Virginia Cooperative Extension

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VIRGINIA STATE UNIVERSITY

Small Grains In 2008

2008 Virginia Polytechnic Institute and State University 2808-1007

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Recommended Small Grain Varieties

The following are the small grain variety recommendations for Virginia in 2008. The recommendations are based on the agronomic performance in barley and wheat variety tests conducted by the Research and Extension Divisions of Virginia Tech in the various agricultural regions of the state.

Recommended Wheat Varieties Arranged in Order of Maturity

All varieties have been extensively tested and proven to be adapted statewide.

Agronomic Characteristics				
Cultivar	**Grain Yield**	**Test Weight**	**Milling Quality**	**SRW Baking Quality**
Early Heading Varieties (116-117 d, Julian)				
SS 520*	3	2	4	2
Featherstone 176	3	2	3	3
Jamestown	3	4	3	1
Coker 9553	3	4	2	1
Mid-Season Heading Varieties (118-119 d, Julian)				
USG 3665	4	2	4	3
USG 3555	4	2	3	2
Pioneer 26R24	4	3	3	3
Branson†	4	2	2	3
Chesapeake	3	4	1	2
Tribute	3	4	3	2
Sisson	3	3	3	3
USG 3209*	4	2	1	1
Dominion	3	3	4	2
Full-Season Heading Varieties (120-121 d, Julian)				
Pioneer 26R15	3	1	4	3
SS 560	4	2	3	1
SS-MPV 57	4	2	4	3
Pioneer 26R12	2	4	3	3
SS 8302	3	4	3	3
SS 8309	3	3	3	3

* These lines are not daylength sensitive and should not be planted early in order to avoid potential freeze damage.

4 - Significantly greater or better than average

3 - Greater or better than average

2 - Below or worse than average

1 - Significantly below or worse than average

† Based on performance over only two seasons and may be less reliable than other recommendations.

Disease Resistance

Cultivar	FHB†† resistance	Powdery Mildew	Leaf Rust	Stripe Rust	Glume Blotch	Barley Yellow Dwarf Virus
Early Heading Varieties (116-117 d, Julian)						
SS 520	1	3	3	1	4	3
Featherstone 176	1	4	2	3	3	4
Jamestown	3	3	3	3	2	3
Coker 9553	3	3	3	4	4	3
Mid-Season Heading Varieties (118-119 d, Julian)						
USG 3665	3	3	4	3	3	3
USG 3555	4	3	2	4	2	3
Pioneer 26R24	1	3	3	1	4	4
Branson†	4	3	4	4	4	4
Chesapeake	3	4	2	1	3	3
Tribute	4	4	4	1	4	3
Sisson	1	3	1	1	4	3
USG 3209	3	3	1	3	2	4
Dominion	3	4	3	4	2	3
Full-Season Heading Varieties (120-121 d, Julian)						
Pioneer 26R15	4	3	4	4	2	4
SS 560	3	2	2	1	3	3
SS-MPV 57	3	2	2	1	4	4
Pioneer 26R12	2	3	2	2	3	3
SS 8302	4	3	2	4	2	2
SS 8309	4	3	2	2	3	3

4 - Significantly better than average

3 - Better than average

2 - Worse than average

1 - Significantly worse than average

†† FHB -Fusarium head blight

† Based on performance over only two season and may be less reliable than other recommendations

Recommended Barley Varieties

	Hulled Barley				Hulless Barley	
	Nomini*	Callao	Price	Thoroughbred	Doyce	Eve
Adapted Regions						
Coastal Plain		X	X	X	X	X
Piedmont, South of James River		X	X	X	X	X
Piedmont, North of James River		X	X	X	X	X
West of Blue Ridge	X	X	X	X	X	X
Agronomic Characteristics						
Yield	3	3	3	4	3	3
Test Weight	1	4	3	4	2	4
Lodging	2	1	3	1	2	3
Relative Height	4	1	2	3	3	2
Relative Heading	Avg	Early	Avg	Late	Avg	Early
Grain Protein, %	8.6	8.6	8.4	7.8	8.6	9.3
Starch, %	54.7	56.3	55.2	58.9	63.7	62.1

4 - Significantly greater or better than average
3 - Greater or better than average
2 - Below or worse than average
1 - Significantly below or worse than average

*Nomini barley has low test weight. It is not recommended in eastern Virginia because low test weight grain is unsuitable for export or domestic non-ruminant feed markets.

Barley and Wheat Entries

Commercial Barley Entries

Virginia Tech and Virginia Crop Improvement Association, 9142 Atlee Station Road, Mechanicsville, VA 23116 – Barsoy, Callao, Doyce, Eve, H-585, Nomini, Price, Thoroughbred, and Wysor.

Commercial and Experimental Wheat Entries

AgriPro COKER, PO Box 411, 520 East 1050 South, Brookston, IN 47923 –Branson, COKER 9804, COKER 9436, COKER 9553, AgriPro W3177, Magnolia, and Panola.

AgSouth Genetics, PO Box 72246, Albany, GA 31721-2246 – AGS 2050.

Crop Production Services, Box 1467, Galesburg, IL 61402-1467 –Dominion, Tribute, V9510, V9713, Oglethorpe.

Featherstone Seed Company, 13941 Genito Road, Amelia, VA 23002 - Featherstone 176.

University of Maryland, CMREC/Beltsville Facility, 12000 Beaver Dam Road, Laurel, MD 20708 – Chesapeake.

Michigan State University, 286 PSSB, East Lansing, MI 48824-1325 – Red Ruby.

Pioneer Hi-Bred International, Inc., 7501 Memorial Pkwy SW, Suite 205, Huntsville, AL 35802 - 26R12, 26R15, 26R24, 26R31, and 26R87.

Progeny Ag Products, 1529 Hwy 193, Wynne, AR 72396 – Progeny 145, Progeny 166, Progeny 185, Progeny 117, Progeny 122, and Progeny 127.

Southern States Cooperative, PO Box 26234, Richmond, VA 23260 - SS 520, SS 560, SS 8302, SS 8309, SS 8404, SS MPV 57, SS 548, and SS 8641.

Uni-South Genetics, 2640-C Nolensville Road, Nashville, TN 37211 - USG 3209, USG 3342, USG 3592, USG 3665, and USG 3725, USG 3555, and Renwood 3633.

Virginia Tech and Virginia Crop Improvement Association, 9142 Atlee Station Road, Mechanicsville, VA 23111 – Jamestown, Massey, McCormick, Sisson, and all lines prefixed by VA.

Appreciation is expressed to the Virginia Small Grains Check-Off Board, AgriPro COKER, Ag-South Genetics, Crop Production Services, Featherstone Seed, Inc., Pioneer Hi-Bred International, Inc., Progeny Ag Products, Southern States Cooperative, UniSouth Genetics, Inc., and the Virginia Crop Improvement Association for their financial support of the Small Grains Variety Testing Program at Virginia Tech.

Conducted and summarized by the following Virginia Tech employees: Dr. Wade Thomason, Extension Agronomist, Grains; Dr. Carl Griffey, Small Grains Breeder; Mr. Harry Behl, Agricultural Supervisor; Ms. Elizabeth Hokanson, Research Associate. Location Supervisors: Mr. Tom Custis (Painter); Mr. Bobby Ashburn (Holland); Mr. Bob Pitman, Mr. Mark Vaughn, (Warsaw); Mr. Ned Jones (Blackstone); Dr. Carl Griffey, Mr. Wynse Brooks, Mr. Bryan Will (Blacksburg); Mr. Brian Jones (Shenandoah Valley); Mr. David Starner, Mr. Steve Gulick, Mr. Alvin Hood (Orange).

Introduction

The following tables present results from barley and wheat varietal tests conducted in Virginia in 2006-2008. Small-grain cultivar performance tests are conducted each year in Virginia by the Virginia Tech Department of Crop and Soil Environmental Sciences and the Virginia Agricultural Experiment Station. The tests 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 given for individual locations and across locations and years; yield and other performance characteristics are averaged over the number of locations indicated. 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 experimental location.

The Season

Fall of 2007 presented challenging planting conditions for many growers due to dry soil conditions with over half the state reported to be very short of soil moisture. Growers needing to perform primary tillage waited for rain while some small grain was planted into these dry seedbeds. Rains in late October improved conditions dramatically and by the end of the first week of November, wheat planting reached 53 percent of intended acres, which is the same as the five year average. Early winter was relatively dry (Figure 1) and while there were still concerns over subsoil moisture, most of the small grain crop was rated good or better. Warm and favorable conditions in April resulted in wheat heading approximately 5 days earlier than the long term average. However, generally cool conditions in May resulted in longer grain fill and harvest that was on time (Figure 2). These cool conditions during grain fill helped produce plump kernel and generally good yields across the Commonwealth.

Figure 1. Long term mean and 2008 growing season statewide rainfall.

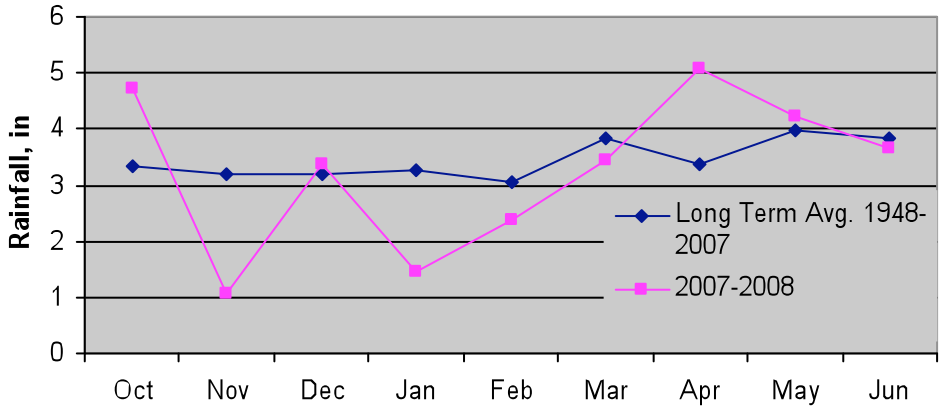
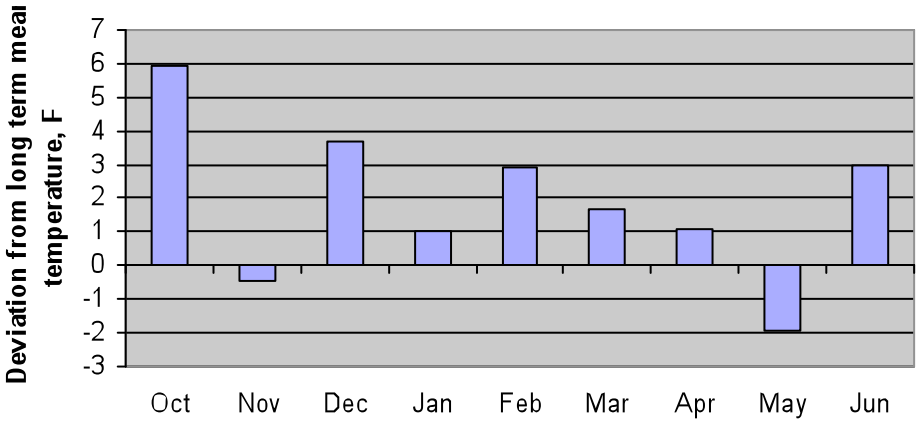


Figure 2. Deviation of 2008 monthly average temperatures from long term average (1948-2008)



Virginia producers planted an estimated 61,000 acres of Barley in 2007-08, 13,000 more acres than the previous year. An estimated 41,000 acres were harvested with an average yield of 73 bu/ac. This is two bu/ac more than the 2007 crop and 3 bu/ac less than the 2006 crop. Planted acres for wheat were estimated at 300,000 acres in 2007-08 which was up 70,000 acres from the previous year and 110,000 acres over 2006. Harvested area in 2006-07 was estimated at 260,000 acres, up 44 percent over the previous two seasons. Statewide average yield was estimated at 66 bushels per acre. Overall wheat production is expected to be near 16.5 million bushels.

Section 1: Barley Varieties

Hulless Barley

Hulless barley tests were planted in seven-inch rows at Blackstone, Orange, Holland, and Painter. They were planted in six-inch rows at Warsaw and Blacksburg. They were planted in seven and one-half-inch rows at the Warsaw No-Till location. The no-till tests at Holland and Warsaw were planted at 28 seeds per row foot. All other locations were planted at 32 seeds per row foot.

Yields of current hulless barley lines are generally 10-20 percent lower than those of hulled barley lines. This is expected since the hull makes up 12-15 percent of the weight of traditional barley and the breeding program for hulless barley is relatively new. To date, significant progress has been made in the development of winter hulless barley lines. The program has developed more than 3,000 winter hulless barley populations. Continued efforts will be focused on development of hulless barley varieties for specific end-use markets benefiting producers in the Mid-Atlantic Region.

The three year (2006-2008) average yield for Doyce hulless barley in Virginia was 72 bushels per acre with test weight of 54.7 pounds per bushel. Eve hulless barley averaged 74 bushels per acre, but test weight was significantly higher at 58.3 pounds per bushel.

Hulled Barley

Hulled barley tests were planted in seven-inch rows at Blackstone, Orange, Holland, and Painter. They were planted in six-inch rows at Warsaw and Blacksburg. They were planted in seven and one-half-inch rows at the Warsaw No-Till location. The no-till tests at Holland and Warsaw were planted at 28 seeds per row foot. All other locations were planted at 24 seeds per row foot.

Virginia grown barley typically yields in excess of 100 bushels per acre, and fits well in many crop rotation systems. However, profitable barley production on over 50,000 acres in Virginia will require revival of international market opportunities and/or development of barley varieties that livestock feeders desire.

Three year average yields of Thoroughbred hulled barley were 118 bushels per acre with average test weight of 47 pounds per bushel compared to the mean yield of 105 bu/ac and test weight of 46.2 pounds per bushel for the mean of all cultivars tested.

Summary of barley management practices for the 2008 harvest season (All rates are given on a per acre basis.)

Blacksburg - Planted October 1, 2007. Preplant fertilizer was 30-40-60 in September 2007. Site was fertilized with 50 gal N on March 3, 2008 and again on March 28, 2008 with 50 gal N plus 0.5 oz Harmony Extra. Harvest occurred on June 10-12, 2008.
Blackstone - Planted October 16, 2007. Heavy rain events totaling 5.75" one week after planting caused severe washing of the plots, forcing abandonment.
Painter - Planted November 2, 2007. Preplant fertilizer was 500 lb 5-10-10. Site was fertilized with 60 lb N using 30%UAN and 0.75 oz Harmony Extra SG® March 22, 2008. Site was also treated with 1 pt 2,4-D plus ½ pint 80/20 surfactant March 22, 2008. Site was fertilized with 30 lb N using 30% UAN April 19, 2008. Harvest occurred on June 11, 2008.
Warsaw - Planted October 22-23, 2007. Preplant fertilizer was 25-80-80-5 applied October 19, 2007. Site was sprayed with 0.9 oz Finesse® on December 12, 2007. Site was fertilized at 25 lb N using 12-0-0-1.5 on December 18, 2007 and again on February 11, 2008. Site was treated with 1.92 oz Karate® for aphids on April 17, 2008. Harvest occurred June 9, 2008.
Holland – Planted no-till November 8, 2007. Preplant fertilization was 300 lb 9-16-31-3 on October 23, 2007. Site was fertilized with 60 lb N using 30% UAN and 0.6 oz Harmony Extra® February 4, 2008. A 10% manganese product was used at 1.5 qt on February 26, 2008. Site was fertilized with 40 lb N using 30% UAN March 13, 2008. Harvest occurred on June 10, 2008.
Orange - Planted October 16, 2007. Preplant fertilization was 25-64-22-22S on September 26, 2007. Sixty lb N and Harmony Extra® at 0.4 oz were applied March 6, 2008. Harvest occurred on June 12-13, 2008.

