	116.9	50.6	2	7 (+)
VA21B-7 LA	116.7	48	1	4
Atlantic	116	50.6	3 (+)	7 (+)
VA21BFHB-19DH0303	114.8	48.2	0	2 (-)
VA20BFHB-18DH362 SA	114.8	51	1	7 (+)
VA21BFHB-19DH0302	113.8	53.2	0	6
Thoroughbred	113.8	49.8	0	8 (+)
VA21BFHB-19DH0184	113.3	48.5	0	3 (-)
Secretariat	112.1	44.7 (-)	1	1 (-)
FS 945	111.9	51.7	1	4
VA21BFHB-19DH0300	110.9	51	0	6
VA18B-23 LA	110	52	2	4
VA20B-40 LA	108.2	50	2	8 (+)
Flavia	105.6	50.6	0	4
VA20BFHB-18DH480 SA	105.1	47.3	1	6 (+)
Mean	114.5	50.2	1	5
LSD	25.1	5.2	1	1
CV	15.7	7.5	76	21
VA21B-11 LA	103	47	2	5

Line	Grain Yield bu/ac	Test Weight lb/bu	Lodging Julian	Leaf Rust 0-9
Wysor	102.7	48.2	3 (+)	8 (+)
Nomini	102.6	44.5 (-)	3 (+)	7 (+)
VT Beahm	102.2	48.6	1	5
VA21B-12 LA	101.6	50.5	2	7 (+)
Hirondella	98	46.3	0	1 (-)
VA21BFHB-14 NA	97.7	48.5	1	6
VA92-42-46	95.4	48.1	3 (+)	5
Barsoy	91.9	52.1	5 (+)	7 (+)
VA16BFHB-266 NA-19	89.8	43.4 (-)	1	4
20211573 (Greg)	82.5 (-)	60.2 (+)	0	7 (+)
Mean	114.5	50.2	1	5
LSD	25.1	5.2	1	1
CV	15.7	7.5	76	21

Virginia Tech Wheat Varieties

Wheat trials were planted in seven-inch rows at Blackstone, Orange, Holland, Painter, and Shenandoah Valley. They were planted in six-inch rows at Blacksburg and Warsaw. The no-till locations (Holland and Shenandoah Valley) were planted at 48 seeds per square foot. All other locations were planted at 44 seeds per square foot. Due to excessive deer damage and poor yields, the tests at Painter and Holland are not included in over-location analysis for wheat.

Selecting the best wheat varieties is challenging but becomes easier with adequate information on performance over multiple environments. Past seasons across Virginia have provided the opportunity to evaluate day length sensitivity, spring freeze damage, glume blotch, scab (*Fusarium* head blight), and general plant health. Many newer wheat varieties and lines performed well in all environments tested.

Producers who grow large acreages of wheat should plant two or more varieties having significantly different maturity dates to ensure harvest of high-quality grain having high test weight and no sprouting. In Virginia it is typical for sporadic or consistent rain showers to interrupt harvest. These wetting and drying cycles and subsequent delays can significantly reduce grain test weight and quality. Growers can circumvent this problem by planting varieties that differ significantly in maturity. Early maturing varieties often can be harvested first and prior to significant rain showers, and later maturing varieties harvested subsequently will suffer less damage and losses in test weight and quality due to exposure to such a rain event.

Table 9. Performance of entries in the Virginia Tech Wheat Test, 2023 harvest.

Line	A TA- AL	Grain Yield bu/ac	Test Weight lb/bu	Heading Date Julian	Height In	Lodging 0-9	Powdery Mildew 0-9	Leaf Rust 0-9	Barely Yellow Dwarf Virus 0-9	Fusarium Head Blight (Scab) 0-9	FDK %	DON ppm
5VTK-1-101	A	126.2 (+)	59	118	32.9 (-)	2	1 (-)	0 (-)	0	4	60	9.4
Dyna-Gro WX23444	AL	125.3 (+)	57.6 (-)	114 (-)	37.5	2	1 (-)	3	2	5	55	3.4
VA20FHB-18	A	125 (+)	59	116	38.5 (+)	1	2 (-)	0 (-)	2	4	45	9.1
17VDH-SRW01- 077	A	123.7 (+)	59.4 (+)	115 (-)	38.3 (+)	1	0 (-)	0 (-)	0	5	20 (-)	5.8
VA20W-135	A	122.8 (+)	59.2 (+)	118	39.3 (+)	1	3	0 (-)	1	5	67.5	13.2 (+)
USG 3661	AL	122.3 (+)	59.1 (+)	119 (+)	33.6 (-)	2	3	0 (-)	1	4	55	9.7
SH 9520	A	122	58.6	119 (+)	35.9	1	2 (-)	5	1	4	55	6.4
Dyna-Gro Shirley	TA	121.3	58	117	35 (-)	1	1 (-)	0 (-)	0	6 (+)	75	14.5 (+)
18VTK10-23	A	121.3	60.2 (+)	114 (-)	37	0	3	0 (-)	0	4	45	7
EPIX 1365	A	121.2	56.8 (-)	117	36.1	1	3	2	5	6 (+)	60	5.5
17VDH-SRW02- 125	A	120.7	59.8 (+)	120 (+)	37.5	1	0 (-)	0 (-)	1	4	45	10.8
15VDH-FHB- MAS25-15	A	120.7	59.5 (+)	116	35.1 (-)	1	2	0 (-)	0	4	25	5.5
Phoenix 29	A	120.5	59.6 (+)	119 (+)	36.3	1	2	1	1	4	75	10.1
HILLIARD	A	120.5	58.3	116 (-)	38.5 (+)	1	2	0 (-)	1	4	52.5	10.1
VA19FHB-36	A	120.4	59.1 (+)	117	40.3 (+)	1	2	1 (-)	1	3	30	7.5
Mean	NA	112.9	58.3	117	36.6	1	3	3	1	4	51.6	7.9
LSD	NA	9.4	0.7	1	1.4	1	1	2	NA	2	29.1	5.2
CV	NA	13.3	1.8	1	3.8	121	35	50	NA	21	28.5	33
SH 5123	AL	120.3	59.4 (+)	118	36.6	2	5 (+)	0 (-)	2	4	30	5.1
EXP 3354	AL	120.2	57.6 (-)	114 (-)	37.1	2 (+)	1 (-)	2	1	5	65	4.3
18VTK10-110	A	120.2	60.8 (+)	119 (+)	35.9	1	2 (-)	0 (-)	1	3	45	4.8

Line	A TA- AL	Grain Yield bu/ac	Test Weight lb/bu	Heading Date Julian	Height In	Lodging 0-9	Powdery Mildew 0-9	Leaf Rust 0-9	Barely Yellow Dwarf Virus 0-9	Fusarium Head Blight (Scab) 0-9	FDK %	DON ppm
USG 3673	AL	120	59.3 (+)	118	36.5	1	5 (+)	0 (-)	2	3	30	4.3
USG 3451	AL	120	59.2 (+)	115 (-)	36.8	2	3	1	0	5	15 (-)	3
18VTK12-111	TA	118.9	59.6 (+)	120 (+)	34.5 (-)	1	1 (-)	0 (-)	0	4	30	7.1
USG 3783	A	118.9	58	119 (+)	34.9 (-)	1	4	4	0	5	50	8.3
GP 543	TA	118.7	57.4 (-)	115 (-)	38.1 (+)	1	1 (-)	3	1	5	50	4
Dyna-Gro 9393	A	118.5	57.9	119 (+)	35 (-)	0	4	3	1	4	45	6.5
18VTK6-3	A	118.4	59.4 (+)	118	36.8	1	2	0 (-)	0	4	57.5	7
16VDH-SRW09-025	A	118.4	58.8	116 (-)	38	1	2 (-)	1	1	4	55	11
Dyna-Gro 9120	A	118.4	59.9 (+)	117	36.6	1	4	3	0	5	17.5 (-)	5.2
VA20FHB-22	A	118.2	59	117	39.8 (+)	1	2 (-)	0 (-)	2	5	55	9.3
AgriMAXX 535	A	118.2	59.1 (+)	118	35.8	1	3	4	1	5	45	7
17VDH-SRW05-169	A	117.7	57.9	115 (-)	31.3 (-)	1	1 (-)	1 (-)	0	6	70	10
VA20W-142	AL	117.6	59.1 (+)	117	38.3 (+)	2	2	0 (-)	1	4	50	6.2
GA151313-20E48	A	117.3	59.4 (+)	120 (+)	34 (-)	0	3	0 (-)	1	5	77.5	8.3
Mean	NA	112.9	58.3	117	36.6	1	3	3	1	4	51.6	7.9
LSD	NA	9.4	0.7	1	1.4	1	1	2	NA	2	29.1	5.2
CV	NA	13.3	1.8	1	3.8	121	35	50	NA	21	28.5	33
EPIX 1375	AL	117.3	59.8 (+)	114 (-)	37.3	2	0 (-)	0 (-)	2	4	40	8.6
17VDH-SRW03-204	A	117.1	59.7 (+)	116	37.6	1	1 (-)	0 (-)	3	5	70	13.1 (+)
Pioneer 26R59	TA	117	58.1	117	33.6 (-)	1	3	5	3	6	67.5	8.3
VA21W-59	TA	116.9	58.3	119 (+)	35.6	2	2	0 (-)	0	7 (+)	90 (+)	29.5 (+)
AgriMAXX 514	A	116.8	57.1 (-)	119 (+)	36.6	1	4	2	2	5	60	7.3
18VTK5-95	AL	116.7	59.8 (+)	117	36.1	1	1 (-)	0 (-)	1	4	45	6.4
Pioneer 26R33	A	116.5	58.4	119 (+)	37	1	3	6 (+)	3	3	42.5	6.7

Line	A TA- AL	Grain Yield bu/ac	Test Weight lb/bu	Heading Date Julian	Height In	Lodging 0-9	Powdery Mildew 0-9	Leaf Rust 0-9	Barely Yellow Dwarf Virus 0-9	Fusarium Head Blight (Scab) 0-9	FDK %	DON ppm
18VTK10-77	A	116.5	59.9 (+)	113 (-)	36.9	2	3	1 (-)	0	3	30	3.3
KWS495	A	116.2	58.5	116 (-)	34.8 (-)	0	5 (+)	1 (-)	3	2 (-)	35	5.5
VA21W-112	A	116.1	57.1 (-)	117	35.5	1	2 (-)	0 (-)	0	6	82.5 (+)	18.5 (+)
17VTK4-29	TA	116.1	58.9	116	35.9	2	0 (-)	0 (-)	2	5	65	7.7
18VTK10-188	A	116	59.2 (+)	115 (-)	36.1	1	2	0 (-)	1	3	15 (-)	2.7 (-)
GP 282	A	116	58.8	117	34.1 (-)	1	6 (+)	4	2	6 (+)	80	9.7
USG 3352	A	115.9	57.6 (-)	120 (+)	36.8	1	5 (+)	5 (+)	1	4	57.5	15.5 (+)
VA19W-29	A	115.4	58.4	117	38.6 (+)	1	3	5	1	6 (+)	72.5	13.6 (+)
MAS #190	A	115.2	57.7 (-)	121 (+)	34.8 (-)	1	3	4	2	5	55	9.1
Dyna-Gro 9422	A	115.1	57.1 (-)	118	36.9	1	3	8 (+)	1	6	70	13
16VDH-SRW03-018	A	115.1	60.7 (+)	117	38.4 (+)	1	2	0 (-)	1	5	50	6.7
Mean	NA	112.9	58.3	117	36.6	1	3	3	1	4	51.6	7.9
LSD	NA	9.4	0.7	1	1.4	1	1	2	NA	2	29.1	5.2
CV	NA	13.3	1.8	1	3.8	121	35	50	NA	21	28.5	33
VA18HRW-96	A	115	59.2 (+)	119 (+)	38.6 (+)	0	2	2	3	4	90 (+)	13.8 (+)
VA19W-87	A	114.9	59.2 (+)	118	38.5 (+)	1	1 (-)	0 (-)	0	3	40	9.8
EPIX 2356	A	114.8	57.5 (-)	119 (+)	36.8	1	4	6 (+)	3	5	75	13.4 (+)
Revere 2277	A	114.7	58.6	120 (+)	35.9	0	1 (-)	6 (+)	0	5	50	6.7
CROPLAN CP9606	A	114.6	57.2 (-)	117	36.6	1	5 (+)	3	1	5	62.5	6.4
18VDH-FHB- MAS07-173-03	A	114.5	58.8	117	36.6	2 (+)	1 (-)	0 (-)	0	4	45	10.3
USG 3363	A	114.3	57.5 (-)	118	37.9	0	3	6 (+)	1	4	30	4.7
USG 3234	AL	114.3	60.3 (+)	119 (+)	39.8 (+)	1	4	4	1	3	35	2.8

Line	A TA- AL	Grain Yield bu/ac	Test Weight lb/bu	Heading Date Julian	Height In	Lodging 0-9	Powdery Mildew 0-9	Leaf Rust 0-9	Barely Yellow Dwarf Virus 0-9	Fusarium Head Blight (Scab) 0-9	FDK %	DON ppm
HR 5210	A	114.3	57.9	120 (+)	34.4 (-)	0	2 (-)	1 (-)	3	5	90 (+)	16.7 (+)
MAS #178	AL	114.2	57.8	119 (+)	38.3 (+)	1	5 (+)	4	0	4	60	7
KWS477	TA	114.1	59.3 (+)	116	38.3 (+)	1	6 (+)	3	5	6 (+)	25	0.8 (-)
MBX 120	A	114.1	58.5	120 (+)	35.6	0	2 (-)	4	1	5	55	5.5
MAS #155	A	113.8	57 (-)	118	37.9	2	3	8 (+)	0	5	75	7.7
MAS #86	A	113.8	56.8 (-)	117	38	1	5 (+)	4	1	3	40	2.9
DH17SRW136- 066	TA	113.3	57.5 (-)	118	35.8	1	1 (-)	5 (+)	0	4	72.5	6.2
AgriMAXX 525	A	113.3	57.5 (-)	119 (+)	35.4	1	4	7 (+)	3	5	40	3.8
VA19MAS7- 519-1WS-R110	A	113.3	59.7 (+)	120 (+)	37.1	1	3	1 (-)	3	4	40	21.4 (+)
18VTK12-60	AL	113.3	58.1	113 (-)	36.1	2 (+)	4	0 (-)	3	4	50	4
Mean	NA	112.9	58.3	117	36.6	1	3	3	1	4	51.6	7.9
LSD	NA	9.4	0.7	1	1.4	1	1	2	NA	2	29.1	5.2
CV	NA	13.3	1.8	1	3.8	121	35	50	NA	21	28.5	33
Revere 2347	A	112.8	57.8	118	37	0	3	6 (+)	2	5	20 (-)	4.5
Dyna-Gro 9231	A	112.8	57.9	118	37.6	1	3	4	2	5	27.5	3.4
Viking 822	A	112.8	57.6 (-)	117	38.1 (+)	1	3	3	2	4	30	3.1
CP8224	AL	112.7	60.1 (+)	119 (+)	35.4	0	7 (+)	4	1	5	45	13.4 (+)
MAS #133	A	112.6	55.8 (-)	118	37.3	1	5 (+)	5 (+)	2	4	75	12.5
USG 3000	AL	112.6	59.3 (+)	119 (+)	36.4	1	5 (+)	0 (-)	3	4	65	11.8
AGS 4043	A	112.6	59.6 (+)	116	33.9 (-)	1	1 (-)	0 (-)	1	4	35	3.5
MBX 230	A	112.6	57.8	118	37.8	0	2	7 (+)	4	5	35	4.4
KWS482	A	112.4	58.4	118	35.5	0	2	7 (+)	1	3	10 (-)	3
MBX 176	A	112.2	56.4 (-)	119 (+)	37	1	3	8 (+)	4	5	60	6.4
15VDH-FHB- MAS38-01	A	112.2	57.4 (-)	112 (-)	33.3 (-)	3 (+)	1 (-)	0 (-)	2	3	17.5 (-)	4

Line	A TA- AL	Grain Yield bu/ac	Test Weight lb/bu	Heading Date Julian	Height In	Lodging 0-9	Powdery Mildew 0-9	Leaf Rust 0-9	Barely Yellow Dwarf Virus 0-9	Fusarium Head Blight (Scab) 0-9	FDK %	DON ppm
MBX 127	A	112.1	57 (-)	118	37.1	0	4	7 (+)	1	4	35	4.2
MBX 245	TA	112.1	57.5 (-)	116	34.1 (-)	1	4	5	3	5	65	10.1
VA19W-89	A	112.1	58.7	118	37.4	0	2 (-)	1 (-)	1	4	75	7.1
MAS #139	A	112	56.8 (-)	119 (+)	35.5	0	4	6 (+)	0	5	70	9.5
VA20FHB-20	A	111.8	59.9 (+)	116	38	0	2 (-)	3	2	4	27.5	6.1
VA18HRW-57	A	111.7	58.5	120 (+)	39.6 (+)	1	5 (+)	1 (-)	3	3	80	5
AgriMAXX 513	A	111.4	57.9	117	37	2 (+)	3	5 (+)	2	4	37.5	3.5
SH 4222	A	111.3	57.7	118	37	1	3	6 (+)	1	5	40	4.1
Mean	NA	112.9	58.3	117	36.6	1	3	3	1	4	51.6	7.9
LSD	NA	9.4	0.7	1	1.4	1	1	2	NA	2	29.1	5.2
CV	NA	13.3	1.8	1	3.8	121	35	50	NA	21	28.5	33
Dyna-Gro 9172	A	111.3	57.3 (-)	117	36.4	1	5 (+)	7 (+)	2	3	40	4.3
Dyna-Gro 9290	A	111.2	57.6 (-)	116	38.6 (+)	1	4	2	4	5	45	6.6
VA18HRW-58	A	111.1	60 (+)	120 (+)	39.5 (+)	2	2	1 (-)	3	4	70	7.3
USG 3463	A	111	56.9 (-)	117	34.5 (-)	1	2	5 (+)	0	4	65	5.3
MAS #67	AL	110.3	56.9 (-)	114 (-)	35.6	1	6 (+)	2	1	5	22.5 (-)	2.3 (-)
LIBERTY 5658	A	110.3	59.1 (+)	114 (-)	39.1 (+)	1	4	1	0	4	40	6.5
EXP 3904	A	110.1	58.8	121 (+)	37.3	1	4	3	0	3	70	8.1
18VDH-FHB- MAS07-164-01	AL	110.1	59.5 (+)	114 (-)	35.1 (-)	2 (+)	2	0 (-)	1	7 (+)	80	8.6
SH 7222	A	110	59.9 (+)	119 (+)	36.5	0	1 (-)	0 (-)	1	3	80	8.2
AgriMAXX 516	A	110	57 (-)	118	36	1	5 (+)	8 (+)	1	5	55	5.6
Dyna-Gro 9151	A	109.8	58.6	118	38	2	4	8 (+)	2	5	60	8.3
MAS #143	A	109.8	56.9 (-)	119 (+)	37.1	1	4	6 (+)	1	4	55	5.4
EPIX 4372	A	109.4	57.3 (-)	119 (+)	36	1	5 (+)	8 (+)	3	4	40	3.8
16VDH-SRW03- 023	TA	109.2	58.4	116	37	1	3	1 (-)	1	5	45	7

Line	A TA- AL	Grain Yield bu/ac	Test Weight lb/bu	Heading Date Julian	Height In	Lodging 0-9	Powdery Mildew 0-9	Leaf Rust 0-9	Barely Yellow Dwarf Virus 0-9	Fusarium Head Blight (Scab) 0-9	FDK %	DON ppm
EXP 3574	AL	109.1	56.5 (-)	120 (+)	35.4	0	1 (-)	5	0	2	55	4.6
FS 743	A	109.1	57.6 (-)	117	38.3 (+)	0	3	6 (+)	0	5	45	5.4
Revere 2148	AL	109	58.3	118	37.1	1	5 (+)	6 (+)	1	4	20 (-)	3
VA19W-02	A	108.9	58.7	116	37.5	1	5 (+)	0 (-)	0	5	70	12.1
Mean	NA	112.9	58.3	117	36.6	1	3	3	1	4	51.6	7.9
LSD	NA	9.4	0.7	1	1.4	1	1	2	NA	2	29.1	5.2
CV	NA	13.3	1.8	1	3.8	121	35	50	NA	21	28.5	33
DH17SRW136-038	A	108.7	56.8 (-)	117	34.9 (-)	1	1 (-)	6 (+)	1	5	60	12.3
AgriMAXX 503	AL	108.4	58.4	118	36.5	1	5 (+)	4	2	2 (-)	27.5	2.4 (-)
Featherstone 3000	AL	108	59.4 (+)	118	36.5	1	5 (+)	1	4	4	77.5	14.1 (+)
16VDH-FHB-MAS60-7-03	AL	108	59	116	35 (-)	1	0 (-)	5 (+)	2	3	70	11.7
GA131218-20E15	A	108	58.4	115 (-)	34.5 (-)	3 (+)	5 (+)	1 (-)	0	6 (+)	90 (+)	25.4 (+)
AgriMAXX 502	A	107.9	57.5 (-)	116 (-)	37.6	1	3	6 (+)	1	5	70	6.4
EPIX 2392	A	107.9	57.5 (-)	118	38.1 (+)	1	4	6 (+)	2	6	55	7.4
CP8045	A	107.8	57 (-)	118	35.8	0	4 (+)	6 (+)	3	4	45	3.3
MAS #316	A	107.4	57.7 (-)	119 (+)	37.5	1	5 (+)	4	1	3	45	4.7
Dyna-Gro 9481	AL	107.4	57.1 (-)	117	34.9 (-)	1	4	1	0	4	15 (-)	1.5 (-)
KWS459	A	107.3	58.3	117	34.3 (-)	1	6 (+)	1	1	4	35	7
AgriMAXX 505	A	107.2	59	119 (+)	37.1	1	4	5 (+)	3	4	45	6
GA161240-20LE6	AL	107.1	59.9 (+)	118	37.9	2 (+)	0 (-)	0 (-)	3	3	72.5	13.3 (+)
MAS #164	A	107.1	55.4 (-)	119 (+)	34.8 (-)	0	4	5 (+)	2	4	67.5	4.9
SH 7200	A	107	58.8	113 (-)	36.8	2	4	0 (-)	2	7 (+)	80	25 (+)
VA21FHB-8	TA	107	59.2 (+)	116 (-)	36.9	1	2	1	0	3	62.5	9.4

Line	A TA- AL	Grain Yield bu/ac	Test Weight lb/bu	Heading Date Julian	Height In	Lodging 0-9	Powdery Mildew 0-9	Leaf Rust 0-9	Barely Yellow Dwarf Virus 0-9	Fusarium Head Blight (Scab) 0-9	FDK %	DON ppm
FS 891	A	106.9	58.3	118	37	1	4 (+)	3	5	5	70	6.8
USG 3472	A	106.5	56.8 (-)	118	35.6	1	5 (+)	8 (+)	1	4	45	3.3
GA12230-20E36	A	106.2	58.3	116 (-)	35.1 (-)	1	3	0 (-)	1	5	60	9.1
Mean	NA	112.9	58.3	117	36.6	1	3	3	1	4	51.6	7.9
LSD	NA	9.4	0.7	1	1.4	1	1	2	NA	2	29.1	5.2
CV	NA	13.3	1.8	1	3.8	121	35	50	NA	21	28.5	33
FS 745	A	106.1	57 (-)	119 (+)	36.3	1	5 (+)	7 (+)	2	4	42.5	5.6
GP 747	A	105.9	55.6 (-)	118	36.3	1	4	5 (+)	2	4	70	12
FS 597	A	105.9	57.3 (-)	117	36.8	1	4	2	5	5	45	5
AGS 3026	A	105.3	59.5 (+)	120 (+)	35.5	1	7 (+)	0 (-)	1	4	82.5 (+)	29.4 (+)
Dyna-Gro 9002	A	105	56.9 (-)	117	38.3 (+)	1	6 (+)	4	0	5	55	5.1
Featherstone 125	A	104.9	60.3 (+)	118	37.3	1	6 (+)	0 (-)	1	6	57.5	8.5
VA21W-18	A	103.6	58.7	111 (-)	35.1 (-)	1	3	1	0	5	45	10.1
Revere 2169	A	102.9 (-)	56.8 (-)	118	35.9	0	4	7 (+)	1	4	15 (-)	3.9
MAS #189	A	100.4 (-)	59.5 (+)	110 (-)	37.8	1	2 (-)	4	1	3	27.5	2 (-)
MAS #2	AL	99.9 (-)	59.3 (+)	119 (+)	42.8 (+)	4 (+)	5 (+)	4	1	3	35	4.7
AGS 3040	TA	97.7 (-)	58.7	115 (-)	36.6	0	8 (+)	1	6	5	55	10.1
MAS #106	TA	92.6 (-)	58.2	111 (-)	36.9	2	7 (+)	3	1	4	25	2.5 (-)
MASSEY	TA	88.2 (-)	57.8	117	41.1 (+)	3 (+)	2	8 (+)	1	5	60	10.3
Mean	NA	112.9	58.3	117	36.6	1	3	3	1	4	51.6	7.9
LSD	NA	9.4	0.7	1	1.4	1	1	2	NA	2	29.1	5.2
CV	NA	13.3	1.8	1	3.8	121	35	50	NA	21	28.5	33

A – Awns; FDK – Fusarium Damaged Kernels; DON – Deoxynivalenol.

Table 10. Performance of entries in the Virginia Tech Wheat Test, 2022 and 2023 harvests.