Table 1. Summary of performance of hulless entries in the Virginia Tech Barley Test over locations, 2008 harvest.

Hulless Lines	Yield (Bu/a) (5)		Test Weight (Lb/bu) (5)		Date Headed (Mar31+) (2)		Height (In) (3)		Lodging (0-9) (5)		Leaf Rust (0-9) (2)		Powdery Mildew (0-9) (2)		Net Blotch (0-9) (4)		Early Height (Inches) (1)	
VA06H-25	91	+	58.2		23	+	39	+	5		2	-	5	+	3	-	12	
VA05H-147	86	+	58.2		21	+	39	+	4	-	3	-	1	-	4	-	12	
VA06H-182	84	+	57.2		22	+	35	-	6	+	4		0	-	5		9	-
VA05H-158	83	+	58.4		18	-	40	+	4	-	5	+	5	+	4	-	15	+
VA05H-120	83	+	58.2		18	-	40	+	5		4		5	+	5		15	+
VA06H-23	82	+	58.0		21	+	40	+	4	-	4		3		4	-	11	
VA06H-149	81	+	56.7	-	22	+	38		4	-	3	-	2	-	6	+	11	
VA06H-98	80	+	57.7		19	-	36	-	5		3	-	4	+	6	+	13	
VA06H-3	79		60.1	+	21	+	37	-	4	-	3	-	1	-	4	-	11	
VA06H-31	78		57.7		22	+	41	+	5		3	-	4	+	5		10	-
VA06H-14	76		57.3		24	+	39	+	6	+	3	-	4	+	5		10	-
VA06H-48	76		58.7	+	18	-	40	+	4	-	7	+	1	-	2	-	11	
VA05H-162	76		58.7	+	22	+	40	+	5		4		5	+	5		12	
VA06H-72	76		57.4		19	-	36	-	5		4		6	+	6	+	14	+
Eve	76		58.2		15	-	36	-	5		2	-	1	-	6	+	16	+
VA03H-61	75		59.7	+	23	+	37	-	4	-	3	-	2	-	5		7	-
VA06H-95	75		58.3		19	-	36	-	5		6	+	6	+	5		12	
VA04H-53	74		57.4		24	+	38		7	+	5	+	1	-	4	-	10	-
VA06H-8	74		56.8		18	-	36	-	5		3	-	2	-	4	-	12	
VA04H-111	74		57.4		19	-	37	-	5		3	-	1	-	5		12	
VA05H-114	73		56.4	-	18	-	37	-	7	+	3	-	3		5		12	
VA01H-125	73		56.6	-	17	-	32	-	4	-	5	+	0	-	7	+	11	
VA06H-81	72		56.0	-	18	-	35	-	6	+	5	+	4	+	5		13	
VA06H-47	72		58.2		18	-	40	+	4	-	6	+	1	-	2	-	10	-
VA04H-25	72		59.0	+	20		39	+	4	-	3	-	1	-	4	-	13	
VA06H-7	71		57.2		18	-	36	-	6	+	3	-	1	-	5		13	
H-585	71		55.9	-	16	-	38		5		5	+	3		6	+	15	+
VA05H-161	69	-	57.4		22	+	39	+	6	+	5	+	5	+	5		13	
VA03H-100	68	-	57.6		22	+	41	+	6	+	5	+	1	-	5		11	
Doyce	64	-	53.1	-	20		35	-	8	+	1	-	2	-	7	+	15	+
VA03H-58	60	-	57.1		23	+	33	-	8	+	3	-	1	-	5		9	-
VA05H-59	58	-	57.9		24	+	37	-	6	+	3	-	7	+	6	+	9	-
Average	75		57.6		20		38		5		4		3		5		12	
LSD (0.05)	5		0.9		1		1		1		1		1		1		2	
C.V.	10		2.4		4		4		---		---		---		---		14	

Released cultivars are shown in bold print.

The number in parentheses below column headings indicates the number of locations on which data are based.

Varieties are ordered by descending yield averages.

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.

Table 2. Two-year average summary of performance of hulless entries in the Virginia Tech Barley Tests, 2007 and 2008 harvests.

Hulless Lines	Yield (Bu/a)		Test Weight (Lb/bu)		Date Headed (Mar31+)		Height (In)		Lodging (0-9)		Leaf Rust (0-9)		Powdery Mildew (0-9)		Net Blotch (0-9)		Spot Blotch (0-9)		Spring Freeze (0-9)		Early Height (inches)	
	(11)		(11)		(5)		(6)		(10)		(6)		(2)		(7)		(4)		(1)		(1)	
VA05H-147	77	+	57.7		24	+	38	+	3		3	-	1	-	4	-	3		2		12	
VA03H-61	71	+	59.8	+	25	+	36		2	-	3	-	2		4	-	3		1	-	7	-
VA04H-53	71	+	57.1		26	+	36		5	+	5	+	1	-	3	-	2	-	1	-	10	-
VA05H-120	71	+	57.3		23		37	+	2	-	5	+	5	+	4	-	3		2		15	+
VA05H-158	70		57.4		23		37	+	2	-	5	+	5	+	4	-	3		3	+	15	+
VA03H-100	69		57.0		24	+	40	+	4	+	5	+	1	-	4	-	3		2		11	
VA05H-162	68		58.2	+	25	+	38	+	3		5	+	5	+	4	-	3		2		12	
VA04H-111	68		56.8		22	-	35	-	3		3	-	1	-	4	-	2	-	5	+	12	
VA01H-125	67		57.0		20	-	30	-	3		5	+	0	-	6	+	5	+	0	-	11	
VA04H-25	67		58.6	+	23		36		3		2	-	1	-	4	-	2	-	2		13	
Eve	66		58.0	+	20	-	35	-	3		3	-	1	-	5		3		2		16	+
VA05H-161	65		57.2		25	+	38	+	3		6	+	5	+	4	-	3		3	+	13	
H-585	64		56.1	-	21	-	36		3		5	+	3	+	6	+	5	+	2		15	+
Doyce	62	-	53.4	-	23		33	-	5	+	1	-	2		7	+	5	+	5	+	15	+
VA03H-58	61	-	57.6		25	+	33	-	6	+	3	-	1	-	4	-	3		1	-	9	-
VA05H-59	58	-	57.6		26	+	34	-	3		3	-	7	+	6	+	4	+	2		9	-
Average	67		57.3		23		36		3		4		2		5		3		2		12	
LSD (0.05)	4		0.7		1		1		1		1		1		1		1		1		2	
C.V.	12		3.1		3		5		---		---		---		---		---		---		---	

Released cultivars are shown in bold print.

The number in parentheses below column headings indicates the number of location-years on which data are based.

Varieties are ordered by descending yield averages.

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, freeze, or lodging where 0 = highly resistant and 9 = highly susceptible.

Table 3. Three-year average summary of performance of hulless entries in the Virginia Tech Barley Tests, 2006, 2007, and 2008 harvests.

Hulless Lines	Yield (Bu/a)		Test Weight (Lb/bu)		Date Headed (Mar31+)		Height (In)		Lodging (0-9)		Leaf Rust (0-9)		Powdery Mildew (0-9)		Net Blotch (0-9)		Spot Blotch (0-9)		Spring Freeze (0-9)		Early Height (inches)	
	(18)		(18)		(9)		(10)		(16)		(9)		(2)		(8)		(6)		(1)		(3)	
VA04H-53	79	+	57.8		23	+	36	+	4	+	4	+	1		3	-	2	-	1	-	8	-
VA03H-61	78	+	60.1	+	23	+	34		2	-	2	-	2	+	4	-	3		1	-	5	-
VA03H-100	75		57.7		22	+	39	+	3		5	+	1		4	-	3		2		8	-
VA01H-125	75		57.5		18	-	29	-	3		5	+	0	-	6	+	5	+	0	-	9	
Eve	74		58.3	+	18	-	34		2	-	3		1		5		3		2		11	+
VA04H-111	73		57.5		20		34		2	-	2	-	1		4	-	2	-	5	+	10	+
VA04H-25	72		59.2	+	20		36	+	2	-	2	-	1		3	-	2	-	2		10	+
Doyce	72		54.7	-	20		33	-	4	+	1	-	2	+	6	+	5	+	5	+	11	+
H-585	70	-	56.6	-	17	-	35	+	2	-	5	+	3	+	6	+	4	+	2		11	+
VA03H-58	68	-	58.4	+	23	+	31	-	5	+	3		1		4	-	3		1	-	7	-
Average	74		57.8		20		34		3		3		1		5		3		2		9	
LSD (0.05)	3		0.5		1		1		1		1		1		1		1		1		1	
C.V.	11		2.7		4		5		---		---		---		---		---		---		---	

Released cultivars are shown in bold print.
The number in parentheses below column headings indicates the number of location-years on which data are based.
Varieties are ordered by descending yield averages.
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, freeze, or lodging where 0 = highly resistant and 9 = highly susceptible.

Table 4. Summary of performance of hulless entries in the Virginia Tech Barley Test planted no-till at the Tidewater AREC, Holland, VA, 2008 harvest.

Hulless Lines	Yield (Bu/a)		Test Weight (Lb/bu)		Lodging (0-9)		Net Blotch (0-9)	
VA06H-25	68	+	59.6		3		4	-
VA05H-158	66	+	60.4		4		6	
VA06H-72	65		60.4		3		7	+
VA06H-95	65		60.9	+	3		7	+
VA06H-48	62		60.8	+	3		2	-
VA03H-61	62		61.7	+	3		6	
VA06H-14	62		60.1		4		7	+
VA05H-120	62		60.6	+	5		7	+
VA06H-182	61		59.1	-	3		6	
VA06H-98	61		60.1		3		7	+
VA05H-162	61		61.0	+	5		7	+
VA06H-23	60		59.7		3		5	-
VA05H-147	60		59.8		3		5	-
VA05H-114	60		59.4	-	5		6	
VA06H-31	60		59.4	-	4		7	+
VA06H-3	59		61.7	+	3		5	-
VA06H-47	58		61.3	+	2	-	3	-
VA06H-8	58		59.9		3		5	-
VA04H-53	58		59.2	-	6	+	5	-
VA06H-7	57		60.6	+	2	-	5	-
VA06H-81	57		59.9		4		5	-
VA06H-149	57		58.6	-	4		8	+
Eve	56		60.1		3		7	+
VA04H-111	55		59.8		3		5	-
VA04H-25	55		61.4	+	4		5	-
VA03H-100	54		60.2		4		7	+
VA05H-161	54		60.3		4		7	+
VA05H-59	49	-	59.8		5		8	+
VA03H-58	48	-	59.6		8	+	6	
H-585	48	-	58.8	-	2	-	8	+
Doyce	47	-	56.9	-	7	+	8	+
VA01H-125	46	-	59.5		2	-	8	+
Average	58		60.0		4		6	
LSD (0.05)	8		0.6		2		1	
C.V.	9		0.7		---		---	

Released cultivars are shown in bold print.

Varieties are ordered by descending yield averages.

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.

Table 5. Summary of performance of hulless entries in the Virginia Tech Barley Test, Eastern Virginia AREC, Warsaw, VA, 2008 harvest.

Hulless Lines	Yield (Bu/a)		Test Weight (Lb/bu)		Date Headed (Mar31+)		Height (In)		Lodging (0-9)		Powdery Mildew (0-9)		Net Blotch (0-9)		Early Height (Inches)	
VA05H-147	108	+	57.7		16	+	41	+	7		1	-	2		12	
VA06H-25	102	+	57.4		18	+	39		8		6	+	1	-	12	
VA06H-23	101	+	57.1		16	+	42	+	7		4	+	2		11	
VA06H-182	97		56.7		18	+	35	-	6		0	-	3	+	9	-
VA06H-48	97		59.5	+	12	-	41	+	5	-	2	-	1	-	11	
VA01H-125	96		57.2		11	-	33	-	5	-	1	-	3	+	11	
VA06H-149	96		56.6		18	+	40		6		3		3	+	11	
VA06H-3	94		60.1	+	16	+	37	-	7		1	-	1	-	11	
VA06H-47	92		59.0	+	13	-	42	+	5	-	1	-	1	-	10	-
VA04H-53	91		57.5		20	+	40		6		1	-	2		10	-
VA05H-120	90		57.0		13	-	40		9	+	6	+	3	+	15	+
VA06H-31	88		57.3		18	+	42	+	9	+	5	+	3	+	10	-
VA05H-114	88		55.9	-	12	-	39		9	+	3		2		12	
H-585	88		56.4	-	11	-	41	+	7		4	+	4	+	15	+
Eve	87		57.5		10	-	37	-	8		1	-	4	+	16	+
Doyce	86		52.5	-	14	-	35	-	9	+	4	+	6	+	15	+
VA06H-8	85		57.3		12	-	37	-	6		1	-	1	-	12	
VA04H-111	85		56.6		13	-	37	-	8		2	-	3	+	12	
VA06H-7	84		57.0		13	-	37	-	8		1	-	3	+	13	
VA05H-158	84		57.8		14	-	41	+	7		6	+	2		15	+
VA06H-98	83		56.4	-	15		38		8		6	+	4	+	13	
VA03H-58	82		58.1		18	+	34	-	9	+	1	-	2		9	-
VA06H-14	80		57.4		19	+	41	+	9	+	6	+	3	+	10	-
VA03H-100	80		58.2		18	+	43	+	8		1	-	2		11	
VA04H-25	80		58.7	+	14	-	41	+	6		2	-	2		13	
VA03H-61	79		60.3	+	18	+	38		7		2	-	2		7	-
VA05H-162	79		58.4	+	18	+	43	+	8		6	+	3	+	12	
VA06H-81	78		56.5	-	14	-	36	-	8		6	+	3	+	13	
VA06H-72	77		56.7		15		36	-	9	+	7	+	5	+	14	+
VA05H-161	71	-	57.6		18	+	41	+	9	+	6	+	3	+	13	
VA06H-95	69	-	57.6		14	-	36	-	8		7	+	3	+	12	
VA05H-59	54	-	56.7		19	+	37	-	9	+	8	+	2		9	-
Average	86		57.4		15		39		7		3		2		12	
LSD (0.05)	12		0.9		1		2		2		1		1		2	
C.V.	10		1.1		5		4		---		---		---		14	

Released cultivars are shown in bold print.

Varieties are ordered by descending yield averages.

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.

Table 6. Summary of performance of hulless entries in the Virginia Tech Barley Test, Eastern Shore AREC, Painter, VA, 2008 harvest.