Line	A TA- AL	Grain Yield bu/ac	Test Weight lb/bu	Heading Date Julian	Height In	Lodging 0-9	Powdery Mildew 0-9	Leaf Rust 0-9	Barely Yellow Dwarf Virus 0-9	Fusarium Head Blight (Scab) 0-9	FDK %	DON ppm
SH 9520	A	107 (+)	58	122 (+)	35	1	2 (-)	5	1	4	38.8	8.8
15VTK-1-101	A	106.6 (+)	57.9	120	32.1 (-)	2	1 (-)	0 (-)	0	4	37.5	10
USG 3661	AL	106.1 (+)	58.6 (+)	120 (+)	33.2 (-)	1	3	1 (-)	1	4	57.5	11.7
17VDH-SRW01-077	A	105.8 (+)	58.7 (+)	117 (-)	37.5 (+)	1	0 (-)	0 (-)	0	5	33.8	6.6
USG 3451	AL	105.4 (+)	58.7 (+)	117 (-)	36.1	2	3	2	0	5 (+)	41.3	6.7
USG 3352	A	105.3 (+)	57.4	122 (+)	36.1	0	5 (+)	5	1	4	51.3	12.6 (+)
17VTK4-29	TA	104.9	57.9	118 (-)	35	1	0 (-)	0 (-)	2	5	46.3	8.7
USG 3783	A	104.8	57.5	121 (+)	34.6 (-)	1	4	4	0	4	41	8.1
Dyna-Gro 9393	A	104.4	57.5	121 (+)	34.5 (-)	0	4	3	1	4	40	6.5
VA19FHB-36	A	104.3	58.5 (+)	118 (-)	39.1 (+)	1	2 (-)	1 (-)	1	3	30	6.7
Dyna-Gro Shirley	TA	103.5	56.8 (-)	120	34.3 (-)	1	1 (-)	0 (-)	0	6 (+)	62.5	12.7 (+)
SH 5123	AL	102.6	58.4 (+)	120	35.5	2	5 (+)	0 (-)	2	3	22.5	5.7
VA20W-142	AL	102.6	58.2 (+)	120	37.4 (+)	2	2	0 (-)	1	4	38.8	5.7
USG 3673	AL	102.5	58.4 (+)	120	35.4	1	5 (+)	0 (-)	2	3	22.5	5.2
AgriMAXX 514	A	102.4	56.3 (-)	121 (+)	36	1	4	2	2	4	46.3	6.9
Pioneer 26R59	TA	102.1	57.1 (-)	119	32.8 (-)	1	3	5	3	5	53.8	8.4
Mean	NA	98.9	57.7	119	36	1	3	4	1.4	4	42	7.4
LSD	NA	6.1	0.4	1	1.1	1	1	2	NA	1	22.1	4.7
CV	NA	14	1.7	1	3.7	117	32	41	NA	20	37.5	39
AgriMAXX 535	A	102.1	58.6 (+)	120	34.7 (-)	1	3	4	1	4	38.8	7.7

Line	A TA- AL	Grain Yield bu/ac	Test Weight lb/bu	Heading Date Julian	Height In	Lodging 0-9	Powdery Mildew 0-9	Leaf Rust 0-9	Barely Yellow Dwarf Virus 0-9	Fusarium Head Blight (Scab) 0-9	FDK %	DON ppm
HILLIARD	A	101.8	57.5	118 (-)	37.2 (+)	0	2	1 (-)	1	4	45	10.3
MAS #155	A	101.6	56.7 (-)	120	37.1 (+)	2	3	9 (+)	0	5	57.5	7.8
VA20FHB-20	A	101.4	59.4 (+)	118 (-)	37.1 (+)	0	2 (-)	3	2	4	36.3	6.7
Dyna-Gro 9120	A	101.3	59.1 (+)	118 (-)	35.7	1	4	3	0	5 (+)	25	5.7
SH 7222	A	101.2	59.2 (+)	120	36	0	1 (-)	0 (-)	1	3	46.3	7.2
EPIX 1375	AL	101.2	59 (+)	116 (-)	36	2	0 (-)	0 (-)	2	4	32.5	8
Revere 2277	A	101.2	58.1 (+)	123 (+)	35.3	0	1 (-)	6 (+)	0	4	42.5	8.6
DH17SRW136-066	TA	101.2	56.9 (-)	120	35	1	1 (-)	6	0	4	63.8	6.3
USG 3363	A	101.1	57.4	120	37.5 (+)	0	3	7 (+)	1	3	21	4.6
17VDH-SRW05-169	A	100.7	57.2 (-)	116 (-)	30.7 (-)	1	1 (-)	1 (-)	0	5 (+)	60	9.7
VA19W-29	A	100.6	57.7	119	37.8 (+)	1	3	5	1	6 (+)	52.5	12.3 (+)
16VDH-SRW09-025	A	100.6	57.8	118 (-)	37.1 (+)	0	2 (-)	2	1	4	41.3	10
15VDH-FHB-MAS38-01	A	100.3	56.9 (-)	114 (-)	32.3 (-)	3 (+)	1 (-)	0 (-)	2	3 (-)	14.5 (-)	4.1
USG 3463	A	100.3	56.6 (-)	119	33.9 (-)	0	2	5	0	3	63.8	4.9
MAS #86	A	100.2	56.3 (-)	119	37.8 (+)	1	5 (+)	4	1	3 (-)	33.8	3.2
SH 4222	A	99.9	57.5	120	36.9	0	3	6 (+)	1	4	36.3	5.2
Mean	NA	98.9	57.7	119	36	1	3	4	1.4	4	42	7.4
LSD	NA	6.1	0.4	1	1.1	1	1	2	NA	1	22.1	4.7
CV	NA	14	1.7	1	3.7	117	32	41	NA	20	37.5	39
CP8224	AL	99.9	59.3 (+)	121 (+)	34.7 (-)	0	7 (+)	4	1	4	41.3	11
16VDH-SRW03-018	A	99.8	59.6 (+)	118	37.7 (+)	1	2	0 (-)	1	5	47.5	7.3

Line	A TA- AL	Grain Yield bu/ac	Test Weight lb/bu	Heading Date Julian	Height In	Lodging 0-9	Powdery Mildew 0-9	Leaf Rust 0-9	Barely Yellow Dwarf Virus 0-9	Fusarium Head Blight (Scab) 0-9	FDK %	DON ppm
MAS #143	A	99.8	56.5 (-)	121 (+)	36.4	1	4	6 (+)	1	4	36.3	4.4
MBX 127	A	99.6	56.7 (-)	120	36.3	0	4	7 (+)	1	4	25	4.3
AgriMAXX 503	AL	99.6	58	120 (+)	36.3	1	5 (+)	5	2	3 (-)	18.8 (-)	2.6 (-)
MBX 176	A	99.6	56.3 (-)	121 (+)	36.3	1	3	8 (+)	4	4	45	6.5
18VDH-FHB- MAS07-164-01	AL	99.4	58.3 (+)	115 (-)	34.5 (-)	2 (+)	2 (-)	0 (-)	1	7 (+)	61.3	9.1
AgriMAXX 525	A	99	57.4	121 (+)	34.9	1	4	7 (+)	3	4	37.5	4.2
VA19W-02	A	98.6	57.9	119	36.3	1	5 (+)	1 (-)	0	5	53.7	10.1
AgriMAXX 513	A	98.6	57.7	119	36.5	2 (+)	3	5	2	3	36.3	3.4
Dyna-Gro 9151	A	98.5	58.3 (+)	120	37	1	4	8 (+)	2	4	41.3	7
Dyna-Gro 9172	A	98.4	56.7 (-)	120	35.3	1	5 (+)	7 (+)	2	3	26.2	4.8
MAS #139	A	98.4	56.2 (-)	120 (+)	35.2	0	4	7 (+)	0	5	66.3 (+)	8.1
CP8045	A	98	56.5 (-)	120 (+)	34.9	0	4 (+)	6 (+)	3	4	35	4
VA18HRW-96	A	97.9	58.2 (+)	122 (+)	37.7 (+)	0	2	2	3	4	72.5 (+)	13.4 (+)
AgriMAXX 516	A	97.9	56.5 (-)	120	35.2	1	5 (+)	8 (+)	1	4	37.5	5.9
VA19MAS7-519- 1WS-R110	A	97.4	59 (+)	122 (+)	36.4	1	3	1 (-)	3	4	32.5	17.3 (+)
Featherstone 3000	AL	97.3	58.6 (+)	120	35.8	1	5 (+)	1 (-)	4	4	47.5	11
USG 3472	A	97.2	56.6 (-)	120 (+)	35.4	0	5 (+)	9 (+)	1	4	31.3	4.1
Mean	NA	98.9	57.7	119	36	1	3	4	1.4	4	42	7.4
LSD	NA	6.1	0.4	1	1.1	1	1	2	NA	1	22.1	4.7
CV	NA	14	1.7	1	3.7	117	32	41	NA	20	37.5	39
16VDH-SRW03- 023	TA	97.2	57.7	118 (-)	36.1	0	3	1 (-)	1	4	37.5	6
AgriMAXX 502	A	97.2	56.9 (-)	119	36.3	1	3	6 (+)	1	4	57.5	6.9
16VDH-FHB- MAS60-7-03	AL	97.1	58.5 (+)	118 (-)	34.2 (-)	1	0 (-)	6	2	4	47.5	9.2

Line	A TA- AL	Grain Yield bu/ac	Test Weight lb/bu	Heading Date Julian	Height In	Lodging 0-9	Powdery Mildew 0-9	Leaf Rust 0-9	Barely Yellow Dwarf Virus 0-9	Fusarium Head Blight (Scab) 0-9	FDK %	DON ppm
VA18HRW-58	A	96.9	59.2 (+)	123 (+)	38.4 (+)	2	2 (-)	1 (-)	3	4	62.5	7.1
MAS #133	A	96.8	55.1 (-)	120	36.3	1	5 (+)	5	2	4	56.2	10.5
Revere 2148	AL	96.7	57.8	121 (+)	36.4	1	5 (+)	6 (+)	1	3	20	2.8
Featherstone 125	A	96.5	59.8 (+)	119	36.5	1	6 (+)	1 (-)	1	6 (+)	47.5	8.7
VA18HRW-57	A	96.2	57.8	123 (+)	38.3 (+)	1	5 (+)	1 (-)	3	3	70 (+)	5.2
FS 743	A	96.2	57.4	120	38.2 (+)	0	3	7 (+)	0	5	38.8	6.5
AgriMAXX 505	A	95.9	58.4 (+)	121 (+)	36.3	1	4	5	3	4	50	6.5
Dyna-Gro 9002	A	95.8	56.6 (-)	119	37.3 (+)	1	6 (+)	4	0	4	41.3	5
HR 5210	A	95.4	56.5 (-)	122 (+)	33.2 (-)	0	2 (-)	1 (-)	3	6 (+)	87.5 (+)	16.4 (+)
FS 597	A	95.2	56.9 (-)	118 (-)	35.8	0	4	2	5	4	42.5	5.6
Revere 2169	A	94.9	56.4 (-)	120	35.3	0	4	7 (+)	1	3	13.8 (-)	5
FS 745	A	94.6	56.5 (-)	121 (+)	35.4	1	5 (+)	7 (+)	2	4	27.5	5.3
MAS #67	AL	94.5	56 (-)	117 (-)	34.7 (-)	1	6 (+)	3	1	4	26.3	2.1 (-)
MAS #316	A	93.3	57.2	121 (+)	36.8	1	5 (+)	5	1	3 (-)	27.5	5.5
FS 891	A	91.2 (-)	57.8	120	35.9	1	4 (+)	4	5	4	45	6.3
Mean	NA	98.9	57.7	119	36	1	3	4	1.4	4	42	7.4
LSD	NA	6.1	0.4	1	1.1	1	1	2	NA	1	22.1	4.7
CV	NA	14	1.7	1	3.7	117	32	41	NA	20	37.5	39
SH 7200	A	90.3 (-)	58.1 (+)	115 (-)	36.2	2	4	1 (-)	2	6 (+)	67.5 (+)	21 (+)
MAS #189	A	89.7 (-)	58.5 (+)	112 (-)	36.8	1	2 (-)	4	1	3 (-)	18.5 (-)	1.9 (-)
MAS #2	AL	88.3 (-)	58.7 (+)	121 (+)	42.3 (+)	4 (+)	5 (+)	4	1	3	36.3	4.7
MASSEY	TA	81.8 (-)	57.5	118 (-)	40.1 (+)	3 (+)	2 (-)	8 (+)	1	4	45	9.4

Line	A TA- AL	Grain Yield bu/ac	Test Weight lb/bu	Heading Date Julian	Height In	Lodging 0-9	Powdery Mildew 0-9	Leaf Rust 0-9	Barely Yellow Dwarf Virus 0-9	Fusarium Head Blight (Scab) 0-9	FDK %	DON ppm
MAS #106	TA	81.6 (-)	57.3	113 (-)	36.2	2	7 (+)	4	1	4	20	2.5 (-)
Mean	NA	98.9	57.7	119	36	1	3	4	1.4	4	42	7.4
LSD	NA	6.1	0.4	1	1.1	1	1	2	NA	1	22.1	4.7
CV	NA	14	1.7	1	3.7	117	32	41	NA	20	37.5	39

A – Awns; FDK – Fusarium Damaged Kernels; DON – Deoxynivalenol.

Table 11. Performance of entries in the Virginia Tech Wheat Test, 2021, 2022, and 2023 harvest.