Hulless Lines	Yield (Bu/a)		Test Weight (Lb/bu)		Lodging (0-9)		Leaf Rust (0-9)		Powdery Mildew (0-9)		Net Blotch (0-9)	
VA06H-98	85	+	59.3		7	+	3		2		7	+
VA06H-25	83	+	59.8		4		2		5	+	3	-
VA06H-182	83	+	59.5		6		3		0	-	4	-
VA06H-149	81		58.4	-	3	-	3		1		7	+
VA04H-111	80		59.1		7	+	2		1		5	
VA01H-125	79		58.5	-	7	+	5	+	0	-	7	+
VA04H-25	79		61.1	+	5		2		1		4	-
VA05H-120	79		59.8		5		3		3		4	-
VA05H-158	79		59.8		4		4		3		3	-
VA06H-3	79		61.1	+	5		2		1		4	-
VA06H-81	79		59.5		6		4		2		6	+
VA06H-8	78		59.2		6		2		2		3	-
VA05H-147	77		59.3		5		2		1		4	-
VA06H-95	77		60.0		6		5	+	5	+	5	
VA06H-23	76		59.9		3	-	3		2		4	-
VA06H-72	75		59.7		4		4		4	+	5	
VA05H-162	74		60.4	+	4		3		5	+	4	-
VA06H-7	74		59.4		6		2		2		4	-
VA06H-14	74		60.1		7	+	1	-	3		4	-
VA04H-53	73		60.2	+	4		4		1		4	-
VA06H-47	73		60.4	+	3	-	5	+	1		2	-
H-585	72		58.0	-	6		4		2		7	+
Eve	72		59.8		5		1	-	1		6	+
VA03H-61	70		61.8	+	3	-	2		2		5	
VA05H-114	70		58.2	-	7	+	2		2		4	-
VA06H-48	70		60.4	+	4		7	+	1		2	-
VA05H-161	69		59.3		6		6	+	4	+	3	-
VA03H-100	68		59.8		6		6	+	0	-	4	-
VA06H-31	65	-	59.5		4		2		3		4	
VA05H-59	62	-	60.2	+	6		3		6	+	6	+
Doyce	61	-	55.5	-	8	+	1	-	1		8	+
VA03H-58	59	-	59.6		8	+	2		1		6	+
Average	74		59.6		5		3		2		5	
LSD (0.05)	9		0.6		2		2		2		1	
C.V.	9		0.7		---		---		---		---	

Released cultivars are shown in bold print.

Varieties are ordered by descending yield averages.

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.

Table 7. Summary of performance of hulless entries in the Virginia Tech Barley Test, Northern Piedmont AREC, Orange, VA, 2008 harvest.

Hulless Lines	Yield (Bu/a)		Test Weight (Lb/bu)		Height (In)		Lodging (0-9)	
VA06H-25	99	+	57.2		39		3	
VA06H-182	98	+	54.4		37		6	
VA05H-147	96		57.0		38		3	
VA05H-158	95		54.7		40	+	4	
VA05H-120	94		54.8		39		4	
VA04H-53	93		55.0		38		8	+
VA06H-95	91		56.2		38		3	
VA03H-61	91		55.7		39		4	
VA06H-149	91		53.8		37		5	
VA06H-98	90		55.4		37		6	
VA06H-23	89		55.9		40	+	2	-
VA06H-72	89		53.3		38		4	
VA06H-31	84		55.9		40	+	5	
VA06H-8	84		50.6		37		6	
VA03H-100	84		53.8		41	+	7	
VA06H-3	83		57.7		38		2	-
Eve	83		55.1		36	-	6	
VA06H-48	82		54.6		40	+	2	-
VA01H-125	81		52.1		35	-	4	
VA06H-81	79		50.1		37		5	
H-585	79		49.3	-	38		6	
VA06H-7	79		51.3		39		8	+
VA05H-162	75		55.1		38		9	+
VA04H-25	74		55.0		39		3	
VA05H-161	73		51.8		39		8	+
VA04H-111	73		52.6		39		8	+
VA05H-59	72		55.9		38		4	
VA06H-14	71		52.2		38		7	
VA06H-47	70		51.8		40	+	3	
VA03H-58	70		53.9		36	-	8	+
VA05H-114	70		50.9		37		8	+
Doyce	66	-	46.5	-	37		9	+
Average	83		53.7		38		5	
LSD (0.05)	15		4.1		2		3	
C.V.	13		5.5		4		---	

Released cultivars are shown in bold print.

Varieties are ordered by descending yield averages.

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.

Table 8. Summary of performance of hulless entries in the Virginia Tech Barley Test, Kentland Farm, Blacksburg, VA, 2008 harvest.

Hulless Lines	Yield (Bu/a)		Test Weight (Lb/bu)		Date Headed (Mar31+)		Height (In)		Lodging (0-9)		Leaf Rust (0-9)		Net Blotch (0-9)	
VA06H-25	102	+	57.0		28	+	39	+	5		3	-	5	-
VA05H-147	92	+	57.5		26	+	38	+	1	-	4		6	
VA06H-14	92	+	56.8		28	+	38	+	2	-	4		7	+
VA06H-31	91	+	57.0		27	+	40	+	2	-	3	-	6	
VA05H-162	89	+	58.7	+	26	+	40	+	0	-	5	+	6	
VA05H-158	89	+	59.1	+	23	-	40	+	0	-	6	+	6	
VA05H-120	88	+	58.8	+	23	-	40	+	2	-	6	+	6	
VA06H-23	87	+	57.3		25		39	+	4		4		6	
VA06H-182	83		56.7		26	+	33	-	7	+	4		6	
VA06H-3	81		59.9	+	26	+	36		5		3	-	5	-
VA06H-98	81		57.6		23	-	33	-	2	-	4		6	
VA06H-149	81		55.9	-	26	+	36		1	-	3	-	8	+
Eve	81		58.6	+	20	-	35		2	-	3	-	8	+
VA04H-111	79		57.7		24	-	36		0	-	3	-	7	+
VA05H-161	79		58.0	+	26	+	39	+	2	-	5	+	7	+
VA05H-114	76		57.5		24	-	34	-	5		4		7	+
VA04H-25	75		58.8	+	26	+	36		4		4		7	+
VA03H-61	74		59.1	+	27	+	33	-	3		4		6	
VA06H-72	74		57.7		23	-	35		3		5	+	7	+
VA06H-95	72		57.1		24	-	34	-	6	+	7	+	6	
VA06H-48	70		58.4	+	24	-	39	+	6	+	7	+	3	-
VA06H-47	69		58.5	+	23	-	39	+	8	+	6	+	3	-
H-585	68		57.0		22	-	36		4		6	+	8	+
VA06H-81	65	-	56.0	-	23	-	33	-	6	+	6	+	6	
VA06H-8	65	-	56.8		24	-	34	-	6	+	5	+	7	+
VA01H-125	63	-	55.9	-	22	-	30	-	2	-	5	+	8	+
Doyce	61	-	54.3	-	25		34	-	8	+	2	-	8	+
VA06H-7	61	-	58.0	+	24	-	33	-	8	+	4		8	+
VA03H-100	57	-	56.1	-	26	+	40	+	5		5	+	6	
VA04H-53	56	-	55.0	-	28	+	36		9	+	7	+	6	
VA05H-59	53	-	57.1		29	+	34	-	6	+	4		8	+
VA03H-58	41	-	54.3	-	29	+	30	-	9	+	3	-	6	
Average	75		57.3		25		36		4		4		6	
LSD (0.05)	9		0.7		1		2		2		1		1	
C.V.	9		0.9		4		4		---		---		---	

Released cultivars are shown in bold print.

Varieties are ordered by descending yield averages.

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.

Table 9. Summary of performance of hulled entries in the Virginia Tech Barley Test over locations, 2008 harvest.

Hulled Lines	Yield (Bu/a)		Test Weight (Lb/bu)		Date Headed (Mar31+)		Height (In)		Lodging (0-9)		Leaf Rust (0-9)		Powdery Mildew (0-9)		Net Blotch (0-9)	
	(5)		(5)		(2)		(3)		(5)		(2)		(2)		(4)	
VA06B-48	104	+	46.2		19	-	36		6		4	+	0	-	3	
Callao	101	+	46.2		17	-	34	-	8	+	2	-	0	-	4	+
VA06B-19	101	+	46.7	+	18	-	35	-	6		3		1		4	+
VA96-44-304	101	+	44.9	-	16	-	36		7	+	3		1		5	+
VA06B-44	100		45.3		19	-	35	-	7	+	3		0	-	3	
Thoroughbred	100		46.4		24	+	37	+	5	-	5	+	4	+	4	+
VA03B-58	99		46.9	+	23	+	36		5	-	3		0	-	3	
VA05B-65	98		47.1	+	23	+	35	-	7	+	3		0	-	3	
VA05B-58	98		46.4		21	+	35	-	6		4	+	0	-	3	
VA05B-141	98		46.5		20		36		7	+	2	-	0	-	5	+
VA04B-180	97		46.9	+	18	-	35	-	7	+	3		0	-	2	-
VA06B-53	97		46.3		18	-	34	-	6		4	+	0	-	4	+
VA03B-44	97		46.8	+	21	+	39	+	6		4	+	0	-	4	+
VA04B-125	96		47.1	+	22	+	35	-	6		4	+	0	-	3	
VA03B-171	96		45.7		24	+	37	+	6		4	+	0	-	3	
VA03B-176	96		46.4		26	+	37	+	6		2	-	6	+	3	
VA06B-32	95		46.4		18	-	34	-	7	+	3		0	-	5	+
VA06B-60	94		45.9		16	-	32	-	7	+	3		0	-	4	+
Price	94		46.6		20		36		6		3		1		6	+
VA04B-62	93		46.3		18	-	35	-	7	+	3		0	-	2	-
VA04B-95	93		46.2		23	+	34	-	6		3		0	-	3	
VA05B-64	93		46.2		24	+	35	-	6		3		0	-	3	
VA03B-25	92		46.1		26	+	38	+	4	-	3		0	-	2	-
Nomini	92		44.3	-	18	-	40	+	5	-	3		0	-	2	-
VA04B-8	91		46.1		22	+	34	-	6		2	-	0	-	3	
VA04B-178	91		46.4		21	+	36		6		3		0	-	4	+
MD931046-93	91		44.0	-	19	-	37	+	6		2	-	5	+	4	+
MD931046-38	91		43.8	-	21	+	37	+	6		3		6	+	4	+
VA05B-72	90		46.1		22	+	35	-	6		3		0	-	3	
Barsoy	87	-	45.7		17	-	39	+	6		6	+	1		4	+
VA92-42-46	81	-	43.8	-	18	-	41	+	7	+	1	-	0	-	6	+
Wysor	79	-	43.6	-	20		39	+	6		5	+	0	-	5	+
Average	95		45.9		20		36		6		3		1		3	
LSD (0.05)	6		0.8		1		1		1		1		1		1	
C.V.	11		2.7		4		5		---		---		---		---	

Released cultivars are shown in bold print.

The number in parentheses below column headings indicates the number of locations on which data are based.

Varieties are ordered by descending yield averages.

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.

Table 10. Two-year average summary of performance of hulled entries in the Virginia Tech Barley Tests, 2007 and 2008 harvests.

Hulled Lines	Yield (Bu/a)		Test Weight (Lb/bu)		Date Headed (Mar31+)		Height (In)		Lodging (0-9)		Leaf Rust (0-9)		Powdery Mildew (0-9)		Net Blotch (0-9)		Spot Blotch (0-9)		Spring Freeze (0-9)	
	(11)		(11)		(5)		(6)		(10)		(6)		(2)		(7)		(4)		(1)	
Thoroughbred	106	+	46.0		26	+	35		3	-	5	+	4	+	3		3	+	2	
VA04B-180	104	+	46.0		22	-	33	-	4		4		0	-	2	-	1	-	1	-
VA03B-44	103	+	45.7		24	+	35		4		3	-	0	-	3		2		0	-
VA03B-58	102	+	46.4	+	24	+	34	-	3	-	3	-	0	-	2	-	2		1	-
VA04B-125	102	+	46.4	+	24	+	35		5	+	4		0	-	2	-	2		1	-
Callao	102	+	46.2	+	20	-	33	-	6	+	3	-	0	-	4	+	3	+	1	-
VA05B-64	101	+	46.0		26	+	34	-	5	+	4		0	-	2	-	2		1	-
VA05B-141	101	+	46.3	+	22	-	36	+	4		3	-	0	-	4	+	4	+	1	-
VA03B-176	101	+	46.0		26	+	35		4		3	-	6	+	2	-	2		2	
VA04B-178	100		45.7		23		33	-	3	-	4		0	-	3		1	-	1	-
VA04B-8	100		45.6		26	+	35		5	+	3	-	0	-	2	-	2		2	
VA04B-62	98		46.0		20	-	34	-	5	+	3	-	0	-	2	-	1	-	1	-
VA03B-25	98		45.4		27	+	38	+	3	-	4		0	-	2	-	2		1	-
VA96-44-304	98		45.0	-	19	-	33	-	5	+	4		1		5	+	4	+	2	
VA03B-171	97		45.8		25	+	36	+	3	-	4		0	-	3		2		3	+
VA04B-95	95		45.8		25	+	33	-	4		4		0	-	2	-	2		2	
Price	94		46.1		22	-	34	-	3	-	4		1		5	+	3	+	3	+
VA92-42-46	87	-	44.4	-	22	-	39	+	4		1	-	0	-	7	+	5	+	3	+
Wysor	83	-	43.5	-	23		38	+	5	+	5	+	0	-	4	+	3	+	3	+
Barsoy	79	-	43.9	-	20	-	37	+	3	-	6	+	1		3		2		2	
Average	97		45.6		23		35		4		4		1		3		2		2	
LSD (0.05)	4		0.6		1		1		1		1		1		1		1		1	
C.V.	10		2.8		4		5		---		---		---		---		---		---	

Released cultivars are shown in bold print.

The number in parentheses below column headings indicates the number of location-years on which data are based.

Varieties are ordered by descending yield averages.

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, freeze or lodging where 0 = highly resistant and 9 = highly susceptible.

Table 11. Three-year average summary of performance of hulled entries in the Virginia Tech Barley Tests, 2006, 2007, and 2008 harvests.

Hulled Lines	Yield (Bu/a)		Test Weight (Lb/bu)		Date Headed (Mar31+)		Height (In)		Lodging (0-9)		Leaf Rust (0-9)		Powdery Mildew (0-9)		Net Blotch (0-9)		Spot Blotch (0-9)		Spring Freeze (0-9)		Early Height (inches)	
	(18)		(18)		(9)		(10)		(16)		(9)		(2)		(8)		(6)		(1)		(2)	
Thoroughbred	118	+	47.0	+	23	+	35	+	2	-	5	+	4	+	3		3		2		7	
VA04B-180	114	+	46.5		19	-	32	-	3		4	+	0	-	2	-	1	-	1	-	7	
VA03B-25	111	+	46.4		25	+	38	+	2	-	3		0	-	2	-	2	-	1	-	5	-
VA03B-44	111	+	45.9		21	+	34		3		2	-	0	-	3		2	-	0	-	5	-
VA04B-8	111	+	46.6		24	+	35	+	4	+	3		0	-	2	-	2	-	2		5	-
VA03B-58	110	+	47.1	+	21	+	33	-	3		3		0	-	2	-	2	-	1	-	6	-
VA03B-176	110	+	46.8	+	22	+	34		3		3		6	+	2	-	2	-	2		6	-
VA04B-178	110	+	46.5		20		32	-	3		4	+	0	-	3		2	-	1	-	7	
VA03B-171	108		47.0	+	22	+	36	+	3		3		0	-	2	-	2	-	3	+	7	
Callao	108		46.8	+	18	-	32	-	6	+	3		0	-	4	+	4	+	1	-	7	
VA96-44-304	105		46.0		17	-	32	-	4	+	4	+	1		5	+	4	+	2		8	+
Price	103		47.3	+	20		33	-	3		3		1		4	+	3		3	+	7	
VA92-42-46	90	-	45.1	-	20		39	+	3		1	-	0	-	6	+	5	+	3	+	8	+
Wysor	88	-	44.3	-	20		37	+	4	+	5	+	0	-	4	+	3		3	+	7	
Barsoy	82	-	43.6	-	16	-	36	+	3		6	+	1		3		2	-	2		8	+
Average	105		46.2		20		34		3		3		1		3		3		2		7	
LSD (0.05)	4		0.5		1		1		1		1		1		1		1		1		1	
C.V.	11		3.0		4		5		---		---		---		---		---		---		---	

Released cultivars are shown in bold print.

The number in parentheses below column headings indicates the number of location-years on which data are based.

Varieties are ordered by descending yield averages.

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, freeze or lodging where 0 = highly resistant and 9 = highly susceptible.

Table 12. Summary of performance of hulled entries in the Virginia Tech Barley Test planted no-till at the Tidewater AREC, Holland, VA, 2008 harvest.

Hulled Lines	Yield (Bu/a)		Test Weight (Lb/bu)		Lodging (0-9)		Net Blotch (0-9)	
VA05B-72	80		47.9		3		2	-
VA06B-19	78		48.8		5		5	+
VA04B-8	77		48.3		5		4	
Callao	77		46.8	-	7	+	5	+
MD931046-93	77		47.2		4		5	+
VA03B-176	76		49.3	+	4		3	-
VA05B-65	76		48.4		3		3	-
MD931046-38	76		46.1	-	4		5	+
VA03B-25	75		48.9		2	-	2	-
VA04B-95	75		49.0		2	-	3	-
VA06B-53	75		49.4	+	4		5	+
VA06B-44	74		47.6		5		4	
Barsoy	74		48.6		4		5	+
VA03B-171	73		47.5		3		3	-
VA05B-64	73		48.6		3		3	-
VA03B-44	73		49.2	+	3		4	
VA06B-48	73		47.6		4		4	
VA05B-141	72		47.3		4		5	+
VA03B-58	70		48.6		3		3	-
VA05B-58	70		47.4		4		4	
VA04B-180	69		48.5		5		2	-
VA04B-178	68		48.8		3		4	
VA96-44-304	67		47.7		6	+	7	+
VA04B-125	66		47.5		5		3	-
VA06B-32	66		47.8		5		6	+
Price	65		48.3		4		8	+
VA04B-62	63		48.8		4		2	-
Thoroughbred	63		50.2	+	2	-	5	+
Wysor	62		46.5	-	3		7	+
Nomini	61		46.6	-	3		3	-
VA06B-60	61		49.3	+	6	+	5	+
VA92-42-46	52	-	46.8	-	4		8	+
Average	71		48.1		4		4	
LSD (0.05)	11		1.0		2		1	
C.V.	11		1.4		---		---	

Released cultivars are shown in bold print.

Varieties are ordered by descending yield averages.

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.

Table 13. Summary of performance of hulled entries in the Virginia Tech Barley Test, Eastern Virginia AREC, Warsaw, VA, 2008 harvest.

Hulled Lines	Yield (Bu/a)		Test Weight (Lb/bu)		Date Headed (Mar31+)		Height (In)		Lodging (0-9)		Powdery Mildew (0-9)		Net Blotch (0-9)	
VA96-44-304	133	+	45.0	-	11	-	34		9	+	2	+	3	+
VA06B-48	129	+	45.9		15		33		8		1		2	
VA04B-178	128	+	46.7		17	+	35		8		0	-	3	+
VA05B-58	127		47.5		16	+	33		7		0	-	1	-
VA03B-171	127		47.2		19	+	35		8		0	-	1	-
Thoroughbred	126		47.3		19	+	35		7		5	+	2	
VA03B-25	124		48.7	+	20	+	37	+	6		0	-	1	-
VA06B-32	124		46.8		13	-	33		9	+	0	-	3	+
VA03B-58	123		47.1		19	+	34		7		0	-	1	-
VA04B-125	123		48.0	+	18	+	34		8		0	-	1	-
Callao	122		46.2		12	-	31	-	9	+	0	-	2	
Nomini	120		45.0	-	12	-	40	+	6		0	-	1	-
VA06B-44	119		45.8		14	-	34		7		0	-	2	
VA92-42-46	119		44.3	-	13	-	40	+	7		0	-	6	+
VA06B-60	118		46.3		11	-	30	-	7		1		1	-
VA05B-65	118		47.6	+	18	+	33		8		0	-	2	
VA05B-141	118		47.4		16	+	35		8		0	-	3	+
VA05B-72	117		47.9	+	18	+	33		7		0	-	1	-
VA05B-64	117		47.4		19	+	33		7		0	-	1	-
VA04B-62	117		47.0		13	-	35		7		0	-	1	-
VA04B-180	116		46.7		12	-	33		8		0	-	1	-
VA03B-44	116		46.5		17	+	38	+	8		0	-	1	-
Price	116		47.2		14	-	35		8		1		4	+
VA04B-95	115		47.5		18	+	31	-	7		0	-	1	-
VA06B-19	114		46.8		13	-	31	-	7		1		2	
VA06B-53	113		46.7		12	-	31	-	5	-	0	-	1	-
MD931046-93	110		43.5	-	14	-	35		7		7	+	2	
Wysor	106	-	43.6	-	15		38	+	8		0	-	3	+
VA03B-176	105	-	46.3		20	+	34		9	+	7	+	1	-
VA04B-8	103	-	47.6	+	17	+	32	-	6		0	-	1	-
Barsoy	103	-	45.7		11	-	37	+	7		3	+	3	+
MD931046-38	99	-	43.9	-	17	+	36	+	7		8	+	2	
Average	118		46.5		15		34		7		1		2	
LSD (0.05)	10		1.1		1		2		2		1		1	
C.V.	6		1.7		5		5		---		---		---	

Released cultivars are shown in bold print.

Varieties are ordered by descending yield averages.

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.

Table 14. Summary of performance of hulled entries in the Virginia Tech Barley Test, Eastern Shore AREC, Painter, VA, 2008 harvest.

Hulled Lines	Yield (Bu/a)		Test Weight (Lb/bu)		Lodging (0-9)		Leaf Rust (0-9)		Powdery Mildew (0-9)		Net Blotch (0-9)	
VA05B-64	97		49.4	+	2	-	2		0	-	3	-
VA04B-125	97		49.9	+	3		3	+	0	-	3	-
VA03B-58	93		49.5	+	4		2		0	-	4	
VA05B-58	92		49.6	+	4		2		0	-	3	-
VA06B-53	91		48.2		4		2		0	-	5	+
VA06B-19	90		48.6		4		1	-	1		4	
VA03B-176	90		48.7		3		2		5	+	4	
MD931046-93	89		44.9	-	5		2		3	+	5	+
VA96-44-304	89		47.1		5		2		0	-	6	+
VA06B-48	88		47.8		3		1	-	0	-	4	
VA03B-44	88		49.7	+	3		2		0	-	6	+
Thoroughbred	87		48.5		2	-	4	+	2	+	4	
VA05B-65	87		48.3		5		1	-	0	-	5	+
VA03B-171	85		48.3		3		3	+	0	-	3	-
MD931046-38	84		45.0	-	4		3	+	4	+	4	
VA06B-44	83		47.3		4		1	-	0	-	3	-
VA04B-95	83		49.0		4		2		0	-	4	
VA04B-8	83		49.7	+	4		2		0	-	4	
Callao	83		48.6		5		1	-	0	-	5	+
VA04B-180	81		47.6		4		2		0	-	2	-
VA05B-141	81		48.2		4		1	-	0	-	6	+
VA03B-25	79		49.2		2	-	3	+	0	-	3	-
Price	79		48.1		4		2		0	-	6	+
VA04B-62	78		47.8		5		2		0	-	1	-
Nomini	76		43.8	-	3		3	+	0	-	2	-
VA06B-32	76		48.6		5		2		1		5	+
VA06B-60	76		48.2		5		2		0	-	6	+
VA04B-178	74		48.4		3		2		0	-	5	+
VA05B-72	73		49.1		3		2		0	-	4	
Barsoy	71		46.0	-	4		5	+	0	-	4	
Wysor	68		45.0	-	3		4	+	0	-	5	+
VA92-42-46	68		45.2	-	5		0	-	0	-	6	+
Average	83		47.9		4		2		1		4	
LSD (0.05)	17		1.4		2		1		1		1	
C.V.	14		2.0		---		---		---		---	

Released cultivars are shown in bold print.

Varieties are ordered by descending yield averages.

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.

Table 15. Summary of performance of hulled entries in the Virginia Tech Barley Test, Northern Piedmont AREC, Orange, VA, 2008 harvest.

Hulled Lines	Yield (Bu/a)		Test Weight (Lb/bu)		Height (In)		Lodging (0-9)	
VA06B-53	125	+	44.1		38		9	
VA06B-48	125	+	45.0		38		9	
Price	120		44.6		39		9	
VA06B-44	117		41.8		38		9	
VA05B-58	113		44.5		37		9	
Callao	111		44.0		37		9	
VA06B-19	111		43.3		39		9	
VA05B-141	109		43.2		37		9	
VA05B-65	109		45.4		38		9	
VA03B-44	109		43.4		39		9	
VA96-44-304	108		41.1		38		8	-
VA03B-176	108		43.7		38		9	
VA06B-32	106		43.2		35	-	9	
VA04B-180	105		44.8		37		9	
VA04B-95	104		44.0		35	-	9	
VA03B-58	103		43.7		38		8	-
VA04B-125	101		45.2		37		9	
VA04B-62	100		42.2		36		9	
VA04B-178	100		44.3		37		9	
Thoroughbred	100		43.1		39		9	
VA03B-171	99		43.0		38		9	
VA06B-60	98		41.5		34	-	9	
VA04B-8	98		42.2		38		9	
VA05B-64	96		43.8		36		9	
VA05B-72	95		41.7		39		9	
Barsoy	92		41.6		42	+	8	-
VA03B-25	91		42.9		39		9	
MD931046-38	89		40.5		39		9	
Nomini	88		41.2		39		9	
Wysor	71	-	41.2		40		9	
MD931046-93	68	-	40.7		38		9	
VA92-42-46	65	-	39.4	-	43	+	9	
Average	101		43.0		38		9	
LSD (0.05)	20		3.1		3		1	
C.V.	14		4.9		6		---	

Released cultivars are shown in bold print.

Varieties are ordered by descending yield averages.

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.

Table 16. Summary of performance of hulled entries in the Virginia Tech Barley Test, Kentland Farm, Blacksburg, VA, 2008 harvest.

Hulled Lines	Yield (Bu/a)		Test Weight (Lb/bu)		Date Headed (Mar31+)		Height (In)		Lodging (0-9)		Net Blotch (0-9)		Leaf Rust (0-9)	
Thoroughbred	123	+	44.0		30	+	39	+	5	-	5	+	4	
VA04B-180	112	+	46.4	+	23	-	35		9	+	4		3	-
VA06B-60	112	+	43.9		22	-	32	-	9	+	4		4	
VA06B-19	112	+	46.0	+	23	-	35		7		4		5	+
Nomini	110		45.0		24	-	42	+	5	-	4		3	-
MD931046-93	110		42.1	-	24	-	37		8		3	-	5	+
VA04B-62	109		45.9	+	23	-	35		9	+	4		3	-
VA05B-141	109		46.5	+	24	-	37		8		4		5	+
VA96-44-304	109		43.5		22	-	35		9	+	5	+	5	+
VA03B-58	108		45.6		28	+	36		2	-	3	-	4	
VA06B-48	108		44.8		23	-	37		7		6	+	4	
Callao	108		45.5		22	-	34	-	9	+	4		5	+
MD931046-38	107		43.4		24	-	35		8		3	-	5	+
VA06B-32	105		44.9		23	-	34	-	9	+	4		5	+
VA03B-176	104		44.2		32	+	37		5	-	3	-	2	-
VA06B-44	100		44.9		24	-	35		8		6	+	3	-
VA03B-44	99		45.8	+	25		40	+	6		5	+	3	-
VA05B-65	99		45.8	+	28	+	35		9	+	4		4	
VA92-42-46	97		44.1		24	-	39	+	9	+	1	-	7	+
VA04B-8	96		42.8		26	+	33	-	6		3	-	3	-
VA03B-171	95		42.4	-	29	+	38	+	5	-	4		3	-
Barsoy	95		45.7	+	22	-	38	+	8		6	+	4	
VA04B-125	94		45.0		27	+	35		8		4		3	-
Price	91		45.0		25		36		7		4		6	+
VA03B-25	90		41.0	-	32	+	39	+	1	-	4		3	-
VA05B-72	88	-	43.7		27	+	34	-	7		5	+	4	
VA05B-58	87	-	44.6		26	+	34	-	7		5	+	4	
VA04B-178	87	-	43.7		26	+	34	-	8		3	-	6	+
Wysor	86	-	41.8	-	24	-	39	+	9	+	5	+	5	+
VA05B-64	85	-	42.3	-	29	+	34	-	8		5	+	3	-
VA06B-53	84	-	43.4		24	-	33	-	8		6	+	4	
VA04B-95	83	-	42.2	-	27	+	35		8		5	+	3	-
Average	100		44.2		25		36		7		4		4	
LSD (0.05)	12		1.5		1		2		2		1		1	
C.V.	9		2.4		4		4		---		---		---	

Released cultivars are shown in bold print.

Varieties are ordered by descending yield averages.

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.

Section 2: Wheat Varieties

Wheat tests were planted in seven-inch rows at Blackstone, Orange, Holland, Painter, and Shenandoah Valley. They were planted in six-inch rows at Warsaw and Blacksburg. They were planted in seven and one-half-inch rows at the Warsaw No-Till location. All no-till locations (Holland, Warsaw No-Till, and Shenandoah Valley) were planted at 28 seeds per row foot. All other locations were planted at 22 seeds per row foot.

When evaluating wheat variety performance as presented in this report, one should consider the use of seed treatment. Certain entries in this test have different seed treatments that may greatly impact performance. Seed treatments are indicated by an acronym in parentheses following the name. "B" is Baytan®, "D" is Dividend®, "R" is raxil, and "T" is thiram. For example, USG3209 (RT) indicates that this entry was treated with raxil and thiram. Virginia Tech experimental lines and some public varieties such as Massey were treated with raxil and thiram.