Line	A TA- AL	Grain Yield bu/ac	Test Weight lb/bu	Heading Date Julian	Height In	Lodging 0-9	Powdery Mildew 0-9	Leaf Rust 0-9	Barely Yellow Dwarf Virus 0-9	Fusarium Head Blight (Scab) 0-9	FDK %	DON ppm
15VTK-1-101	A	97.1 (+)	58.1	121	30.6 (-)	1	1 (-)	0 (-)	0	4	37.5	10
USG 3451	AL	97.1 (+)	58.9 (+)	119 (-)	34.5	1	2	1 (-)	0	5 (+)	41.3	6.7
Dyna-Gro Shirley	TA	95.6 (+)	57 (-)	122	33 (-)	0	1 (-)	0 (-)	1	6 (+)	62.5 (+)	12.7 (+)
Dyna-Gro 9120	A	95	59.5 (+)	120 (-)	33.5 (-)	0	3	3	2	5 (+)	25	5.7
VA19W-29	A	95	58.1	120 (-)	35.5 (+)	0	2	4	2	6 (+)	52.5	12.3 (+)
EPIX 1375	AL	94.7	59.3 (+)	117 (-)	34.3	1	1 (-)	0 (-)	2	4	32.5	8
HILLIARD	A	94.5	58	119 (-)	35.5 (+)	0	2	0 (-)	1	4	45	10.3
SH 9520	A	94.4	58.3	124 (+)	33.6 (-)	0	2 (-)	4	2	4	38.8	8.8
AgriMAXX 514	A	94.3	57 (-)	122 (+)	34.3	0	3	2	4	4	46.3	6.9
SH 5123	AL	94.3	58.6 (+)	121	33.9	1	3	0 (-)	1	3	22.5	5.7
USG 3673	AL	94.2	58.5 (+)	121	33.9	1	3	0 (-)	1	3	22.5	5.1
MAS #86	A	94.1	56.8 (-)	121	36 (+)	0	3	4	2	3 (-)	33.8	3.2
16VDH- SRW09-025	A	93.9	58.2	119 (-)	35.4 (+)	0	1 (-)	1 (-)	1	4	41.3	10
Pioneer 26R59	TA	93.7	57.8	121	30.8 (-)	0	2	4	3	5	53.8	8.4
15VDH-FHB- MAS38-01	A	93.6	57.4 (-)	116 (-)	31.1 (-)	1 (+)	1 (-)	0 (-)	1	3 (-)	14.5 (-)	4.1
CP8224	AL	93.4	59.6 (+)	123 (+)	33.6	0	5 (+)	4	1	4	41.3	11
Dyna-Gro 9172	A	93.3	57.5 (-)	122 (+)	33.9	0	3	5 (+)	2	3	26.3	4.7
Mean	NA	91.2	58	121	34.4	1	3	3	2	4	39.1	7
LSD	NA	3.9	0.3	1	0.7	1	1	2	2	1	21.9	4.5
CV	NA	12.5	1.7	1	4.1	169	45	48	74	19	40.1	39.7

Line	A TA- AL	Grain Yield bu/ac	Test Weight lb/bu	Heading Date Julian	Height In	Lodging 0-9	Powdery Mildew 0-9	Leaf Rust 0-9	Barely Yellow Dwarf Virus 0-9	Fusarium Head Blight (Scab) 0-9	FDK %	DON ppm
16VDH-SRW03-018	A	92.8	59.6 (+)	120 (-)	35.5 (+)	0	2	0 (-)	1	5	47.5	7.3
SH 7222	A	92.5	59.3 (+)	121	34.8	0	1 (-)	0 (-)	1	3	46.7	7.2
USG 3472	A	92.5	57.4 (-)	122 (+)	34	0	3	7 (+)	0	4	31.3	4.1
Featherstone 3000	AL	92.4	58.9 (+)	122 (+)	34.3	0	3	1 (-)	3	4	47.5	11
CP8045	A	92.2	57.4 (-)	122 (+)	33.9	0	3	5 (+)	1	4	35	4
16VDH-SRW03-023	TA	91.8	57.9	120 (-)	34.8	0	3	1 (-)	0	4	37.5	6
MAS #143	A	91.6	57.3 (-)	122 (+)	34.1	0	3	5	0	4	36.3	4.3
MBX 127	A	91.6	57.5 (-)	122 (+)	34.1	0	3	5 (+)	1	4	25	4.3
AgriMAXX 513	A	91.2	58	121	34.4	1	3	4	2	3	36.3	3.4
Dyna-Gro 9002	A	90.7	57.1 (-)	121	35.2 (+)	1	4 (+)	3	0	4	41.3	5
AgriMAXX 516	A	90.6	57.3 (-)	122 (+)	33.5 (-)	0	3	7 (+)	1	4	37.5	5.9
Dyna-Gro 9151	A	90.3	59 (+)	122 (+)	34.9	1	3	7 (+)	4	4	41.3	7
MBX 176	A	90	56.9 (-)	122 (+)	34.4	0	2	7 (+)	5 (+)	4	45	6.5
AgriMAXX 502	A	89.9	57.5 (-)	120	34.3	0	2	5 (+)	4 (+)	4	57.5	6.8
MAS #139	A	89.6	56.8 (-)	122 (+)	32.9 (-)	0	3	6 (+)	2	5	66.3 (+)	8.1
Revere 2169	A	89.3	57.4 (-)	122 (+)	33.4 (-)	0	3	5 (+)	0	3	13.8 (-)	4.9
AgriMAXX 503	AL	89.3	58.1	122 (+)	34.7	0	4 (+)	4	2	3 (-)	18.8	2.6
AgriMAXX 505	A	89.2	59.2 (+)	122 (+)	34.5	0	3	5	5 (+)	4	50	6.5
Featherstone 125	A	89.2	60 (+)	121	34.7	0	4 (+)	0 (-)	0	6 (+)	47.5	8.7
MAS #133	A	89.1	55.7 (-)	122 (+)	34.3	0	3	5	3	4	56.3	10.5
Mean	NA	91.2	58	121	34.4	1	3	3	2	4	39.1	7
LSD	NA	3.9	0.3	1	0.7	1	1	2	2	1	21.9	4.5
CV	NA	12.5	1.7	1	4.1	169	45	48	74	19	40.1	39.7
Revere 2148	AL	87.8	58.1	123 (+)	34.8	1	3	5 (+)	1	3	20	2.8

Line	A TA- AL	Grain Yield bu/ac	Test Weight lb/bu	Heading Date Julian	Height In	Lodging 0-9	Powdery Mildew 0-9	Leaf Rust 0-9	Barely Yellow Dwarf Virus 0-9	Fusarium Head Blight (Scab) 0-9	FDK %	DON ppm
MAS #67	AL	87.1 (-)	56.6 (-)	120 (-)	33 (-)	0	4 (+)	2	1	4	26.3	2.1 (-)
MAS #316	A	86.7 (-)	57.5 (-)	123 (+)	35.7 (+)	1	3	4	3	3 (-)	27.5	5.5
SH 7200	A	86.2 (-)	58.8 (+)	118 (-)	35.4 (+)	1	3	0 (-)	4	6 (+)	67.5 (+)	21 (+)
FS 891	A	84.7 (-)	58.1	122 (+)	34.4	0	3	3	4 (+)	4	45	6.2
MAS #2	AL	83.3 (-)	59.1 (+)	123 (+)	40.1 (+)	3 (+)	3	3	2	3	36.3	4.7
MASSEY	TA	75 (-)	58.1	120 (-)	38.9 (+)	2 (+)	2	8 (+)	1	4	45	9.4
Mean	NA	91.2	58	121	34.4	1	3	3	2	4	39.1	7
LSD	NA	3.9	0.3	1	0.7	1	1	2	2	1	21.9	4.5
CV	NA	12.5	1.7	1	4.1	169	45	48	74	19	40.1	39.7

A – Awns; FDK – Fusarium Damaged Kernels; DON – Deoxynivalenol.

Table 12. Performance of entries in the Virginia Tech Wheat Test, Kentland Farm, Blacksburg, VA 2023 harvest.

Line	A TA-AL	Grain Yield bu/ac	Test Weight lb/bu	Heading Date Julian	Height In	Lodging 0-9
MAS #155	A	143.1 (+)	60.4	125	41	3
MAS #139	A	140.7 (+)	59.8	127 (+)	39.7	1
VA20FHB-18	A	137 (+)	61.1	123	42.7 (+)	1
LIBERTY 5658	A	136.3 (+)	61.3 (+)	121 (-)	43.5 (+)	2
Dyna-Gro 9422	A	135.9 (+)	60	125	41	2
CPX92394	A	135.4 (+)	61.3 (+)	122 (-)	43.7 (+)	2
SH 9520	A	133.7	60.7	127 (+)	39.2	1
AgriMAXX 525	A	133.4	61.2 (+)	127 (+)	39	1
MAS #143	A	133.1	60	126	40.5	2
VA19W-29	A	133.1	60.6	125	42.5 (+)	2
EPIX 1365	A	133.1	59.3 (-)	125	38.7	1
EPIX 2356	A	132.8	60.2	127 (+)	40.7	2
EXP 3574	AL	132	59.4 (-)	128 (+)	38 (-)	1
CROPLAN CP9606	A	131.9	59.3 (-)	124	39.7	1
AgriMAXX 514	A	131.6	59.3 (-)	127 (+)	39.5	2
MAS #164	A	131.5	59.4 (-)	128 (+)	38 (-)	1
Dyna-Gro 9290	A	131.4	59.3 (-)	124	42.2 (+)	1
VA19FHB-36	A	131.4	61.2 (+)	125	44 (+)	2
DH17SRW136-066	TA	131	59.4 (-)	126	38.7	3
17VDH-SRW01-077	A	130.9	61.3 (+)	123 (-)	41.7	1
MBX 127	A	130.9	59.7 (-)	125	41	1
VA19W-02	A	130.9	60.3	123 (-)	41	3
Pioneer 26R36	A	130.5	61.6 (+)	122 (-)	42.5 (+)	2
Mean	NA	124.4	60.4	125	40.1	2
LSD	NA	10.2	0.7	2	1.9	2
CV	NA	5.9	0.8	1	3.4	83
USG 3673	AL	130.3	60.8	125	39.5	2

Line	A TA-AL	Grain Yield bu/ac	Test Weight lb/bu	Heading Date Julian	Height In	Lodging 0-9
GA151313-20E48	A	130.1	61.4 (+)	128 (+)	37.2 (-)	1
Dyna-Gro 9151	A	130	60.9	126	42 (+)	3
15VDH-FHB-MAS25-15	A	129.9	61.2 (+)	124	39	2
SH 5123	AL	129.8	61	126	39.7	4
VA20W-135	A	129.8	60.8	125	44 (+)	2
GP 543	TA	129.4	59 (-)	122 (-)	41.2	3
Dyna-Gro 9172	A	128.9	60.1	125	39.2	1
Dyna-Gro 9002	A	128.8	58.5 (-)	124	40.7	3
AgriMAXX 516	A	128.6	59.7 (-)	125	40	1
17VTK4-29	TA	128.6	59.6 (-)	123	39.7	3
EPIX 1375	AL	128.6	61.6 (+)	121 (-)	41.5	3
MAS #133	A	128.5	58.2 (-)	126	40.5	2
VA20FHB-22	A	128.3	60.3	125	43.5 (+)	3
VA21W-59	TA	128.2	60.2	127 (+)	38.7	4 (+)
USG 3783	A	127.8	60.7	127 (+)	38.2	1
DH17SRW136-038	A	127.7	58.5 (-)	124	38 (-)	2
VA21W-112	A	127.6	58.7 (-)	125	38.5	1
Pioneer 26R59	TA	127.5	60	124	37.7 (-)	1
18VTK12-60	AL	127.4	59.3 (-)	120 (-)	40.2	3
USG 3633	A,AL	127.3	61.2 (+)	121 (-)	42.5 (+)	1
Phoenix 29	A	127.3	61.6 (+)	126	39.2	3
Dyna-Gro 9393	A	127.3	60.4	127 (+)	38.5	1
17VDH-SRW03-204	A	127.2	61.2 (+)	124	41.5	2
CP8045	A	127.1	60	126	39.5	1
Mean	NA	124.4	60.4	125	40.1	2
LSD	NA	10.2	0.7	2	1.9	2
CV	NA	5.9	0.8	1	3.4	83
Pioneer 26R45	A	126.9	61.1	121 (-)	42.7 (+)	1
FS 855	A	126.9	61.4 (+)	121 (-)	42.5 (+)	0

Line	A TA-AL	Grain Yield bu/ac	Test Weight lb/bu	Heading Date Julian	Height In	Lodging 0-9
USG 3352	A	126.9	60.4	128 (+)	39.5	1
MAS #178	AL	126.9	59.5 (-)	127 (+)	42 (+)	2
KWS495	A	126.7	60.5	124	37.2 (-)	1
KWS477	TA	126.6	61.3 (+)	123	41.2	1
MAS #67	AL	126	59.6 (-)	121 (-)	39.5	1
CP8224	AL	126	62.3 (+)	127 (+)	38 (-)	1
18VTK10-23	A	125.9	62.1 (+)	121 (-)	40.5	1
HILLIARD	A	125.9	59.2 (-)	123	41.7	1
MAS #86	A	125.8	58.7 (-)	124	41.2	1
Dyna-Gro 9120	A	125.5	61.6 (+)	124	39.2	1
Revere 2277	A	125.4	60.5	128 (+)	39.2	1
MBX 176	A	125.4	59.1 (-)	127 (+)	40.2	1
Dyna-Gro Shirley	TA	125.2	59.4 (-)	125	38.2	1
USG 3234	AL	125.1	62 (+)	126	42.5 (+)	2
SH 4222	A	125	61.2 (+)	125	40	1
USG 3451	AL	124.9	61.4 (+)	123	40.5	4 (+)
FS 891	A	124.8	60.5	125	40.5	2
15VDH-FHB-MAS38-01	A	124.8	58.1 (-)	118 (-)	37 (-)	4
18VTK10-77	A	124.7	60.9	119 (-)	40.2	3
16VDH-SRW03-023	TA	124.7	60.2	124	39.5	1
VA20FHB-20	A	124.6	61.9 (+)	124	41.7	1
FS 743	A	124.6	61.2 (+)	125	41.5	1
USG 3363	A	124.5	61.2 (+)	126	41.2	1
Mean	NA	124.4	60.4	125	40.1	2
LSD	NA	10.2	0.7	2	1.9	2
CV	NA	5.9	0.8	1	3.4	83
AgriMAXX 503	AL	124.5	60.2	126	39.7	1
16VDH-SRW03-018	A	124.5	61.9 (+)	124	42.5 (+)	2
GA131218-20E15	A	124.5	60.3	122 (-)	37.7 (-)	3

Line	A TA-AL	Grain Yield bu/ac	Test Weight lb/bu	Heading Date Julian	Height In	Lodging 0-9
VA19MAS7-519-1WS-R110	A	124.5	62.1 (+)	127 (+)	41.2	1
MBX 120	A	124.3	60.8	128 (+)	38 (-)	0
18VTK12-111	TA	124.3	60.9	128 (+)	38 (-)	3
MBX 230	A	124.3	61.1	125	40.5	1
Dyna-Gro 9231	A	124.2	61.6 (+)	126	40.5	1
18VTK6-3	A	124	61.1	127 (+)	40	1
Pioneer 26R33	A	123.9	60.7	126	41.2	2
VA18HRW-57	A	123.9	60.4	128 (+)	42.7 (+)	2
Dyna-Gro WX23444	AL	123.7	59 (-)	121 (-)	40.5	3
KWS459	A	123.6	59.8	125	38.2	3
FS 745	A	123.6	59.9	126	39.2	1
EPIX 2392	A	123.6	61.3 (+)	125	41.2	2
Revere 2347	A	123.3	61.4 (+)	126	40.5	1
Viking 822	A	123.3	60	125	41	2
AgriMAXX 502	A	123.3	59.9	123 (-)	39.7	1
GP 282	A	123.1	60	125	37.2 (-)	2
MAS #316	A	123.1	60.9	127 (+)	40.2	3
15VTK-1-101	A	122.4	60.6	126	37.2 (-)	3
Revere 2169	A	122.2	60	126	39	1
AgriMAXX 505	A	122.2	61.6 (+)	127 (+)	41	2
HR 5210	A	122.2	60.4	128 (+)	38.2	0
VA20W-142	AL	122	60.8	125	40.2	3
Mean	NA	124.4	60.4	125	40.1	2
LSD	NA	10.2	0.7	2	1.9	2
CV	NA	5.9	0.8	1	3.4	83
Dyna-Gro 9481	AL	122	59.4 (-)	125	38.2	2
MBX 245	TA	121.6	59.3 (-)	123 (-)	37.7 (-)	1
USG 3661	AL	121.5	60.1	127 (+)	37 (-)	3
FS 597	A	121.4	59.4 (-)	124	40.7	1

Line	A TA-AL	Grain Yield bu/ac	Test Weight lb/bu	Heading Date Julian	Height In	Lodging 0-9
EPIX 4372	A	121.4	60.1	126	39.2	1
MAS #190	A	121.4	60.3	129 (+)	38 (-)	2
Revere 2148	AL	121.4	60.3	126	41	2
18VTK10-188	A	120.8	60.5	122 (-)	39.7	2
USG 3472	A	120.7	60.1	126	38.7	1
VA19W-89	A	120.5	60.2	126	40.7	1
18VDH-FHB-MAS07-164-01	AL	120.4	60.7	121 (-)	37.7 (-)	4
AgriMAXX 535	A	120.2	61.6 (+)	126	38.2	1
EXP 3354	AL	120	59.1 (-)	121 (-)	39.7	4 (+)
AGS 3026	A	120	61.7 (+)	128 (+)	39.5	2
USG 3463	A	119.9	59.5 (-)	126	38.2	1
18VTK10-110	A	119.9	61.7 (+)	127 (+)	38.5	1
VA18HRW-96	A	119.7	61.2 (+)	127 (+)	42.2 (+)	0
17VDH-SRW02-125	A	119.6	61	129 (+)	41	2
SH 7222	A	119.5	60.9	126	39.5	0
16VDH-SRW09-025	A	119.2	60	124	41.2	1
17VDH-SRW05-169	A	118.8	58.9 (-)	122 (-)	35 (-)	2
AGS 3040	TA	118.1	60.7	122 (-)	40.2	1
EXP 3904	A	117.7	60.6	128 (+)	39.2	1
VA21FHB-8	TA	117.6	60.4	122 (-)	40	3
MAS #106	TA	117.4	59.8	115 (-)	40.7	2
Mean	NA	124.4	60.4	125	40.1	2
LSD	NA	10.2	0.7	2	1.9	2
CV	NA	5.9	0.8	1	3.4	83
SH 7200	A	117.3	60.3	120 (-)	40.2	2
AgriMAXX 513	A	116.7	59.6 (-)	124	40.2	3
18VTK5-95	AL	116.5	61.2 (+)	125	38.7	1
GP 747	A	116.5	57.9 (-)	125	39	2
Featherstone 3000	AL	115.9	61.1	125	39	1

Line	A TA-AL	Grain Yield bu/ac	Test Weight lb/bu	Heading Date Julian	Height In	Lodging 0-9
VA18HRW-58	A	115.7	60.9	127 (+)	43 (+)	3
USG EXP 3000	AL	115.6	61	126	39.5	2
GA12230-20E36	A	115.3	60.3	124	38.7	1
16VDH-FHB-MAS60-7-03	AL	114.9	60.9	124	38.7	3
VA21W-18	A	114.9	60.3	118 (-)	38.5	1
KWS482	A	114.4	60.7	124	38.2	1
Featherstone 125	A	114.1 (-)	61.8 (+)	125	40	2
MAS #189	A	114.1 (-)	60.9	117 (-)	41.5	2
VA19W-87	A	113.4 (-)	61.2 (+)	126	41	1
AGS 4043	A	111.9 (-)	60.9	124	36.7 (-)	2
18VDH-FHB-MAS07-173-03	A	109.3 (-)	60	126	39.2	4 (+)
MASSEY	TA	104.3 (-)	60.2	125	44.5 (+)	4 (+)
GA161240-20LE6	AL	104.1 (-)	61.4 (+)	126	40.7	3
MAS #2	AL	101.4 (-)	60.3	126	47.2 (+)	7 (+)
Mean	NA	124.4	60.4	125	40.1	2
LSD	NA	10.2	0.7	2	1.9	2
CV	NA	5.9	0.8	1	3.4	83

Table 13. Performance of entries in the Virginia Tech Wheat Test, Southern Piedmont AREC, Blackstone, VA, 2023 harvest.

Line	Grain Yield bu/ac	Test Weight lb/bu	Lodging 0-9
Dyna-Gro WX23444	131.1 (+)	56.1	1 (-)
18VTK10-23	127.7 (+)	58.1 (+)	4
SH 7222	126.4 (+)	57.5 (+)	1 (-)
18VTK12-111	124.6 (+)	57.3 (+)	0 (-)
17VDH-SRW02-125	124.3 (+)	57.6 (+)	0 (-)
17VDH-SRW01-077	124 (+)	56.7 (+)	0 (-)
18VDH-FHB-MAS07-173-03	124 (+)	56.6 (+)	0 (-)
18VTK10-110	121.7	59.4 (+)	2
15VTK1-101	121.4	56.6 (+)	0 (-)
18VTK5-95	121.4	57.5 (+)	1 (-)
VA19FHB-36	120.4	56.6 (+)	1 (-)
VA20FHB-18	119.6	56.2	2
GA151313-20E48	119.4	56.8 (+)	3
SH 9520	119.2	56.7 (+)	1 (-)
Revere 2277	118.7	57.1 (+)	0 (-)
KWS482	118.6	56.8 (+)	2
18VTK6-3	118.6	56.6 (+)	2
MBX 230	117.5	55.2 (-)	2
MBX 120	117.5	56.6 (+)	0 (-)
USG 3352	117.4	54.6 (-)	5 (+)
USG 3673	117.3	56.7 (+)	5 (+)
USG 3661	117.3	57.1 (+)	4
Phoenix 29	117.3	56.9 (+)	2
Dyna-Gro Shirley	117.2	55.9	0 (-)
VA19W-29	117.1	55 (-)	4
Pioneer 26R33	116.9	56.4	2
Revere 2347	116.8	55 (-)	2
VA20W-135	116.7	57.5 (+)	3
AGS 4043	116.6	57.8 (+)	0 (-)
16VDH-SRW03-018	116.5	58.1 (+)	3
Mean	107.9	55.8	3
LSD	14.3	0.6	2
CV	9.4	0.8	33
EPIX 1375	116.5	57.7 (+)	0 (-)

Line	Grain Yield bu/ac	Test Weight lb/bu	Lodging 0-9
18VTK10-188	116.1	57.5 (+)	3
EXP 3354	115.7	56	1 (-)
Dyna-Gro 9422	115.5	54.5 (-)	2
Viking 822	115.4	54.7 (-)	3
HR 5210	115.3	54.4 (-)	2
VA18HRW-96	115.1	56.7 (+)	2
VA20FHB-22	114.9	56.2	2
17VTK4-29	114.7	57.3 (+)	0 (-)
Dyna-Gro 9120	114.3	58 (+)	3
SH 7200	114	56.8 (+)	3
15VDH-FHB-MAS25-15	114	56.7 (+)	3
AgriMAXX 502	113.9	55.5	2
SH 5123	113.5	57.1 (+)	5 (+)
SH 4222	113.3	55.1 (-)	2
GP 543	113.2	55.8	0 (-)
16VDH-SRW09-025	113.2	56.5	2
USG 3234	113.1	58 (+)	4
EPIX 2356	113.1	54.4 (-)	5 (+)
VA21W-59	112.5	56.3	2
17VDH-SRW05-169	112.5	56.5	1 (-)
17VDH-SRW03-204	112.5	56.9 (+)	0 (-)
Featherstone 3000	112.4	56.9 (+)	5 (+)
MBX 176	112.4	55 (-)	2
EPIX 1365	112.3	53.6 (-)	2
AgriMAXX 535	111.9	55.9	2
VA19W-87	111.9	57.2 (+)	1 (-)
HILLIARD	111.7	56.1	2
EXP 3904	111.7	55.6	4
MAS #133	110.7	52.5 (-)	5
VA21W-112	110.5	54.3 (-)	2
Dyna-Gro 9231	110.4	54.9 (-)	3
USG 3363	110.2	55.2 (-)	2
USG EXP 3000	110.1	55.9	5
Mean	107.9	55.8	3
LSD	14.3	0.6	2
CV	9.4	0.8	33
MAS #190	110	55.1 (-)	3
CP8045	110	54.2 (-)	4

Line	Grain Yield bu/ac	Test Weight lb/bu	Lodging 0-9
USG 3451	109.3	55.7	2
GP 282	109.2	56.4	6 (+)
DH17SRW136-038	108.8	54.9 (-)	1 (-)
FS 743	108.6	55.1 (-)	2
VA19MAS7-519-1WS-R110	108.4	56	2
FS 745	108.2	54.2 (-)	4
USG 3463	108	54.1 (-)	2
VA20W-142	108	56	2
Dyna-Gro 9172	107.9	54.1 (-)	5 (+)
EXP 3574	107.8	53.9 (-)	2
Dyna-Gro 9393	107.8	55.4	5
MBX 245	107.7	55.4	5
18VTK10-77	107.5	58.2 (+)	3
MAS #155	107.5	53.7 (-)	2
AgriMAXX 516	107.5	54.2 (-)	5 (+)
VA19W-89	107.4	56	1 (-)
Dyna-Gro 9151	107.3	55.9	3
Pioneer 26R59	107.2	56	4
USG 3783	107	55.4	4
16VDH-SRW03-023	106.9	55.1 (-)	3
AgriMAXX 513	106.8	55.5	2
CP8224	106.8	57.2 (+)	8 (+)
DH17SRW136-066	106.7	56.3	1 (-)
FS 891	106.5	56	4
AgriMAXX 503	106.3	55.6	5 (+)
GP 747	105.9	52.8 (-)	4
AgriMAXX 514	105.3	53.9 (-)	4
Featherstone 125	105.2	58.1 (+)	6 (+)
VA21FHB-8	105.1	56.6 (+)	2
USG 3633	105	56.7 (+)	6 (+)
Dyna-Gro 9290	104.8	54.8 (-)	4
Mean	107.9	55.8	3
LSD	14.3	0.6	2
CV	9.4	0.8	33
EPIX 4372	104.4	54.6 (-)	5 (+)
18VDH-FHB-MAS07-164-01	104.3	56.8 (+)	2
GA161240-20LE6	104.3	57.4 (+)	0 (-)