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 daylength 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.

The future for wheat varieties adapted to Virginia conditions is very positive. Dr. Carl Griffey, Virginia Tech's small grains breeder, has many lines starting with "VA" shown in the by-location tables that are in the top-yielding group and that display good disease resistance.

The released varieties that yielded significantly higher than the statewide mean in 2008 were USG 3555, Branson, Pioneer 26R15, SS 560,SS 548, USG 3665, USG 3725, and SS 8641. SS 548 and SS 8641 also had mean test weight that was also significantly higher than the test mean. The average of all locations was 88 bu/ac which is higher than in previous years. The warm spring resulted in many areas heading five to seven days earlier than normal but overall cool conditions in May slowed maturity and provided a relatively long grain fill period under favorable conditions.

USG 3665 had the highest two year average yield. USG 3555, Branson, SS 560, and Pioneer 26R15 also had grain yields that were significantly higher than the test mean when results from 2007 and 2008 were combined.

Producers who grow large acreages of wheat should plant two or more varieties having significantly different maturity dates in order to ensure harvest of high quality grain having high test weight and no sprouting. In Virginia it is typical that the first good week of wheat harvest is followed by a period of sporadic or consistent rain showers, which delay subsequent harvest and significantly reduce grain test weight and quality. Growers can circumvent this problem by planting varieties that differ significantly in maturity wherein 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.

Two locations in 2007-08, Warsaw No-till, and Holland were planted no-till following corn. Individual sites are reported similar to other testing locations. These sites are also included in the overall yearly average. A table averaging performance of varieties only at these no-till sites is also included for reference. In general the top performing lines in this over-location no-till summary were the same as those in the top-yielding group of the overall summary table.

Summary of wheat management practices for the 2008 harvest season (All rates are given on a per acre basis.)

Blacksburg - Planted October 3, 2007. Preplant fertilizer was 30-40-60 in September 2007. Site was fertilized with 50 gal N on March 3, 2008 and again on March 28, 2008 with 50 gal N plus 0.5 oz Harmony Extra. Harvest occurred on July 1, 2008.
Blackstone - Planted October 16, 2007. Preplant fertilizer was 300 lb 10-20-20 October 12, 2007. One-half inch irrigation was applied on October 17, then again on October 18, 2007. Heavy rain events totaling 5.75" one week after planting caused severe washing of the plots, forcing them to be abandoned.
Warsaw - Planted October 23, 2007. Preplant fertilizer was 25-80-80-5 applied October 19, 2007. Site was sprayed with 0.9 oz Finesse® on December 12, 2007. Site was fertilized at 25 lb N using 12-0-0-1.5 on December 18, 2007, again on February 11, 2008, and again on March 27, 2008. Site was treated with 1.92 oz Karate® for aphids on April 17, 2008. Harvest occurred June 19, 2008.
Warsaw No-Till - Planted October 24, 2007. One ton lime was applied on October 5, 2007. Preplant fertilizer was 25-80-80-5 applied October 19, 2007. Also on October 19, site was sprayed with 2.5 pt Gramoxone Extra® and ½ pt 2-4,D. Site was fertilized at 25 lb N using 12-0-0-1.5 on December 19, 2007 and again on February 20, 2008. Also on February 20, site was sprayed with 0.9 oz Finesse®. Site was fertilized again on March 27, 2008 with 40 lb N using 12-0-0-1.5. Site was treated with 1.92 oz Karate® for aphids on April 17, 2008. Harvest occurred June 19, 2008.
Painter - Planted November 2, 2007. Preplant fertilizer was 500 lb 5-10-10. Site was fertilized with 60 lb N using 30%UAN and 0.75 oz Harmony Extra SG® March 22, 2008. Site was also treated with 1 pt 2,4-D plus ½ pint 80/20 surfactant March 22, 2008. Site was fertilized with 50 lb N using 30% UAN April 19, 2008. Harvest occurred on June 25-26, 2008.
Holland - Planted no-till November 8, 2007. Preplant fertilization was 300 lb 9-16-31-3 on October 23, 2007. Site was fertilized with 60 lb N using 30% UAN and 0.6 oz Harmony Extra® February 4, 2008. A 10% manganese product was used at 1.5 qt on February 26, 2008. Site was also treated with 4.75 oz Osprey® on February 26, 2008. Site was fertilized with 60 lb N using 30% UAN March 13, 2008. Harvest occurred on June 12, 2008.
Orange - Planted October 16, 2007. Preplant fertilization was 25-64-22-22S on September 26, 2007. Sixty lb N and Harmony Extra® at 0.4 oz were applied March 6, 2008. Harvest occurred on June 25-26, 2008.
Shenandoah Valley - Planted on October 17, 2007. Preplant fertilizer was 40 lb N November 1, 2007. Fifty lb N and 0.6 oz Harmony Extra® were applied February 1, 2008. Forty lb N were applied March 3, 2008. Harvest occurred July 1, 2008.

Table 17. Summary of performance of entries in the Virginia Tech Wheat Test, 2008 harvest.

Line	Yield (Bu/a) (7)		Test Weight (Lb/bu) (7)		Date Headed (Mar31+) (4)		Height (In) (4)		Lodging (0-9) (6)		Powdery Mildew (0-9) (3)		Leaf Rust (0-9) (4)		Barley Yellow Dwarf Virus (0-9) (1)		S. nodorum Leaf Blotch (0-9) (1)		Early Height (In) (2)		Hessian Fly Resistance (Biotype)[1]	Awns[2]
VA03W-409	97	+	57.3	-	29		35	-	1	-	0	-	0	-	2	-	0	-	11			AL
USG 3555 (D)	96	+	57.8	-	27	-	33	-	3		1	-	4	+	2	-	3	+	14	+		AL
Branson(D)	95	+	57.3	-	28	-	36		2	-	1	-	2	-	2	-	0	-	10	-	B	AL
VA05W-139	95	+	58.6	+	30	+	35	-	2	-	2		2	-	3		2		11			TA
VA04W-306	94	+	57.6	-	27	-	35	-	4	+	0	-	3		3		2		12	+		TA
VA05W-258	94	+	57.7	-	29		38	+	2	-	3	+	3		4	+	2		13	+		TA
VA05W-414	94	+	58.0		30	+	37	+	3		1	-	3		2	-	1	-	11			AL
Pioneer 26R15(D)	93	+	57.4	-	28	-	36		3		1	-	2	-	4	+	2		11		B	A
SS 560(RT)	93	+	57.7	-	29		36		4	+	2		4	+	4	+	3	+	12	+		TA
VA03W-412	93	+	59.3	+	28	-	36		2	-	1	-	3		5	+	2		12	+		AL
SS 548(DE)	93	+	58.8	+	28	-	37	+	2	-	3	+	3		3		4	+	12	+		TA
VA03W-434	92	+	57.5	-	29		32	-	1	-	0	-	3		2	-	0	-	11			AL
USG 3665(D)	92	+	58.3		28	-	38	+	1	-	2		2	-	2	-	3	+	11		B	TA
VA05W-151	92	+	60.2	+	27	-	35	-	3		0	-	5	+	2	-	2		13	+		TA
VA06W-423	92	+	57.3	-	31	+	37	+	3		1	-	2	-	4	+	1	-	12	+		AL
USG 3725(D)	92	+	56.5	-	29		38	+	2	-	4	+	3		3		2		12	+		TA
VA01W-205	91	+	58.5		28	-	33	-	2	-	2		0	-	2	-	1	-	12	+		AL
VA05W-78	91	+	58.2		28	-	34	-	3		1	-	3		3		0	-	11			TA
VA05W-251	91	+	57.6	-	28	-	35	-	3		2		0	-	2	-	1	-	12	+		TA
VA06W-93	91	+	59.0	+	30	+	33	-	2	-	4	+	2	-	2	-	0	-	10	-		AL
VA06W-215	91	+	57.0	-	29		37	+	1	-	1	-	0	-	2	-	1	-	12	+		AL
VA06W-600	91	+	58.6	+	30	+	37	+	3		4	+	5	+	3		1	-	9	-		TA
SS 8641(R)	91	+	58.9	+	29		38	+	2	-	0	-	0	-	4	+	1	-	13	+		TA
SS-MPV 57(RT)	90		57.8	-	29		38	+	2	-	3	+	4	+	5	+	4	+	12	+		TA
Tribute(D)	90		61.2	+	28	-	35	-	3		1	-	1	-	3		0	-	10	-		TA
VA04W-90	90		58.8	+	28	-	37	+	2	-	1	-	3		3		3	+	13	+		AL
VA05W-168	90		61.3	+	27	-	34	-	2	-	1	-	0	-	2	-	0	-	11			TA
Vigoro V9510(D)	90		57.8	-	28	-	36		2	-	2		4	+	3		3	+	11			A
VA06W-6	90		59.4	+	29		31	-	5	+	0	-	0	-	3		1	-	9	-		A
USG 3342(D)	89		57.6	-	27	-	34	-	2	-	1	-	1	-	3		2		14	+		A

Table 17. Summary of performance of entries in the Virginia Tech Wheat Test, 2008 harvest, continued.

Line	Yield (Bu/a)		Test Weight (Lb/bu)		Date Headed (Mar31+)		Height (In)		Lodging (0-9)		Powdery Mildew (0-9)		Leaf Rust (0-9)		Barley Yellow Dwarf Virus (0-9)		S. nodorum Leaf Blotch (0-9)		Early Height (In)		Hessian Fly Resistance (Biotype)[1]	Awns[2]
	(7)		(7)		(4)		(4)		(6)		(3)		(4)		(1)		(1)		(2)			
Dominion(D)	89		58.9	+	29		33	-	3		0	-	3		3		1	-	11			AL
Pioneer 26R12(D)	89		59.1	+	30	+	37	+	2	-	2		3		3		1	-	10	-		A
Pioneer 26R31(D)	89		57.8	-	27	-	33	-	3		0	-	2	-	4	+	3	+	13	+		AL
SS 520(RT)	89		57.3	-	26	-	38	+	4	+	1	-	3		4	+	2		14	+		TA
Chesapeake(RT)	89		59.6	+	28	-	35	-	4	+	1	-	4	+	2	-	2		12	+		TA
VA03W-235	89		58.9	+	30	+	37	+	3		1	-	5	+	2	-	2		11			TA
VA03W-310	89		56.5	-	27	-	35	-	1	-	1	-	1	-	2	-	0	-	14	+		AL
VA04W-259	89		57.7	-	30	+	34	-	1	-	1	-	1	-	3		0	-	12	+		AL
VA06W-194	89		58.0		28	-	35	-	2	-	2		1	-	4	+	2		11			TA
VA06W-392	89		58.0		29		35	-	5	+	3	+	0	-	3		0	-	10	-		TA
Progeny 117(D)	89		58.1		27	-	38	+	4	+	4	+	3		3		2		13	+		AL
SS 8309(RT)	88		58.0		30	+	38	+	5	+	2		3		2	-	2		9	-		TA
Jamestown	88		59.8	+	26	-	35	-	3		1	-	2	-	1	-	3	+	14	+	B	A
Red Ruby(RT)	88		57.8	-	29		38	+	3		1	-	7	+	3		1	-	11			A
VA04W-230	88		57.9		28	-	35	-	3		4	+	3		3		3	+	12	+		AL
VA05W-250	88		56.8	-	31	+	36		3		2		0	-	4	+	0	-	11			TA
VA05W-257	88		56.6	-	30	+	34	-	2	-	3	+	4	+	2	-	1	-	11			TA
VA06W-256	88		58.1		28	-	37	+	3		1	-	0	-	5	+	2		11			TA
VA04W-495	88		58.5		28	-	37	+	3		2		5	+	3		2		12	+		TA
Progeny 185(D)	88		57.7	-	28	-	38	+	1	-	4	+	3		3		1	-	12	+		AL
Progeny 122(D)	88		57.6	-	31	+	38	+	3		2		5	+	2	-	0	-	9	-	B	TA
SS 8302(RT)	87		58.5		30	+	39	+	3		5	+	3		4	+	0	-	12	+	B	A
Sisson	87		57.7	-	28	-	35	-	4	+	2		8	+	2	-	3	+	12	+		AL
Pioneer 26R24(D)	87		57.6	-	27	-	38	+	4	+	3	+	2	-	3		4	+	13	+		TA
Panola(D)	87		56.8	-	27	-	37	+	4	+	2		4	+	4	+	4	+	12	+		A
COKER 9553(D)	87		59.8	+	26	-	37	+	2	-	1	-	2	-	2	-	1	-	13	+		A
VA06W-237	87		57.3	-	29		35	-	3		2		0	-	2	-	2		12	+		TA
VA05W-641	87		58.4		28	-	37	+	3		0	-	3		3		3	+	13	+		AL
VA06W-608	87		57.8	-	28	-	34	-	4	+	0	-	1	-	3		2		10	-		AL
VA04W-592	86		57.6	-	30	+	38	+	1	-	1	-	1	-	3		1	-	10	-		AL

Table 17. Summary of performance of entries in the Virginia Tech Wheat Test, 2008 harvest, continued.