Line	Grain Yield bu/ac	Test Weight lb/bu	Lodging 0-9
VA20FHB-20	104	57.5 (+)	2
VA18HRW-57	103.2	56.4	5 (+)
CPX92394	103.2	55.6	5 (+)
VA18HRW-58	103.1	57.9 (+)	2
MAS #86	103	54.1 (-)	6 (+)
KWS477	102.9	56.9 (+)	7 (+)
CROPLAN CP9606	102.6	54.4 (-)	5 (+)
USG 3472	102.6	53.8 (-)	5
Revere 2148	102.6	55.8	5 (+)
MAS #143	102.3	53.9 (-)	4
AgriMAXX 505	102.2	56.1	4
VA19W-02	102.2	55.8	5 (+)
MBX 127	102	54.5 (-)	4
KWS459	102	55.4	7 (+)
AgriMAXX 525	101.7	55.1 (-)	4
MAS #316	101.2	54.2 (-)	6 (+)
KWS495	100.7	54.9 (-)	6 (+)
MAS #67	100.2	53.6 (-)	7 (+)
EPIX 2392	99.9	54.6 (-)	3
MAS #139	99.8	54.3 (-)	5
FS 855	99.7	56.8 (+)	5 (+)
LIBERTY 5658	99.3	57.1 (+)	4
GA12230-20E36	99.2	54.7 (-)	5 (+)
Pioneer 26R45	98.9	56.2	4
FS 597	97.4	54.7 (-)	4
Revere 2169	95.6	53.7 (-)	5
AGS 3026	95.6	56.7 (+)	8 (+)
MAS #178	95.4	55.7	5 (+)
Dyna-Gro 9481	92.8 (-)	53.7 (-)	3
MAS #164	92.4 (-)	NA	5
Mean	107.9	55.8	3
LSD	14.3	0.6	2
CV	9.4	0.8	33
MAS #189	89.8 (-)	57.4 (+)	2
16VDH-FHB-MAS60-7-03	89.8 (-)	57 (+)	0 (-)
18VTK12-60	89.3 (-)	56.1	4
Dyna-Gro 9002	88.9 (-)	54.1 (-)	7 (+)

Line	Grain Yield bu/ac	Test Weight lb/bu	Lodging 0-9
VA21W-18	88.3 (-)	55.7	4
MASSEY	83.6 (-)	55.6	2
GA131218-20E15	83.5 (-)	55.3	6 (+)
MAS #2	82.9 (-)	56.7 (+)	5 (+)
15VDH-FHB-MAS38-01	82.3 (-)	54 (-)	1 (-)
AGS 3040	82.2 (-)	56.1	8 (+)
Pioneer 26R36	74.4 (-)	54 (-)	9 (+)
MAS #106	68.9 (-)	55.7	8 (+)
Mean	107.9	55.8	3
LSD	14.3	0.6	2
CV	9.4	0.8	33

Table 14. Performance of entries in the Virginia Tech Wheat Test, Tidewater AREC, Holland, VA, 2023 harvest.

Line	Grain Yield bu/ac	Test Weight lb/bu
15VTK-1-101	92.9 (+)	55.4
16VDH-SRW03-018	91.1 (+)	56.4 (+)
EPIX 4372	90.8 (+)	54.3
AgriMAXX 502	89.6 (+)	53.2
MAS #86	89.2 (+)	51.3 (-)
15VDH-FHB-MAS25-15	88.4 (+)	55.5
SH 4222	87.6 (+)	54.1
FS 745	86.4 (+)	53.8
MAS #143	86.3 (+)	53.5
CP8045	85.1 (+)	54.3
GA151313-20E48	84.8 (+)	54.2
CROPLAN CP9606	84.8 (+)	52.8
FS 743	84.4 (+)	53.7
EPIX 2392	84.3 (+)	53.4
Dyna-Gro 9393	82.3	54.9
USG 3783	81.3	54.9
17VDH-SRW01-077	81.2	54.6
USG 3363	80.8	54
SH 7200	80.8	53.9
18VTK12-111	80.7	55.1
Viking 822	80.7	53
MBX 127	80.1	53.7
AgriMAXX 535	80	54
MAS #133	79.6	51.6
Dyna-Gro 9002	79.4	53.7
18VTK10-110	79	56.6 (+)
Dyna-Gro 9172	78.9	53.2
17VTK4-29	78.9	54.8
VA19W-29	78.2	52.2
16VDH-SRW03-023	78.1	53.3
MAS #316	77.7	53.2
VA21W-112	77.4	50.1 (-)
Mean	66.1	53.6
LSD	16.4	2.1
CV	16.9	2.7

Line	Grain Yield bu/ac	Test Weight lb/bu
Revere 2347	76.8	54
AgriMAXX 516	76.8	51.6
Revere 2169	76.6	54
18VDH-FHB-MAS07-173-03	76.2	51 (-)
MAS #190	76	53.9
AgriMAXX 505	75.8	55.4
SH 5123	75.4	55.7 (+)
17VDH-SRW02-125	75.1	55.8 (+)
MBX 230	74.9	54.2
SH 9520	74	55.4
16VDH-SRW09-025	74	53.4
Dyna-Gro 9231	73.5	53.5
KWS482	73.4	54.7
Dyna-Gro 9120	73.4	55.7 (+)
USG 3472	73.3	54.4
DH17SRW136-038	72.9	53.4
Dyna-Gro Shirley	72.5	54.5
GA12230-20E36	72.4	51.6
VA19FHB-36	72.4	52.9
VA19W-02	72	54
VA20W-135	71.3	54.6
18VTK10-23	70.9	54.6
VA18HRW-96	69.9	52.6
VA21W-59	68.5	52.9
FS 891	68.5	54.4
17VDH-SRW03-204	67.4	54
VA20FHB-20	66.7	57 (+)
VA19W-87	66.6	55.4
EXP 3904	66.5	53.8
MAS #139	66.2	54
AGS 3026	66	55.9 (+)
MBX 120	65.9	54.7
Pioneer 26R33	65.5	55.1
15VDH-FHB-MAS38-01	65.5	50.7 (-)
Mean	66.1	53.6
LSD	16.4	2.1
CV	16.9	2.7
AgriMAXX 513	65.5	53.1

Line	Grain Yield bu/ac	Test Weight lb/bu
VA20W-142	65.3	54.8
AgriMAXX 525	64.9	54.5
SH 7222	64.7	54.3
GA131218-20E15	64.3	53.2
Featherstone 125	64.3	57.3 (+)
LIBERTY 5658	63.7	55.2
USG 3673	63.5	55.7
Dyna-Gro 9422	63.4	50.8 (-)
18VTK6-3	63.3	54
GP 747	62.9	51.7
HILLIARD	62.8	52.8
VA20FHB-18	62.6	51.7
AGS 4043	62.5	54.2
18VTK10-77	62.4	54.3
CPX92394	62.2	55.2
Dyna-Gro 9151	62.1	54.6
Pioneer 26R59	62.1	52.4
Dyna-Gro 9290	61.7	51.6
GP 282	60.9	54.2
FS 855	60.7	55.4
VA18HRW-57	60.5	54.7
17VDH-SRW05-169	60.2	51.9
18VTK10-188	60.1	55.1
EPIX 1375	60	55.5
Revere 2277	59.8	55.3
VA20FHB-22	59.6	54.5
Pioneer 26R36	58.9	53.3
EPIX 2356	58.4	51.8
MAS #2	58.1	54.6
AgriMAXX 514	57.8	51.5 (-)
DH17SRW136-066	57.6	53.9
USG 3633	57.4	55.4
VA19MAS7-519-1WS-R110	57.1	52.8
Mean	66.1	53.6
LSD	16.4	2.1
CV	16.9	2.7
KWS495	57	49 (-)
EPIX 1365	57	50.7 (-)

Line	Grain Yield bu/ac	Test Weight lb/bu
VA18HRW-58	56.9	56.2 (+)
KWS459	56.4	53.6
MBX 176	56.3	53.2
USG 3661	56.1	55.4
FS 597	56	52.1
USG 3463	54.9	50.7 (-)
MAS #155	53.5	51.4 (-)
Phoenix 29	52.6	54.9
USG 3352	52.5	50.3 (-)
GA161240-20LE6	51.7	55.7 (+)
MAS #164	51.6	48.8 (-)
VA21W-18	51.6	52.4
MAS #178	51.5	53.9
USG 3234	51.5	55.6
EXP 3354	51.4	53.2
VA19W-89	51.3	54.1
18VTK12-60	50.4	52.4
AGS 3040	50.4	53.2
Featherstone 3000	49.9	55
USG EXP 3000	49.8	55.3
18VTK5-95	49.7 (-)	54.4
VA21FHB-8	49.6 (-)	51.7
KWS477	49.1 (-)	53.6
Dyna-Gro WX23444	49 (-)	52.8
MAS #189	48.1 (-)	53.7
CP8224	47.9 (-)	53.4
MASSEY	47.9 (-)	53.8
HR 5210	47.3 (-)	51.8
Dyna-Gro 9481	44.8 (-)	53
MAS #67	43.5 (-)	50.9 (-)
EXP 3574	42.2 (-)	50.4 (-)
16VDH-FHB-MAS60-7-03	41.3 (-)	52.9
Mean	66.1	53.6
LSD	16.4	2.1
CV	16.9	2.7
GP 543	39.4 (-)	53.5
18VDH-FHB-MAS07-164-01	37 (-)	51.9
AgriMAXX 503	NA	55.5

Line	Grain Yield bu/ac	Test Weight lb/bu
MAS #106	NA	49.9 (-)
MBX 245	NA	52
Pioneer 26R45	NA	55.4
Revere 2148	NA	52
USG 3451	NA	51.5 (-)
Mean	66.1	53.6
LSD	16.4	2.1
CV	16.9	2.7

Table 15. Performance of entries in the Virginia Tech Wheat Test, Northern Piedmont Center, Orange, VA, 2023 harvest.

Line	Grain Yield bu/ac	Test Weight lb/bu
CROPLAN CP9606	147.1	55.9 (-)
MAS #190	144.6	57.5
Dyna-Gro WX23444	144.5	56.9
USG 3363	143.6	57.0
USG 3661	142.3	58.4 (+)
AgriMAXX 514	140.2	56.7
AgriMAXX 525	139.3	57.1
Pioneer 26R59	138.6	56.8
MAS #178	138.3	57.1
EXP 3354	138.0	56.8
USG 3783	137.3	57.3
SH 9520	136.9	57.8
Dyna-Gro 9393	136.3	57.2
AgriMAXX 513	136.1	56.8
MBX 245	135.7	56.6
MAS #164	135.7	54.4 (-)
MAS #139	135.5	57.1
USG 3451	133.8	57.1
15VTK-1-101	133.1	57.1
Revere 2347	132.6	57.2
KWS477	132.3	58.5 (+)
Dyna-Gro Shirley	132.1	56.6
AgriMAXX 535	131.4	57.9
Dyna-Gro 9151	131.4	58.0
USG EXP 3000	131.4	58.3 (+)
Pioneer 26R36	131.0	56.2 (-)
EPIX 2356	130.8	56.0 (-)
Pioneer 26R33	130.6	57.6
Dyna-Gro 9231	130.6	57.2
16VDH-FHB-MAS60-7-03	130.3	57.9
Dyna-Gro 9172	130.1	56.7
SH 5123	129.8	58.3 (+)
MAS #2	129.8	58.1
VA20FHB-18	129.8	57.3
18VTK5-95	129.8	58.4 (+)
Mean	119.5	57.3
LSD	31.6	1.0
CV	18.8	1.2
17VDH-SRW02-125	129.6	58.1

Line	Grain Yield bu/ac	Test Weight lb/bu
16VDH-SRW09-025	129.5	57.4
MAS #143	129.5	56.6
AgriMAXX 516	129.4	57.3
MBX 127	129.0	56.6
VA20W-135	128.4	58.0
HILLIARD	128.1	57.0
GP 543	126.4	57.0
VA19W-89	126.3	58.0
EPIX 1365	126.3	55.3 (-)
GP 282	125.9	58.2
KWS482	125.7	57.5
USG 3673	125.3	58.3 (+)
MAS #316	124.2	55.9 (-)
18VTK10-23	124.0	58.1
MAS #86	124.0	55.7 (-)
SH 4222	123.5	57.5
GA131218-20E15	123.4	57.1
Dyna-Gro 9120	123.1	58.5 (+)
VA20W-142	123.0	58.1
MAS #155	122.9	56.7
18VTK10-110	122.7	59.0 (+)
AgriMAXX 505	122.2	57.3
USG 3472	122.2	56.8
USG 3352	122.1	56.1 (-)
HR 5210	121.7	57.4
17VDH-SRW05-169	121.6	56.8
15VDH-FHB-MAS25-15	121.6	57.3
CP8224	121.1	59.2 (+)
Dyna-Gro 9481	121.0	56.7
MBX 176	120.5	55.7 (-)
VA19MAS7-519-1WS-R110	120.4	58.1
EPIX 4372	120.2	56.8
VA21W-59	120.0	57.1
Pioneer 26R45	119.9	56.9
VA18HRW-96	119.8	58.2
AGS 4043	119.4	58.1
Revere 2169	119.0	56.8
Mean	119.5	57.3
LSD	31.6	1.0
CV	18.8	1.2
Revere 2148	119.0	56.5
MBX 230	118.8	57.5