Line	Yield (Bu/a) (7)		Test Weight (Lb/bu) (7)		Date Headed (Mar31+) (4)		Height (In) (4)		Lodging (0-9) (6)		Powdery Mildew (0-9) (3)		Leaf Rust (0-9) (4)		Barley Yellow Dwarf Virus (0-9) (1)		S. nodorum Leaf Blotch (0-9) (1)		Early Height (In) (2)		Hessian Fly Resistance (Biotype)[1]	Awns[2]
VA05W-436	86		58.1		30	+	36		1	-	4	+	0	-	5	+	1	-	11			A
Vigoro V9713(D)	86		57.6	-	30	+	35	-	5	+	2		4	+	4	+	2		11			A
VA03W-509	86		58.3		28	-	34	-	2	-	1	-	2	-	3		2		11		B	AL
VA05W-376	86		58.6	+	30	+	37	+	2	-	2		0	-	4	+	0	-	11			AL
SS 8404(RT)	85	-	59.4	+	28	-	33	-	3		3	+	4	+	2	-	1	-	12	+		A
Featherstone 176(RT)	85	-	58.0		27	-	37	+	0	-	1	-	4	+	2	-	3	+	12	+		TA
Pioneer 26R87(D)	85	-	60.7	+	26	-	35	-	4	+	2		1	-	4	+	3	+	14	+		A
VA05W-22	85	-	57.4	-	31	+	36		3		0	-	2	-	3		0	-	10	-		AL
VA04W-360	85	-	59.0	+	28	-	37	+	4	+	1	-	4	+	2	-	2		11			AL
COKER 9804(D)	85	-	57.5	-	27	-	37	+	2	-	1	-	4	+	4	+	4	+	12	+		A
USG 3592(D)	84	-	58.2		29		38	+	2	-	2		0	-	3		2		13	+		TA
VA05W-108	84	-	57.1	-	30	+	35	-	3		2		1	-	3		2		11			AL
VA05W-125	84	-	58.4		27	-	35	-	2	-	0	-	5	+	3		2		12	+		TA
VA05W-668	84	-	59.5	+	30	+	36		3		5	+	4	+	2	-	0	-	9	-		TA
Oglethorpe(D)	84	-	58.0		25	-	34	-	5	+	4	+	1	-	4	+	4	+	15	+	B	TA
VA06W-112	84	-	57.7	-	29		34	-	2	-	2		0	-	4	+	1	-	10	-		AL
Progeny 166(D)	84	-	57.0	-	29		40	+	2	-	7	+	1	-	5	+	2		10	-	B	AL
VA05W-101	83	-	56.3	-	30	+	36		3		2		4	+	4	+	4	+	12	+		TA
Progeny 127(D)	83	-	57.3	-	31	+	38	+	1	-	4	+	4	+	3		0	-	9	-		AL
Renwood 3633(D)	83	-	58.0		28	-	38	+	2	-	4	+	2	-	4	+	3	+	11		B	TA
USG 3209(D)	82	-	57.1	-	27	-	35	-	2	-	2		7	+	3		5	+	13	+	B	TA
McCormick	82	-	60.2	+	29		34	-	3		0	-	7	+	3		1	-	10	-		TA
W-1377(D)	82	-	59.6	+	31	+	38	+	1	-	5	+	4	+	2	-	0	-	9	-	B	TA
VA05W-777	82	-	59.5	+	30	+	35	-	3		5	+	4	+	3		0	-	9	-	B	TA
COKER 9436(D)	81	-	56.0	-	33	+	35	-	2	-	2		2	-	3		1	-	11		B	AL
VA04W-571	81	-	59.6	+	31	+	36		2	-	5	+	5	+	2	-	0	-	8	-		TA
VA05W-686	81	-	59.6	+	31	+	37	+	2	-	5	+	4	+	2	-	1	-	9	-	B	TA
VA06W-627	81	-	57.7	-	32	+	35	-	2	-	3	+	0	-	3		1	-	9	-	B	A
Magnolia(D)	80	-	57.2	-	30	+	40	+	4	+	4	+	2	-	4	+	3	+	12	+	B	A
Progeny 145(D)	80	-	57.4	-	27	-	41	+	2	-	6	+	1	-	5	+	3	+	12	+	B	AL

Table 17. Summary of performance of entries in the Virginia Tech Wheat Test, 2008 harvest, continued.

Line	Yield (Bu/a) (7)		Test Weight (Lb/bu) (7)		Date Headed (Mar31+) (4)		Height (In) (4)		Lodging (0-9) (6)		Powdery Mildew (0-9) (3)		Leaf Rust (0-9) (4)		Barley Yellow Dwarf Virus (0-9) (1)		S. nodorum Leaf Blotch (0-9) (1)	Early Height (In) (2)		Hessian Fly Resistance (Biotype)[1]	Awns[2]
Massey	72	-	57.2	-	28	-	40	+	5	+	1	-	8	+	5	+	2	13	+	B	AL
Average	88		58.2		29		36		3		2		3		3		2	11			
LSD (0.05)	3		0.4		1		1		1		1		1		1		1	1			
C.V.	7		1.2		3		4		---		---		---		---		---	11			

Released cultivars are shown in bold print.

The number in parentheses below column headings indicates the number of locations on which data are based.

Varieties are ordered by descending yield averages. A plus or minus sign indicates a performance significantly above or below the test avera

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

[1]Seedlings of all lines were tested over two years for resistance to biotype B of Hessian Fly. Letter in column indicates varietal resistance. Lines lacking letter were susceptible.

[2]A=awned, AL=awnletted, TA=tip awned

Table 18. Two year average summary of performance of entries in the Virginia Tech Wheat Tests, 2007 and 2008 harvests.

Line	Yield (Bu/a) (15)		Test Weight (Lb/bu) (15)		Date Headed (Mar31+) (8)		Height (In) (8)		Lodging (0-9) (10)		Powdery Mildew (0-9) (6)		Leaf Rust (0-9) (8)		Barley Yellow Dwarf Virus (0-9) (6)		*S. nodorum* Leaf Blotch (0-9) (1)		Early Height (In) (2)		Spring Freeze (0-9) (2)		Hessian Fly Resistance (Biotypes)
VA03W-409	93	+	58.0	-	33	+	33	-	1	-	0	-	0	-	1	-	0	-	11	-	1	-	C
VA05W-258	93	+	58.4	-	31		36	+	3	+	2	+	2	-	2		2		13	+	2		C
USG 3665	92	+	58.9	-	31		36	+	1	-	1		2	-	1	-	3	+	11	-	2		BCL
VA05W-414	92	+	58.8	-	33	+	35	+	3	+	0	-	3		1	-	1	-	11	-	1	-	
USG 3555	91	+	58.5	-	30	-	31	-	2		1		4	+	1	-	3	+	14	+	2		
Branson	91	+	58.1	-	31		34		1	-	1		2	-	1	-	0	-	10	-	1	-	B
VA04W-306	90	+	58.8	-	29	-	33	-	2		0	-	3		1	-	2		12		3	+	C
VA03W-412	89	+	60.1	+	31		35	+	1	-	1		3		3	+	2		12		2		
VA05W-78	89	+	59.0		30	-	32	-	2		1		2	-	2		0	-	11	-	2		
VA01W-205	88	+	59.3		31		31	-	2		1		0	-	1	-	1	-	12		1	-	
Pioneer 26R15	88	+	57.9	-	32	+	35	+	1	-	1		1	-	2		2		11	-	1	-	B
SS 560	88	+	58.5	-	32	+	34		1	-	1		4	+	3	+	3	+	12		2		
VA04W-259	88	+	59.0		33	+	33	-	2		0	-	1	-	2		0	-	12		2		
VA05W-151	88	+	60.8	+	29	-	33	-	4	+	0	-	5	+	2		2		13	+	3	+	
VA05W-257	88	+	57.6	-	32	+	34		2		2	+	3		1	-	1	-	11	-	1	-	
Tribute	87		61.8	+	31		33	-	2		0	-	1	-	2		0	-	10	-	2		
VA03W-235	87		59.6	+	33	+	36	+	3	+	1		4	+	1	-	2		11	-	2		
VA03W-434	87		58.3	-	32	+	30	-	1	-	0	-	2	-	2		0	-	11	-	2		
VA03W-310	87		57.4	-	29	-	33	-	2		1		0	-	1	-	0	-	14	+	2		C
VA05W-250	87		58.0	-	33	+	35	+	3	+	1		0	-	2		0	-	11	-	2		BC
USG 3342	86		59.0		30	-	32	-	2		0	-	1	-	2		2		14	+	3	+	BC
SS 8309	86		59.1		33	+	36	+	1	-	1		3		2		2		9	-	1	-	
SS-MPV 57	86		58.4	-	32	+	36	+	3	+	2	+	4	+	3	+	4	+	12		4	+	
VA04W-230	86		58.8	-	30	-	33	-	2		2	+	3		2		3	+	12		3	+	
VA05W-168	86		62.0	+	30	-	32	-	3	+	1		0	-	2		0	-	11	-	2		C
VA05W-251	86		58.5	-	30	-	33	-	3	+	1		0	-	2		1	-	12		3	+	
Pioneer 26R12	85		60.1	+	32	+	35	+	1	-	1		3		2		1	-	10	-	2		
Vigoro V9510	85		58.8	-	31		34		3	+	1		4	+	2		3	+	11	-	3	+	
SS 8302	85		59.6	+	33	+	36	+	1	-	3	+	3		2		0	-	12		3	+	B

Table 18. Two year average summary of performance of entries in the Virginia Tech Wheat Tests, 2007 and 2008 harvests, continued.

Line	Yield (Bu/a) (15)		Test Weight (Lb/bu) (15)		Date Headed (Mar31+) (8)		Height (In) (8)		Lodging (0-9) (10)		Powdery Mildew (0-9) (6)		Leaf Rust (0-9) (8)		Barley Yellow Dwarf Virus (0-9) (6)		*S. nodorum* Leaf Blotch (0-9) (1)		Early Height (In) (2)		Spring Freeze (0-9) (2)		Hessian Fly Resistance (Biotypes)
Chesapeake	85		60.2	+	31		33	-	3	+	0	-	4	+	2		2		12		2		
VA04W-90	85		59.7	+	31		34		2		0	-	3		2		3	+	13	+	3	+	
VA04W-592	85		58.7	-	33	+	37	+	3	+	1		1	-	2		1	-	10	-	1	-	
VA05W-436	85		59.0		32	+	34		2		3	+	0	-	2		1	-	11	-	1	-	
Dominion	84		59.4		31		32	-	2		0	-	3		2		1	-	11	-	1	-	
Sisson	84		58.7	-	31		33	-	3	+	1		7	+	2		3	+	12		4	+	
Pioneer 26R24	84		58.9	-	30	-	35	+	2		1		2	-	2		4	+	13	+	3	+	
Red Ruby	84		58.8	-	32	+	36	+	1	-	1		6	+	2		1	-	11	-	2		
USG 3209	83		58.3	-	30	-	32	-	4	+	1		6	+	1	-	5	+	13	+	3	+	BC
SS 520	83		58.4	-	28	-	35	+	2		1		3		3	+	2		14	+	4	+	
Featherstone 176	83		58.9	-	29	-	35	+	3	+	0	-	4	+	2		3	+	12		3	+	
Panola	83		58.0	-	30	-	35	+	2		1		3		2		4	+	12		2		
VA05W-125	83		59.3		29	-	33	-	2		0	-	4	+	2		2		12		2		
Vigoro V9713	83		58.9	-	33	+	34		2		2	+	4	+	2		2		11	-	1	-	
Pioneer 26R31	82	-	58.8	-	30	-	30	-	1	-	0	-	2	-	3	+	3	+	13	+	4	+	
SS 8404	82	-	60.4	+	31		31	-	0	-	2	+	4	+	1	-	1	-	12		4	+	
Jamestown	82	-	60.7	+	28	-	33	-	1	-	1		2	-	1	-	3	+	14	+	3	+	BC
USG 3592	82	-	59.2		31		36	+	4	+	2	+	0	-	2		2		13	+	3	+	BC
W-1377	82	-	60.4	+	33	+	37	+	2		4	+	4	+	1	-	0	-	9	-	1	-	B
Coker 9553	82	-	60.6	+	28	-	35	+	1	-	1		2	-	2		1	-	13	+	2		
VA05W-108	82	-	57.9	-	33	+	33	-	4	+	1		1	-	2		2		11	-	2		
VA04W-571	82	-	60.5	+	34	+	34		2		3	+	4	+	1	-	0	-	8	-	1	-	B
VA05W-668	82	-	60.2	+	33	+	34		2		3	+	4	+	1	-	0	-	9	-	1	-	B
McCormick	80	-	61.0	+	31		32	-	2		0	-	7	+	2		1	-	10	-	2		
Magnolia	80	-	58.6	-	31		38	+	0	-	3	+	2	-	2		3	+	12		2		B
Coker 9436	79	-	57.1	-	35	+	33	-	2		2	+	2	-	2		1	-	11	-	2		BC
Pioneer 26R87	78	-	61.5	+	28	-	33	-	2		1		1	-	2		3	+	14	+	5	+	
Oglethorpe	78	-	58.9	-	27	-	32	-	3	+	3	+	1	-	2		4	+	15	+	7	+	BCL

Table 18. Two year average summary of performance of entries in the Virginia Tech Wheat Tests, 2007 and 2008 harvests, continued.

Line	Yield (Bu/a) (15)		Test Weight (Lb/bu) (15)		Date Headed (Mar31+) (8)		Height (In) (8)		Lodging (0-9) (10)		Powdery Mildew (0-9) (6)	Leaf Rust (0-9) (8)		Barley Yellow Dwarf Virus (0-9) (6)		*S. nodorum* Leaf Blotch (0-9) (1)	Early Height (In) (2)		Spring Freeze (0-9) (2)		Hessian Fly Resistance (Biotypes)
Massey	71	-	58.7	-	30	-	37	+	4	+	1	7	+	3	+	2	13	+	3	+	B
Average	85		59.2		31		34		2		1	3		2		2	12		2		
LSD (0.05)	3		0.3		1		1		1		1	1		1		1	1		1		
C.V.	8		1.4		3		4		---		---	---		---		---	---		---		

Released cultivars are shown in bold print.

The number in parentheses below column headings indicates the number of location-years on which data are based.

Varieties are ordered by descending yield averages. 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, freeze or lodging, where 0 = highly resistant and 9 = highly susceptible.

Seedlings of all lines were tested over two years for resistance to three biotypes of Hessian Fly, including B, C, and L. Letters in column indicate varietal resistance to specified biotype(s). Lines lacking letters were susceptible to all biotypes.

Table 19. Three year average summary of performance of entries in the Virginia Tech Wheat Tests, 2006, 2007, and 2008 harvests.

Line	Yield (Bu/a)		Test Weight (Lb/bu)		Date Headed (Mar31+)		Height (In)		Lodging (0-9)		Powdery Mildew (0-9)		Leaf Rust (0-9)		Barley Yellow Dwarf Virus (0-9)		*S. nodorum* Leaf Blotch (0-9)		Early Height (In)		Spring Freeze (0-9)	
	(23)		(23)		(12)		(12)		(15)		(7)		(12)		(7)		(1)		(4)		(2)	
VA04W-306	95	+	59.2	-	28	-	33		2	+	0	-	3		1	-	2		11		3	+
VA03W-409	94	+	58.2	-	31	+	33		1		0	-	0	-	1	-	0	-	10	-	1	-
USG 3665	92	+	59.2	-	29		35	+	1		1		1	-	1	-	3	+	10	-	2	
VA03W-412	92	+	60.3	+	29		34	+	1		1		3		3	+	2		11		2	
VA04W-259	92	+	59.4		31	+	32	-	2	+	1		1	-	2		0	-	11		2	
USG 3555	91	+	58.6	-	28	-	31	-	1		1		4	+	1	-	3	+	12	+	2	
VA01W-205	91	+	59.8	+	29		31	-	1		1		0	-	1	-	1	-	11		1	-
Pioneer 26R15	90	+	58.3	-	30	+	34	+	1		1		1	-	2		2		10	-	1	-
SS 560	90	+	58.8	-	30	+	33		1		2	+	4	+	2		3	+	10	-	2	
VA03W-310	90	+	57.7	-	27	-	33		2	+	1		1	-	2		0	-	12	+	2	
Pioneer 26R24	89	+	59.3		28	-	35	+	1		2	+	2	-	2		4	+	11		3	+
SS-MPV 57	89	+	58.7	-	30	+	35	+	2	+	2	+	4	+	3	+	4	+	11		4	+
VA03W-235	89	+	59.7	+	31	+	35	+	2	+	1		4	+	1	-	2		10	-	2	
VA03W-434	89	+	58.8	-	30	+	29	-	1		0	-	2	-	2		0	-	10	-	2	
Chesapeake	88		60.3	+	29		33		2	+	0	-	4	+	2		2		11		2	
Vigoro V9510	88		59.0	-	29		34	+	2	+	1		4	+	2		3	+	10	-	3	+
Pioneer 26R12	88		60.2	+	30	+	34	+	0	-	1		2	-	2		1	-	10	-	2	
SS 8302	88		59.8	+	30	+	36	+	1		3	+	3		2		0	-	11		3	+
SS 8309	88		59.3		31	+	35	+	1		1		3		2		2		9	-	1	-
Tribute	88		61.8	+	29		32	-	1		0	-	1	-	2		0	-	9	-	2	
VA04W-90	88		59.8	+	29		34	+	1		0	-	3		2		3	+	11		3	+
Dominion	87		59.6	+	29		31	-	1		0	-	2	-	2		1	-	10	-	1	-
Sisson	87		59.1	-	28	-	32	-	2	+	1		7	+	2		3	+	11		4	+
USG 3209	87		58.7	-	28	-	32	-	3	+	2	+	6	+	1	-	5	+	12	+	3	+
Featherstone 176	86		59.1	-	27	-	34	+	2	+	0	-	4	+	2		3	+	11		3	+
Panola	86		58.2	-	28	-	34	+	1		1		3		2		4	+	11		2	
Pioneer 26R31	86		58.9	-	28	-	30	-	0	-	0	-	2	-	3	+	3	+	11		4	+
Red Ruby	86		59.0	-	31	+	36	+	1		1		6	+	2		1	-	10	-	2	

Table 19. Three year average summary of performance of entries in the Virginia Tech Wheat Tests, 2006, 2007, and 2008 harvests, continued.

Line	Yield (Bu/a)		Test Weight (Lb/bu)		Date Headed (Mar31+)		Height (In)		Lodging (0-9)		Powdery Mildew (0-9)		Leaf Rust (0-9)		Barley Yellow Dwarf Virus (0-9)		*S. nodorum* Leaf Blotch (0-9)		Early Height (In)		Spring Freeze (0-9)	
	(23)		(23)		(12)		(12)		(15)		(7)		(12)		(7)		(1)		(4)		(2)	
SS 520	86		58.6	-	26	-	35	+	1		1		2	-	3	+	2		12	+	4	+
SS 8404	86		60.6	+	29		31	-	0	-	3	+	3		1	-	1	-	11		4	+
USG 3342	86		59.0	-	28	-	31	-	1		0	-	2	-	2		2		12	+	3	+
USG 3592	85	-	59.5		29		36	+	3	+	2	+	0	-	2		2		11		3	+
W-1377	85	-	60.5	+	31	+	36	+	1		4	+	4	+	1	-	0	-	8	-	1	-
Coker 9553	84	-	60.6	+	27	-	34	+	1		1		2	-	2		1	-	11		2	
Jamestown	84	-	60.7	+	26	-	32	-	1		1		2	-	1	-	3	+	12	+	3	+
Coker 9436	83	-	57.3	-	33	+	32	-	2	+	2	+	2	-	2		1	-	10	-	2	
McCormick	82	-	61.1	+	29		31	-	1		0	-	7	+	2		1	-	9	-	2	
Pioneer 26R87	81	-	61.6	+	26	-	33		1		1		1	-	2		3	+	12	+	5	+
Massey	74	-	59.0	-	29		38	+	3	+	1		7	+	3	+	2		12	+	3	+
Average	87		59.4		29		33		1		1		3		2		2		11		2	
LSD (0.05)	2		0.2		1		1		1		1		1		1		1		1		1	
C.V.	8		1.3		3		4		---		---		---		---		---		---		---	

Released cultivars are shown in bold print.

The number in parentheses below column headings indicates the number of location-years on which data are based.

Varieties are ordered by descending yield averages. 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, freeze or lodging, where 0 = highly resistant and 9 = highly susceptible.

Table 20. Summary of performance of entries in the Virginia Tech Wheat Test planted conventionally-tilled at Warsaw, 2008 harvest.

Line	Yield (Bu/a)		Test Weight (Lb/bu)		Date Headed (Mar31+)		Height (In)		Lodging (0-9)		Powdery Mildew (0-9)		Leaf Rust (0-9)		Early Height (In)	
VA05W-258	122	+	58.0		21	-	36		4		3		4		15	+
VA03W-409	117	+	57.2	-	23	+	33	-	4		1	-	0	-	13	
VA05W-139	115	+	59.3	+	23	+	34		2	-	2		1	-	13	
VA06W-215	115	+	57.8		22		37	+	4		3		0	-	14	
Dominion(D)	114	+	59.4	+	20	-	32	-	4		0	-	2		13	
VA05W-414	113	+	58.6		24	+	35		6	+	1	-	3		12	
SS-MPV 57(RT)	112	+	58.4		21	-	36		5		5	+	6	+	15	+
SS 560(RT)	112	+	58.0		22		35		6	+	4		6	+	14	
Vigoro V9510(D)	112	+	58.0		22		35		5		4		5	+	13	
USG 3555 (D)	111	+	57.2	-	19	-	32	-	6	+	3		4		16	+
VA03W-412	111	+	60.2	+	21	-	36		3		2		4		13	
Branson(D)	111	+	57.7		21	-	36		4		3		2		10	-
VA05W-151	110		59.8	+	20	-	33	-	6	+	1	-	7	+	16	+
VA06W-194	110		58.3		21	-	34		5		2		1	-	12	
SS 548(DE)	110		59.3	+	21	-	36		4		5	+	2		13	
SS 8641(R)	110		59.0		20	-	38	+	4		0	-	0	-	16	+
VA04W-306	109		58.1		20	-	34		4		0	-	3		12	
VA05W-257	109		57.3		24	+	33	-	4		3		4		12	
VA03W-310	108		57.3		20	-	34		5		2		1	-	16	+
VA04W-259	108		58.5		25	+	33	-	6	+	1	-	1	-	14	
VA06W-6	108		59.0		24	+	30	-	5		1	-	0	-	10	-
Tribute(D)	107		61.1	+	22		33	-	3		1	-	2		11	-
VA05W-125	106		59.0		20	-	35		5		1	-	3		13	
VA05W-168	106		61.4	+	21	-	33	-	4		4		1	-	12	
USG 3725(D)	106		57.3		24	+	36		5		6	+	3		12	
VA03W-434	105		58.8		23	+	30	-	2	-	0	-	1	-	12	
VA04W-90	105		59.4	+	21	-	36		3		2		4		14	
USG 3665(D)	105		57.9		21	-	39	+	4		3		2		13	
Panola(D)	105		57.2	-	20	-	37	+	4		2		3		14	
VA05W-78	105		58.0		21	-	31	-	6	+	2		6	+	12	
VA05W-251	105		57.8		20	-	34		5		4		0	-	14	
Sisson	104		58.8		21	-	34		5		4		9	+	14	
VA05W-641	104		58.7		20	-	36		3		1	-	3		15	+
VA06W-256	103		58.6		21	-	36		4		2		1	-	13	
VA06W-392	103		57.9		21	-	33	-	5		5	+	0	-	11	-
VA06W-423	103		57.6		25	+	36		6	+	3		3		12	
Pioneer 26R15(D)	102		57.3		21	-	35		2	-	2		2		12	
McCormick	102		60.2	+	23	+	33	-	4		1	-	9	+	11	-
VA03W-235	102		59.0		25	+	37	+	3		2		7	+	10	-
VA05W-376	102		58.3		25	+	36		6	+	5	+	0	-	12	
VA06W-237	102		58.8		21	-	34		5		2		0	-	15	+
VA06W-600	102		58.7		24	+	36		2	-	4		6	+	9	-
USG 3592(D)	100		58.6		21	-	36		7	+	3		0	-	15	+

Table 20. Summary of performance of entries in the Virginia Tech Wheat Test planted conventionally-tilled at Warsaw, 2008 harvest, continued.

Line	Yield (Bu/a)		Test Weight (Lb/bu)		Date Headed (Mar31+)		Height (In)		Lodging (0-9)		Powdery Mildew (0-9)		Leaf Rust (0-9)		Early Height (In)	
VA05W-250	100		57.5		25	+	35		5		5	+	1	-	13	
VA06W-112	100		58.3		21	-	31	-	7	+	3		1	-	11	-
VA04W-360	100		59.3	+	21	-	35		4		3		3		13	
SS 8309(RT)	99		58.0		25	+	37	+	3		4		4		10	-
Chesapeake(RT)	99		59.2	+	21	-	34		5		1	-	5	+	14	
VA03W-509	99		58.5		21	-	35		6	+	3		2		14	
VA06W-93	99		58.4		23	+	31	-	5		4		2		11	-
VA06W-608	99		58.1		21	-	32	-	5		1	-	1	-	11	-
Progeny 185(D)	99		58.0		22		37	+	2	-	6	+	3		13	
VA01W-205	98		58.6		21	-	31	-	5		3		1	-	14	
SS 520(RT)	98		58.0		19	-	36		5		3		2		16	+
VA05W-101	98		56.6	-	25	+	34		7	+	4		4		13	
Featherstone 176(RT)	97		57.7		19	-	35		5		2		4		14	
Pioneer 26R12(D)	96		58.7		24	+	36		1	-	2		3		11	-
Jamestown	96		59.4	+	18	-	34		5		3		2		16	+
Pioneer 26R87(D)	96		60.2	+	15	-	36		5		2		1	-	18	+
VA04W-495	96		58.4		22		35		4		5	+	6	+	13	
Progeny 122(D)	96		57.3		25	+	38	+	4		4		6	+	10	-
Pioneer 26R31(D)	95		57.4		20	-	31	-	2	-	1	-	1	-	15	+
Pioneer 26R24(D)	95		58.1		20	-	36		4		3		2		14	
Progeny 127(D)	95		57.0	-	26	+	37	+	3		4		5	+	11	-
VA04W-592	94		56.9	-	25	+	37	+	6	+	2		1	-	11	-
VA05W-436	94		57.8		25	+	34		4		6	+	1	-	13	
USG 3342(D)	93		56.3	-	20	-	34		7	+	2		1	-	16	+
VA05W-668	93		59.3	+	25	+	35		4		6	+	4		10	-
COKER 9804(D)	93		56.9	-	20	-	36		4		3		4		14	
SS 8404(RT)	92		59.1		21	-	32	-	1	-	4		4		14	
Red Ruby(RT)	92		57.2	-	23	+	36		3		2		8	+	12	
Oglethorpe(D)	92		57.6		15	-	34		6	+	4		2		17	+
VA05W-777	92		59.3	+	25	+	35		2	-	5	+	5	+	10	-
USG 3209(D)	90		56.8	-	19	-	32	-	5		3		8	+	15	+
VA04W-571	90		59.0		26	+	36		3		5	+	6	+	9	-
SS 8302(RT)	89		58.7		23	+	37	+	3		5	+	3		13	
Renwood 3633(D)	89		57.6		22		37	+	4		6	+	2		13	
VA04W-230	88		58.3		21	-	33	-	6	+	6	+	3		14	
VA05W-686	88		59.0		25	+	35		5		7	+	4		10	-
Progeny 117(D)	88		57.9		20	-	37	+	5		6	+	4		15	+
VA05W-108	87	-	57.2	-	25	+	34		5		3		1	-	12	
Magnolia(D)	87	-	57.3		24	+	39	+	1	-	6	+	2		15	+
Progeny 145(D)	87	-	57.8		21	-	39	+	3		8	+	1	-	13	
COKER 9436(D)	86	-	55.7	-	27	+	34		6	+	4		1	-	14	
COKER 9553(D)	86	-	58.5		19	-	37	+	3		2		2		15	+
VA05W-22	86	-	56.3	-	25	+	36		5		1	-	1	-	11	-

Table 20. Summary of performance of entries in the Virginia Tech Wheat Test planted conventionally-tilled at Warsaw, 2008 harvest, continued.

Line	Yield (Bu/a)		Test Weight (Lb/bu)		Date Headed (Mar31+)		Height (In)		Lodging (0-9)		Powdery Mildew (0-9)		Leaf Rust (0-9)		Early Height (In)	
Vigoro V9713(D)	84	-	57.3		24	+	34		3		4		6	+	12	
Massey	83	-	57.8		21	-	40	+	4		2		7	+	14	
VA06W-627	83	-	58.0		27	+	33	-	5		3		0	-	10	-
Progeny 166(D)	77	-	57.0	-	24	+	40	+	2	-	8	+	1	-	11	-
W-1377(D)	74	-	59.1		25	+	37	+	3		6	+	4		10	-
Average	99		58.2		22		35		4		3		3		13	
LSD (0.05)	12		1.0		1		2		2		2		2		2	
C.V.	9		1.2		3		4		---		---		---		11	

Released cultivars are shown in bold print.

Varieties are ordered by descending yield averages. 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, where 0 = highly resistant and 9 = highly susceptible.

Table 21. Summary of performance of entries in the Virginia Tech Wheat Test, Eastern Shore AREC, Painter, VA, 2008 harvest.

Line	Yield (Bu/a)		Test Weight (Lb/bu)		Lodging (0-9)		Powdery Mildew (0-9)		Leaf Rust (0-9)		*S. nodorum* Leaf Blotch (0-9)	
VA05W-250	88	+	59.2		2		1		0	-	0	-
VA05W-414	88	+	59.9		1		0		2		1	-
VA05W-436	87	+	60.5	+	0		1		0	-	1	-
VA01W-205	86		60.0		3	+	2		0	-	1	-
VA03W-412	86		60.3	+	1		0		4	+	2	
VA05W-78	86		60.0		2		3	+	1		0	-
VA03W-434	85		59.5		0		0		2		0	-
VA05W-257	85		58.8	-	0		2		3		1	-
VA05W-139	85		59.7		0		1		1		2	
VA05W-251	84		58.8	-	0		1		0	-	1	-
Branson(D)	84		58.6	-	1		1		2		0	-
Vigoro V9510(D)	84		59.4		1		1		4	+	3	+
VA03W-310	83		58.6	-	2		0		0	-	0	-
VA05W-258	83		58.5	-	1		2		2		2	
VA06W-392	83		60.0		0		1		0	-	0	-
SS 548(DE)	83		60.0		0		1		2		4	+
USG 3555 (D)	82		59.0		2		0		4	+	3	+
USG 3592(D)	82		60.2		4	+	1		0	-	2	
VA05W-151	82		61.0	+	2		0		6	+	2	
Vigoro V9713(D)	82		59.2		1		1		4	+	2	
VA06W-93	82		60.3	+	1		4	+	2		0	-
VA06W-215	82		59.2		1		0		0	-	1	-
VA06W-423	82		59.6		2		0		1		1	-
Dominion(D)	81		59.7		1		0		2		1	-
COKER 9436(D)	81		58.2	-	1		2		2		1	-
SS 8404(RT)	81		60.4	+	0		2		4	+	1	-
SS 560(RT)	81		58.8	-	0		0		4	+	3	+
Tribute(D)	81		61.4	+	0		1		1		0	-
VA04W-259	81		60.1		0		0		1		0	-
USG 3665(D)	81		59.6		1		0		1		3	+
VA04W-230	81		60.2		2		1		3		3	+
VA03W-509	81		60.1		1		1		1		2	
VA05W-22	81		58.9	-	1		0		1		0	-
VA06W-6	81		61.1	+	0		0		0	-	1	-
VA06W-256	81		60.5	+	2		0		0	-	2	
VA05W-777	81		60.4	+	1		4	+	4	+	0	-
VA06W-600	81		59.3		1		4	+	5	+	1	-
VA06W-627	81		60.0		1		2		0	-	1	-
USG 3725(D)	81		58.0	-	1		2		1		2	
Pioneer 26R12(D)	80		60.1		0		1		3		1	-
VA03W-409	80		59.2		0		0		0	-	0	-
Panola(D)	80		58.4	-	1		1		4	+	4	+
VA05W-108	80		59.3		2		1		0	-	2	

Table 21. Summary of performance of entries in the Virginia Tech Wheat Test, Eastern Shore AREC, Painter, VA, 2008 harvest, continued.