Line	Grain Yield bu/ac	Test Weight lb/bu
VA18HRW-57	118.7	56.7
Phoenix 29	118.4	58.2
MAS #133	118.4	56.1 (-)
EPIX 2392	118.1	56.6
Dyna-Gro 9422	117.9	56.3
17VTK4-29	117.4	58.2
MAS #67	117.4	55.1 (-)
Featherstone 3000	117.2	58.5 (+)
USG 3234	116.9	58.4 (+)
VA20FHB-22	116.9	58.5 (+)
CP8045	116.8	56.6
15VDH-FHB-MAS38-01	116.7	56.8
18VTK10-77	115.5	58.8 (+)
18VDH-FHB-MAS07-173-03	115.4	57.2
GA161240-20LE6	115.4	59.1 (+)
Dyna-Gro 9290	115.3	55.9 (-)
FS 597	115.3	56.0 (-)
17VDH-SRW01-077	115.0	57.3
Revere 2277	114.8	57.9
VA21W-112	114.5	56.0 (-)
17VDH-SRW03-204	114.5	57.9
USG 3463	114.2	55.5 (-)
KWS495	114.1	57.0
EXP 3904	113.8	57.2
FS 745	113.7	56.7
VA19FHB-36	113.3	56.7
EPIX 1375	113.3	58.3 (+)
18VTK12-111	113.1	58.0
18VTK6-3	112.3	57.2
SH 7200	112.1	56.8
VA19W-87	112.0	57.5
USG 3633	111.5	57.3
AGS 3026	111.0	58.5 (+)
18VTK10-188	110.9	57.8
VA18HRW-58	110.5	58.7 (+)
Mean	119.5	57.3
LSD	31.6	1.0
CV	18.8	1.2
FS 891	110.4	57.4
18VDH-FHB-MAS07-164-01	110.0	57.8
MBX 120	109.3	57.1

Line	Grain Yield bu/ac	Test Weight lb/bu
DH17SRW136-066	109.1	56.8
FS 743	109.0	57.3
VA21FHB-8	108.5	57.5
FS 855	108.5	57.6
GP 747	107.5	55.6 (-)
18VTK12-60	107.2	57.0
VA20FHB-20	107.2	58.1
KWS459	107.0	58.2
Dyna-Gro 9002	106.6	56.4
16VDH-SRW03-018	105.7	59.1 (+)
VA19W-29	105.5	57.4
GA12230-20E36	105.2	56.5
Viking 822	105.2	56.6
AGS 3040	103.7	57.6
MAS #189	102.9	57.6
DH17SRW136-038	102.9	56.7
Featherstone 125	102.8	59.1 (+)
AgriMAXX 503	101.6	56.8
CPX92394	101.4	57.3
16VDH-SRW03-023	100.1	56.7
GA151313-20E48	99.5	58.2
LIBERTY 5658	99.2	57.7
MASSEY	98.5	57.4
EXP 3574	96.3	55.5 (-)
AgriMAXX 502	95.3	56.3
MAS #106	94.4	56.9
VA21W-18	94.3	56.6
SH 7222	84.0 (-)	58.2
VA19W-02	78.7 (-)	57.0
Mean	119.5	57.3
LSD	31.6	1.0
CV	18.8	1.2

Table 16. Performance of entries in the Virginia Tech Wheat Test, Eastern Shore AREC, Painter, VA, 2023 harvest.

Line	Grain Yield bu/ac	Test Weight lb/bu	Leaf Rust 0-9
17VDH-SRW01-077	131.8 (+)	60.5 (+)	0 (-)
15VTK-1-101	125.8 (+)	59.2 (+)	0 (-)
15VDH-FHB-MAS25-15	124 (+)	60.6 (+)	0 (-)
VA20W-135	120.9 (+)	58.8	0 (-)
18VTK12-60	119.2 (+)	58.7	0 (-)
VA20FHB-18	115.9 (+)	59.1	0 (-)
18VTK6-3	115.8 (+)	60.6 (+)	0 (-)
18VTK12-111	115.7 (+)	60.5 (+)	0 (-)
17VDH-SRW02-125	114 (+)	60.8 (+)	0 (-)
VA19W-87	113.5 (+)	58.8	0 (-)
16VDH-SRW03-018	113.2 (+)	61.7 (+)	0 (-)
17VDH-SRW05-169	113.2 (+)	57.2	0 (-)
USG 3451	112.8 (+)	60.7 (+)	2
16VDH-SRW09-025	112.2 (+)	59.4 (+)	0 (-)
HILLIARD	112 (+)	58.7	0 (-)
USG 3661	111.8 (+)	59.2 (+)	0 (-)
VA19FHB-36	111.8 (+)	59.4 (+)	0 (-)
18VTK10-110	111.4 (+)	61.5 (+)	0 (-)
Phoenix 29	111.2 (+)	60.1 (+)	2
VA20FHB-22	111 (+)	59.2 (+)	0 (-)
18VTK10-188	110.7 (+)	59.1 (+)	0 (-)
KWS495	110.4 (+)	59.1 (+)	1 (-)
17VDH-SRW03-204	110	60.7 (+)	0 (-)
18VTK10-77	109.6	60 (+)	0 (-)
18VTK10-23	109.3	60.7 (+)	0 (-)
18VDH-FHB-MAS07-173-03	109.2	59.8 (+)	0 (-)
VA18HRW-58	108	60.6 (+)	1 (-)
VA21W-112	107.4	57.9	0 (-)
VA20FHB-20	105.8	60 (+)	2
VA20W-142	105.3	59.3 (+)	0 (-)
VA19W-29	105.1	58.4	6 (+)
Mean	93.4	57.8	3
LSD	16.6	1.4	2
CV	12.7	1.7	26
Dyna-Gro WX23444	105.1	57.1	3

Line	Grain Yield bu/ac	Test Weight lb/bu	Leaf Rust 0-9
15VDH-FHB-MAS38-01	104.9	58.4	0 (-)
VA21W-59	104.7	58	0 (-)
GA151313-20E48	104.1	59.2 (+)	0 (-)
AgriMAXX 535	103.9	58.7	2
GA131218-20E15	103.6	59	1 (-)
Dyna-Gro Shirley	103.2	58.4	0 (-)
EPIX 1375	103.1	59.9 (+)	0 (-)
17VTK4-29	102.9	59.4 (+)	0 (-)
VA19W-02	102.8	58.7	0 (-)
GP 282	102.4	58.5	3
Dyna-Gro 9120	101.5	59.6 (+)	3
EPIX 1365	100.7	56.3 (-)	2
18VDH-FHB-MAS07-164-01	100.6	60.6 (+)	0 (-)
SH 5123	100.2	59.4 (+)	0 (-)
USG 3463	100.1	55.8 (-)	6 (+)
VA19MAS7-519-1WS-R110	99.4	60.4 (+)	1 (-)
SH 9520	99.2	57.7	5 (+)
LIBERTY 5658	99.1	58.1	2
USG 3783	99	56.2 (-)	5
VA21W-18	98.9	59.9 (+)	0 (-)
EXP 3354	98.9	57.1	3
Dyna-Gro 9393	98.8	56.6	4
USG 3673	97.9	59.2 (+)	0 (-)
Pioneer 26R59	97.7	57.7	3
AgriMAXX 514	97.5	56.2 (-)	2
USG EXP 3000	97.3	60 (+)	0 (-)
MBX 120	97.1	58	5 (+)
SH 7222	97	60.1 (+)	0 (-)
VA18HRW-96	96.9	58.5	2
GP 543	96.8	55.5 (-)	3
GA12230-20E36	96.6	59.2 (+)	0 (-)
KWS477	96.5	58.9	1 (-)
Mean	93.4	57.8	3
LSD	16.6	1.4	2
CV	12.7	1.7	26
Viking 822	96.4	57.3	2
Pioneer 26R45	96.1	57.7	4

Line	Grain Yield bu/ac	Test Weight lb/bu	Leaf Rust 0-9
GA161240-20LE6	96	60.3 (+)	0 (-)
MAS #86	96	56.4 (-)	4
16VDH-SRW03-023	95.9	59.1	0 (-)
AGS 4043	95.8	59.7 (+)	0 (-)
VA19W-89	95.2	59.4 (+)	0 (-)
VA18HRW-57	94.7	58.4	1 (-)
KWS459	94.1	57.4	1 (-)
MAS #178	93.7	57.2	3
AGS 3026	93.3	59.5 (+)	0 (-)
VA21FHB-8	92.6	60.2 (+)	1 (-)
MAS #189	92.4	59.9 (+)	7 (+)
18VTK5-95	91.5	60.5 (+)	0 (-)
FS 855	91.5	59.5 (+)	2
Featherstone 125	91.3	60.7 (+)	0 (-)
USG 3352	91.2	56.8	6 (+)
CPX92394	91.1	58.9	1 (-)
FS 597	90.5	56.5	3
USG 3633	90.5	59.4 (+)	2
EXP 3904	90.2	59.7 (+)	2
HR 5210	89.5	57	1 (-)
SH 7200	89.4	59.8 (+)	0 (-)
MAS #67	88.8	56.7	4
Dyna-Gro 9290	88.6	57.7	2
MBX 245	88.2	56.9	5 (+)
Dyna-Gro 9481	88.2	56.8	2
EPIX 2356	88.1	57.4	6 (+)
Pioneer 26R33	87.9	56.8	7 (+)
DH17SRW136-066	87.1	55.1 (-)	7 (+)
Dyna-Gro 9002	87.1	56.3 (-)	5 (+)
16VDH-FHB-MAS60-7-03	86.2	58	6 (+)
MAS #133	85.9	53.5 (-)	6 (+)
AGS 3040	85.7	58.3	2
Mean	93.4	57.8	3
LSD	16.6	1.4	2
CV	12.7	1.7	26
Revere 2277	84.9	57	9 (+)
USG 3234	84.8	60.4 (+)	5

Line	Grain Yield bu/ac	Test Weight lb/bu	Leaf Rust 0-9
GP 747	84.8	53.4 (-)	4
AgriMAXX 502	84.5	56.1 (-)	8 (+)
CP8224	83.5	59.8 (+)	5
AgriMAXX 503	83.4	58.7	5
Featherstone 3000	83.4	58.9	0 (-)
MAS #106	83.2	58.7	4
MAS #190	83	56 (-)	5 (+)
Revere 2148	81.6	58.8	6 (+)
CROPLAN CP9606	81.1	56.8	4
EPIX 4372	79.3	55.1 (-)	7 (+)
MBX 127	79.2	54.5 (-)	8 (+)
KWS482	78.8	56.1 (-)	9 (+)
Dyna-Gro 9422	78.6	54.4 (-)	9 (+)
FS 891	78.5	57	5
AgriMAXX 505	78.3	58.1	6 (+)
DH17SRW136-038	78.3	54.9 (-)	7 (+)
Pioneer 26R36	78.1	57.8	4
AgriMAXX 513	77.4	57.3	5 (+)
MAS #2	77.3	60 (+)	4
MAS #155	77.3	54.2 (-)	9 (+)
MBX 230	77.2	54.5 (-)	8 (+)
FS 743	76 (-)	54.1 (-)	8 (+)
FS 745	74.9 (-)	54.7 (-)	8 (+)
CP8045	74.9 (-)	54.6 (-)	7 (+)
AgriMAXX 516	74.8 (-)	54.4 (-)	8 (+)
Revere 2347	74.1 (-)	54.5 (-)	8 (+)
Dyna-Gro 9151	73.6 (-)	56.7	8 (+)
Dyna-Gro 9231	73.4 (-)	55.4 (-)	7 (+)
EPIX 2392	72.8 (-)	54.1 (-)	8 (+)
SH 4222	72.6 (-)	54.2 (-)	9 (+)
Dyna-Gro 9172	72.4 (-)	56.1 (-)	8 (+)
USG 3363	72.4 (-)	53.7 (-)	8 (+)
Mean	93.4	57.8	3
LSD	16.6	1.4	2
CV	12.7	1.7	26
EXP 3574	72.3 (-)	54.5 (-)	6 (+)
MAS #316	71.5 (-)	56.9	6 (+)
MBX 176	71.4 (-)	53.3 (-)	8 (+)

Line	Grain Yield bu/ac	Test Weight lb/bu	Leaf Rust 0-9
USG 3472	70.2 (-)	53.9 (-)	9 (+)
AgriMAXX 525	70 (-)	54.4 (-)	8 (+)
MAS #139	68.6 (-)	53.4 (-)	9 (+)
MAS #164	66.8 (-)	51.8 (-)	7 (+)
MAS #143	63.7 (-)	53.1 (-)	8 (+)
Revere 2169	62.9 (-)	53 (-)	9 (+)
MASSEY	59 (-)	54.9 (-)	9 (+)
Mean	93.4	57.8	3
LSD	16.6	1.4	2
CV	12.7	1.7	26

Table 17. Performance of entries in the Virginia Tech Wheat Test, Eastern VA AREC in Warsaw, VA, 2023 harvest.

Line	Grain Yield bu/a	Test Weight lb/bu	Heading Date Julian	Height in	Lodging 0-9	Powdery Mildew 0-9	Barely Yellow Dwarf Virus 0-9
EXP 3574	137.1 (+)	59.3 (-)	112 (+)	32.8	0	0 (-)	0
EPIX 1365	133.4 (+)	59.5 (-)	110	33.5	0	3	5
USG 3234	131.6	62.7 (+)	111 (+)	37 (+)	0	4	1
DH17SRW136-066	130.1	59.9	111	32.8	0	0 (-)	0
USG 3673	129.3	61.5 (+)	111	33.5	0	4	2
KWS495	129	61.3	107 (-)	32.3	0	5 (+)	3
Dyna-Gro Shirley	128.7	59.4 (-)	110	31.8	0	0 (-)	0
VA20W-142	128.7	61.1	110	36.3 (+)	1	3	1
EXP 3354	128.7	59.2 (-)	107 (-)	34.5	0	2	1
Phoenix 29	128.4	61.4	111	33.3	0	2	1
SH 5123	128	61.4	110	33.5	0	4	2
GP 543	127.6	59.5 (-)	108 (-)	35	0	0 (-)	1
Dyna-Gro 9422	127.6	61	110	32.8	0	2	1
Dyna-Gro 9120	127.5	61.7 (+)	110	34	1	4	0
GA151313-20E48	127.4	61.4	113 (+)	30.8 (-)	0	1	1
FS 743	127.2	60.8	110	35	0	3	0
Revere 2277	127	60.5	113 (+)	32.5	0	1	0
AgriMAXX 525	126.9	60.3	112 (+)	31.8	0	3	3
18VTK5-95	126.5	61.7 (+)	110	33.5	0	1	1
MBX 176	126	59.2 (-)	110	33.8	0	3	4
EPIX 2392	126	61.2	110	35	0	4	2
Mean	118.6	60.6	110	33.3	0	3	1
LSD	14.1	0.8	1	1.9	1	2	NA
CV	8.5	0.8	1	4.1	339	42	NA
15VDH-FHB-MAS38-01	125.9	59.7 (-)	105 (-)	29.5 (-)	2 (+)	0 (-)	2
CP8224	125.9	62.2 (+)	112 (+)	32.8	0	7 (+)	1
AgriMAXX 503	125.9	60.7	111	33.3	0	7 (+)	2
DH17SRW136-038	125.7	59.4 (-)	110	31.8	1	1	1
Dyna-Gro 9231	125.6	61	110	34.8	0	3	2
18VTK10-77	125.3	61.5 (+)	107 (-)	33.5	1	3	0

Line	Grain Yield bu/a	Test Weight lb/bu	Heading Date Julian	Height in	Lodging 0-9	Powdery Mildew 0-9	Barely Yellow Dwarf Virus 0-9
MBX 230	125	60.9	110	35	0	3	4
VA19FHB-36	125	61.7 (+)	109	36.5 (+)	0	2	1
EPIX 1375	124.9	61.4 (+)	108 (-)	33	1	0 (-)	2
KWS482	124.6	60.8	111	32.8	0	1	1
15VTK-1-101	124.6	61.4	111	28.5 (-)	1	1	0
18VTK10-110	124.2	62.4 (+)	111	33.3	0	1	1
18VTK12-60	123.9	59.2 (-)	107 (-)	32	2 (+)	3	3
Viking 822	123.8	59.7 (-)	110	35.3 (+)	0	4	2
Pioneer 26R33	123.7	60.4	111	32.8	0	2	3
AgriMAXX 502	123.6	59.8 (-)	109	35.5 (+)	0	3	1
MAS #143	123.5	60.4	112 (+)	33.8	0	4	1
VA18HRW-96	123.5	61.6 (+)	112 (+)	35	0	2	3
AgriMAXX 535	123.4	61.1	110	33.3	1	2	1
USG 3783	123.3	60.5	111	31.5	0	3	0
HILLIARD	123.2	60.6	109	35.3 (+)	0	2	1
SH 7222	122.9	62.7 (+)	111	33.5	0	1	1
VA20FHB-18	122.7	61.5 (+)	109	34.3	0	1	2
Mean	118.6	60.6	110	33.3	0	3	1
LSD	14.1	0.8	1	1.9	1	2	NA
CV	8.5	0.8	1	4.1	339	42	NA
HR 5210	122.7	60.8	112 (+)	30.5 (-)	0	0	3
16VDH-SRW09-025	122.3	60.9	108 (-)	34.8	0	2	1
Dyna-Gro 9393	122.3	60.3	111	31.5	0	3	1
Dyna-Gro WX23444	122.1	58.6 (-)	107 (-)	34.5	0	0 (-)	2
SH 4222	122.1	60.9	110	34	0	3	1
MBX 120	122	60.1	113 (+)	33.3	0	2	1
USG 3352	122	60.2	112 (+)	34	0	4	1
17VDH-SRW05-169	121.7	60.3	108 (-)	27.5 (-)	0	0 (-)	0
EPIX 4372	121.7	60	111 (+)	32.8	0	5	3
18VTK10-188	121.5	61	108 (-)	32.5	0	1	1
18VTK6-3	121.4	61.5 (+)	110	33.5	0	2	0
17VDH-SRW03-204	121.1	62 (+)	109	33.8	0	0 (-)	3

Line	Grain Yield bu/a	Test Weight lb/bu	Heading Date Julian	Height in	Lodging 0-9	Powdery Mildew 0-9	Barely Yellow Dwarf Virus 0-9
AgriMAXX 513	121	60.7	109	33.8	2 (+)	3	2
SH 9520	120.9	60.4	112 (+)	32.5	0	1	1
USG 3363	120.7	61	110	34.5	0	3	1
VA19W-02	120.6	61.9 (+)	110	34	0	4	0
VA21W-112	120.5	58.6 (-)	109	32.5	1	1	0
VA19W-87	120.4	61.8 (+)	110	36 (+)	0	1	0
Revere 2148	120.4	60.2	111	33.3	0	5 (+)	1
MAS #86	120.1	59.2 (-)	111	34.8	0	4	1
VA20FHB-22	119.9	60.4	110	36 (+)	0	0	2
MAS #133	119.7	58.8 (-)	111	34	0	4	2
MBX 127	119.6	60.2	111	33.3	0	4	1
CPX92394	119.5	61.3	108 (-)	34.8	0	3	0
Mean	118.6	60.6	110	33.3	0	3	1
LSD	14.1	0.8	1	1.9	1	2	NA
CV	8.5	0.8	1	4.1	339	42	NA
GP 282	119.4	60.8	110	31 (-)	0	6 (+)	2
18VTK10-23	119.3	62 (+)	107 (-)	33.5	0	2	0
USG 3451	119.1	61	108 (-)	33	0	3	0
VA21W-18	119	61.1	105 (-)	31.8	0	2	0
VA21W-59	119	60.1	111 (+)	32.5	0	2	0
16VDH-SRW03-023	118.9	61	109	34.5	1	2	1
USG 3633	118.9	60.6	109	35	1	4	1
USG 3661	118.8	60.7	110	30.3 (-)	0	2	1
16VDH-FHB-MAS60-7-03	118.7	61.2	109	31.3 (-)	0	0 (-)	2
Pioneer 26R45	118.6	59.2 (-)	110	33	0	3	3
MAS #155	118.3	60.4	111 (+)	34.8	0	2	0
VA18HRW-58	118.3	61.7 (+)	113 (+)	36 (+)	0	2	3
VA20W-135	118.1	60.6	110	34.5	0	2	1
MAS #67	118	59.8 (-)	108 (-)	31.8	0	6 (+)	1
VA18HRW-57	117.9	60.4	113 (+)	36.5 (+)	0	4	3
Revere 2347	117.4	61.2	111	33.5	0	3	2
LIBERTY 5658	117.4	61.1	108 (-)	34.8	1	4	0
VA20FHB-20	117.3	62.1 (+)	109	34.3	0	2	2

Line	Grain Yield bu/a	Test Weight lb/bu	Heading Date Julian	Height in	Lodging 0-9	Powdery Mildew 0-9	Barely Yellow Dwarf Virus 0-9
EXP 3904	117.1	61.2	115 (+)	35.3 (+)	0	3	0
17VTK4-29	117.1	59.9 (-)	109	32	0	0 (-)	2
Dyna-Gro 9172	117.1	59.5 (-)	110	33.5	0	4	2
MAS #316	117	60.8	111 (+)	34.8	0	4	1
18VTK12-111	117	61.5 (+)	112 (+)	31 (-)	0	0 (-)	0
Mean	118.6	60.6	110	33.3	0	3	1
LSD	14.1	0.8	1	1.9	1	2	NA
CV	8.5	0.8	1	4.1	339	42	NA
MAS #178	117	59.3 (-)	111 (+)	34.5	1	4	0
MAS #190	116.9	59.5 (-)	113 (+)	31.5	0	3	2
USG 3472	116.9	60	111	32.5	0	5 (+)	1
17VDH-SRW01-077	116.7	61.2	107 (-)	34.8	0	1	0
AGS 4043	116.2	61.7 (+)	109	31 (-)	0	0 (-)	1
17VDH-SRW02-125	116.1	61.3	112 (+)	34	0	0 (-)	1
VA19W-29	116	61	108 (-)	34.8	0	2	1
Dyna-Gro 9290	115.9	60.5	109	35	0	4	4
GA161240-20LE6	115.7	60.9	110	35	2 (+)	0 (-)	3
MAS #139	115.5	59.9	111	31.3 (-)	0	2	0
16VDH-SRW03-018	115.4	62.6 (+)	110	34.3	0	2	1
VA19MAS7-519-1WS-R110	115.1	62.3 (+)	113 (+)	33	0	4	3
GA12230-20E36	114.8	60.9	108 (-)	31.5	0	2	1
USG 3463	114.8	59.6 (-)	109	30.8 (-)	0	2	0
GP 747	114.7	58.5 (-)	112 (+)	33.5	0	5	2
18VDH-FHB-MAS07-164-01	114.7	61.4	107 (-)	32.5	1	2	1
18VDH-FHB-MAS07-173-03	114.5	60.3	109	34	1	0 (-)	0
FS 891	114.2	60.9	110	33.5	0	5	5
Pioneer 26R59	114.1	60	111	29.5 (-)	0	1	3
15VDH-FHB-MAS25-15	114	61.9 (+)	109	31.3 (-)	0	1	0
Dyna-Gro 9481	113.7	59 (-)	109	31.5	0	4	0
FS 855	113	61.3	108 (-)	34	0	4	0
KWS477	112.5	60.9	110	35.3 (+)	0	6 (+)	5

Line	Grain Yield bu/a	Test Weight lb/bu	Heading Date Julian	Height in	Lodging 0-9	Powdery Mildew 0-9	Barely Yellow Dwarf Virus 0-9
Dyna-Gro 9002	112.3	59.2 (-)	109	35.8 (+)	0	7 (+)	0
Mean	118.6	60.6	110	33.3	0	3	1
LSD	14.1	0.8	1	1.9	1	2	NA
CV	8.5	0.8	1	4.1	339	42	NA
Featherstone 125	112.2	61.7 (+)	110	34.5	0	7 (+)	1
VA21FHB-8	111.9	61.3	109	33.8	0	2	0
Pioneer 26R36	111.4	61.1	110	34.3	0	8 (+)	1
Featherstone 3000	111.3	61.6 (+)	111	34	0	4	4
VA19W-89	111	60.4	110	34	0	2	1
AgriMAXX 505	111	61.9 (+)	111	33.3	0	3	3
CP8045	110.1	59.6 (-)	111	32	0	4	3
CROPLAN CP9606	110	59.7 (-)	109	33.5	0	4	1
FS 745	109.9	59.5 (-)	111 (+)	33.3	0	5	2
KWS459	109.8	60.7	110	30.3 (-)	0	5 (+)	1
Revere 2169	109.5	59.9	111 (+)	32.8	0	3	1
AgriMAXX 516	109.4	59.6 (-)	111	32	0	4	1
AgriMAXX 514	109.3	59.4 (-)	111 (+)	33.8	0	5	2
EPIX 2356	109.1	59.5 (-)	112 (+)	32.8	0	3	3
MAS #164	108.9	58.8 (-)	111	31.5	0	4	2
USG EXP 3000	108.7	61	111	33.3	0	4	3
MBX 245	107.2	59.1 (-)	110	30.5 (-)	0	2	3
Dyna-Gro 9151	106.9	62 (+)	111	34	0	3	2
AGS 3026	106.7	61	113 (+)	31.5	0	8 (+)	1
MAS #189	105.7	62 (+)	104 (-)	34	1	1	1
FS 597	105.2	60	109	32.8	0	4	5
MAS #2	104.9	61.3	112 (+)	38.3 (+)	2 (+)	6 (+)	1
GA131218-20E15	104.9	60.2	108 (-)	31.3 (-)	2 (+)	4	0
SH 7200	102.3 (-)	60.3	107 (-)	33.3	2 (+)	4	2
Mean	118.6	60.6	110	33.3	0	3	1
LSD	14.1	0.8	1	1.9	1	2	NA
CV	8.5	0.8	1	4.1	339	42	NA
AGS 3040	97.2 (-)	61.1	108 (-)	33	0	9 (+)	6
MASSEY	95.8 (-)	61.4	109	37.8 (+)	2 (+)	1	1

Line	Grain Yield bu/a	Test Weight lb/bu	Heading Date Julian	Height in	Lodging 0-9	Powdery Mildew 0-9	Barely Yellow Dwarf Virus 0-9
MAS #106	92.7 (-)	59.9	107 (-)	33	2 (+)	6 (+)	1
Mean	118.6	60.6	110	33.3	0	3	1
LSD	14.1	0.8	1	1.9	1	2	NA
CV	8.5	0.8	1	4.1	339	42	NA

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