Line	Yield (Bu/a)		Test Weight (Lb/bu)		Lodging (0-9)		Powdery Mildew (0-9)		Leaf Rust (0-9)		*S. nodorum* Leaf Blotch (0-9)	
VA06W-194	80		59.4		2		0		0	-	2	
Progeny 122(D)	80		58.5	-	1		2		6	+	0	-
SS 8302(RT)	79		59.9		0		4	+	4	+	0	-
SS-MPV 57(RT)	79		58.5	-	1		3	+	4	+	4	+
Pioneer 26R24(D)	79		59.5		1		0		2		4	+
VA04W-571	79		60.1		0		3	+	5	+	0	-
VA05W-376	79		60.3	+	1		1		0	-	0	-
VA06W-112	79		59.9		2		0		0	-	1	-
USG 3342(D)	78		59.1		1		0		1		2	
Featherstone 176(RT	78		58.9	-	1		0		4	+	3	+
VA03W-235	78		60.5	+	1		0		5	+	2	
VA04W-90	78		60.1		0		0		4	+	3	+
VA04W-306	78		59.2		1		0		3		2	
VA04W-592	78		59.6		1		0		0	-	1	-
VA06W-237	78		59.3		2		0		0	-	2	
Jamestown	77		60.6	+	0		1		1		3	+
Pioneer 26R87(D)	77		61.1	+	0		1		1		3	+
VA04W-495	77		59.9		0		1		5	+	2	
VA05W-686	77		60.3	+	1		2		4	+	1	-
COKER 9804(D)	77		59.0		1		0		3		4	+
Progeny 185(D)	77		59.3		0		2		3		1	-
Pioneer 26R15(D)	76		58.7	-	0		0		1		2	
SS 520(RT)	76		59.4		0		1		1		2	
McCormick	76		60.7	+	2		1		8	+	1	-
Chesapeake(RT)	76		60.7	+	0		0		4	+	2	
COKER 9553(D)	76		60.6	+	0		0		2		1	-
VA05W-168	76		61.2	+	1		0		1		0	-
VA05W-668	76		60.5	+	1		3	+	4	+	0	-
VA04W-360	76		60.2		1		0		4	+	2	
VA05W-641	76		60.1		0		0		1		3	+
SS 8309(RT)	75		58.3	-	0		0		2		2	
Red Ruby(RT)	75		58.8	-	0		0		8	+	1	-
VA05W-125	75		60.2		1		0		5	+	2	
Magnolia(D)	75		59.9		0		1		1		3	+
VA06W-608	75		60.2		4	+	0		0	-	2	
Progeny 117(D)	75		59.2		1		1		2		2	
Pioneer 26R31(D)	74		58.6	-	1		0		2		3	+
Sisson	74		60.0		3	+	1		7	+	3	+
Progeny 127(D)	74		58.0	-	1		3	+	4	+	0	-
W-1377(D)	73		60.6	+	0		5	+	4	+	0	-
VA05W-101	72		59.2		3	+	0		1		4	+
Progeny 166(D)	72		59.0		1		6	+	0	-	2	
SS 8641(R)	72		60.3	+	1		0		0	-	1	-

Table 21. Summary of performance of entries in the Virginia Tech Wheat Test, Eastern Shore AREC, Painter, VA, 2008 harvest, continued.

Line	Yield (Bu/a)		Test Weight (Lb/bu)		Lodging (0-9)		Powdery Mildew (0-9)		Leaf Rust (0-9)		*S. nodorum* Leaf Blotch (0-9)	
Oglethorpe(D)	71	-	59.3		3	+	1		0	-	4	+
Progeny 145(D)	70	-	58.9	-	1		5	+	0	-	3	+
Renwood 3633(D)	70	-	58.9	-	0		2		2		3	+
USG 3209(D)	69	-	59.3		4	+	0		7	+	5	+
Massey	62	-	59.4		4	+	1		8	+	2	
Average	79		59.6		1		1		2		2	
LSD (0.05)	8		0.7		2		2		2		1	
C.V.	7		0.8		---		---		---		---	

Released cultivars are shown in bold print.

Varieties are ordered by descending yield averages. 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, where 0 = highly resistant and 9 = highly susceptible.

Table 22. Summary of performance of entries in the Virginia Tech Wheat Test, Northern Piedmont AREC, Orange, VA, 2008 harvest.

Line	Yield (Bu/a)		Test Weight (Lb/bu)		Date Headed (Mar31+)		Height (In)		Lodging (0-9)	
Branson(D)	118	+	56.6	-	31		38		0	
SS 548(DE)	117	+	58.0		31		40		1	
USG 3555 (D)	113		57.6		31		36	-	0	
VA06W-600	113		58.2		32	+	40		1	
Vigoro V9713(D)	112		57.7		33	+	38		0	
Sisson	111		57.4		30	-	37	-	0	
Pioneer 26R31(D)	110		57.8		30	-	36	-	0	
SS 520(RT)	110		57.1		30	-	40		0	
SS 560(RT)	110		56.3	-	32	+	39		0	
VA04W-230	110		57.8		31		38		0	
VA05W-139	110		57.9		32	+	37	-	0	
Progeny 166(D)	110		56.4	-	32	+	43	+	0	
Pioneer 26R12(D)	109		58.1		32	+	40		1	
Jamestown	109		59.4	+	29	-	39		0	
VA04W-306	109		57.1		30	-	37	-	1	
VA05W-258	109		56.9		32	+	41	+	2	
VA06W-423	109		57.6		33	+	40		2	
Progeny 185(D)	109		56.9		31		43	+	0	
Pioneer 26R15(D)	108		57.0		31		39		0	
Magnolia(D)	108		57.4		33	+	42	+	0	
VA04W-495	108		58.2		31		40		1	
VA03W-235	107		58.0		32	+	41	+	1	
VA03W-412	107		58.8	+	30	-	39		0	
VA05W-414	107		57.1		31		39		2	
VA03W-509	107		57.7		31		38		1	
VA06W-215	107		56.5	-	31		41	+	3	+
VA03W-409	106		56.4	-	32	+	38		1	
COKER 9553(D)	106		59.2	+	29	-	40		0	
VA05W-151	106		59.8	+	31		38		2	
VA06W-6	106		59.0	+	31		33	-	0	
Progeny 117(D)	106		56.8		31		41	+	3	+
USG 3725(D)	106		55.7	-	31		41	+	0	
USG 3342(D)	105		57.4		31		36	-	1	
SS 8309(RT)	105		58.0		32	+	40		0	
VA03W-434	105		57.0		31		34	-	0	
VA03W-310	105		55.6	-	30	-	38		2	
VA05W-78	105		57.7		31		37	-	2	
VA05W-168	105		60.3	+	30	-	37	-	1	
VA06W-93	105		58.1		32	+	37	-	2	
VA04W-259	104		57.0		33	+	38		0	
USG 3665(D)	104		57.1		31		41	+	0	
VA05W-251	104		56.5	-	31		38		2	
COKER 9804(D)	104		57.4		30	-	40		3	+

Table 22. Summary of performance of entries in the Virginia Tech Wheat Test, Northern Piedmont AREC, Orange, VA, 2008 harvest, continued.

Line	Yield (Bu/a)		Test Weight (Lb/bu)		Date Headed (Mar31+)		Height (In)		Lodging (0-9)	
USG 3209(D)	103		57.7		31		39		3	+
Pioneer 26R24(D)	103		57.5		30	-	41	+	1	
Chesapeake(RT)	103		58.4		31		38		0	
Red Ruby(RT)	103		57.3		32	+	41	+	0	
Panola(D)	103		56.1	-	30	-	40		2	
VA05W-125	103		58.4		29	-	37	-	0	
Vigoro V9510(D)	103		56.7	-	30	-	38		3	+
Progeny 122(D)	103		57.2		32	+	40		2	
VA01W-205	102		57.7		32	+	35	-	2	
VA04W-90	101		57.4		31		39		0	
W-1377(D)	101		59.2	+	32	+	41	+	0	
VA05W-250	101		56.4	-	33	+	39		1	
VA05W-436	101		58.2		32	+	39		0	
Progeny 127(D)	101		56.5	-	33	+	41	+	1	
SS 8302(RT)	100		57.2		32	+	41	+	0	
Pioneer 26R87(D)	100		60.1	+	29	-	37	-	2	
VA05W-376	100		58.2		31		41	+	2	
VA05W-641	100		57.4		31		39		0	
Progeny 145(D)	100		57.0		30	-	43	+	0	
SS 8641(R)	100		57.1		32	+	41	+	1	
COKER 9436(D)	99		56.0	-	33	+	38		1	
McCormick	98		60.3	+	31		37	-	0	
Oglethorpe(D)	98		57.5		29	-	38		1	
VA05W-101	98		56.1	-	32	+	41	+	3	+
VA06W-112	98		56.9		33	+	37	-	2	
VA06W-194	98		56.9		32	+	38		0	
VA06W-256	98		57.5		31		40		4	+
VA06W-392	98		56.6	-	31		37	-	2	
SS 8404(RT)	97		58.7	+	31		36	-	0	
VA05W-22	97		57.3		33	+	38		1	
VA06W-608	97		57.9		31		38		2	
VA04W-571	96		58.9	+	32	+	39		1	
VA06W-627	96		57.4		33	+	39		3	+
Featherstone 176(RT)	95		57.4		30	-	40		2	
VA04W-592	95		56.5	-	32	+	43	+	0	
Dominion(D)	94		58.0		32	+	36	-	0	
VA05W-108	94		56.5	-	32	+	38		4	+
VA06W-237	94		56.1	-	31		39		2	
VA04W-360	94		57.8		31		40		1	
Renwood 3633(D)	94		57.4		30	-	41	+	0	
Tribute(D)	93		60.4	+	31		37	-	1	
USG 3592(D)	93		58.1		32	+	41	+	4	+
VA05W-777	93		59.0	+	32	+	39		2	

Table 22. Summary of performance of entries in the Virginia Tech Wheat Test, Northern Piedmont AREC, Orange, VA, 2008 harvest, continued.

Line	Yield (Bu/a)		Test Weight (Lb/bu)		Date Headed (Mar31+)		Height (In)		Lodging (0-9)	
SS-MPV 57(RT)	92		56.4	-	32	+	40		2	
VA05W-257	90	-	56.5	-	32	+	36	-	1	
VA05W-686	90	-	59.2	+	32	+	41	+	2	
VA05W-668	88	-	58.4		32	+	39		1	
Massey	79	-	56.7	-	32	+	42	+	4	+
Average	102		57.6		31		39		1	
LSD (0.05)	12		0.9		1		2		2	
C.V.	8		1.1		3		4		---	

Released cultivars are shown in bold print.

Varieties are ordered by descending yield averages. 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, where 0 = highly resistant and 9 = highly susceptible.

Table 23. Summary of performance of entries in the Virginia Tech Wheat Test planted at Shenandoah Valley at C. E. Martin & Sons Farm, Stuarts Draft, VA, 2008 harvest.

Line	Yield (Bu/a)		Test Weight (Lb/bu)		Lodging (0-9)	
VA03W-409	99	+	56.8		2	-
VA05W-414	98	+	57.2		8	+
Red Ruby(RT)	96	+	56.9		5	
VA03W-434	95	+	56.6		2	-
Pioneer 26R15(D)	93	+	55.6		5	
Pioneer 26R31(D)	93	+	57.8		4	
USG 3555 (D)	93	+	57.1		3	
USG 3665(D)	93	+	57.0		3	
Branson(D)	93	+	56.3		5	
SS 560(RT)	92		57.2		2	-
VA03W-412	92		57.8		4	
VA06W-93	92		59.1	+	3	
SS 8641(R)	92		58.0		5	
Renwood 3633(D)	92		57.5		3	
USG 3342(D)	91		57.4		7	
VA05W-78	91		57.2		5	
VA05W-139	91		57.6		1	-
SS 8302(RT)	90		57.3		4	
VA04W-306	90		56.0		8	+
Oglethorpe(D)	90		56.2		8	+
VA01W-205	89		57.4		4	
Featherstone 176(RT)	89		57.6		6	
VA05W-258	89		57.6		5	
Vigoro V9713(D)	89		56.9		4	
VA06W-423	89		55.9		8	+
VA06W-600	89		58.0		2	-
SS 520(RT)	88		55.0	-	8	+
SS-MPV 57(RT)	88		57.6		6	
W-1377(D)	88		58.6	+	4	
VA05W-108	88		56.4		8	+
VA05W-257	88		56.4		3	
VA05W-22	88		57.7		1	-
VA06W-215	88		54.9	-	6	
COKER 9804(D)	88		57.1		3	
Progeny 117(D)	88		56.1		8	+
Progeny 122(D)	88		56.8		3	
Tribute(D)	87		60.4	+	2	-
Chesapeake(RT)	87		59.1	+	7	
COKER 9553(D)	87		60.1	+	2	-
VA05W-151	87		58.5	+	9	+
VA05W-168	87		60.1	+	5	
VA06W-256	87		54.7	-	9	+

Table 23. Summary of performance of entries in the Virginia Tech Wheat Test planted at Shenandoah Valley at C. E. Martin & Sons Farm, Stuarts Draft, VA, 2008 harvest, continued.

Line	Yield (Bu/a)		Test Weight (Lb/bu)		Lodging (0-9)	
Progeny 166(D)	87		55.1	-	4	
Progeny 185(D)	87		56.9		3	
Pioneer 26R12(D)	86		58.8	+	3	
SS 8404(RT)	86		59.2	+	2	-
Sisson	86		54.8	-	8	+
VA04W-90	86		57.8		8	+
Pioneer 26R87(D)	86		60.5	+	5	
VA05W-436	86		57.7		4	
VA05W-668	86		58.9	+	2	-
VA05W-686	86		59.5	+	3	
Dominion(D)	85		58.4	+	4	
VA05W-125	85		57.1		6	
VA06W-237	85		55.4	-	7	
VA05W-641	85		57.7		5	
SS 548(DE)	85		57.0		4	
USG 3725(D)	85		54.4	-	5	
Jamestown	84		58.3		4	
VA03W-310	84		54.8	-	5	
VA04W-230	84		56.4		7	
VA05W-251	84		56.7		6	
VA04W-360	84		58.1		6	
VA03W-235	83		56.7		8	+
VA04W-259	83		55.9		7	
Vigoro V9510(D)	83		57.2		7	
VA03W-509	83		57.5		4	
VA05W-376	83		57.6		4	
VA06W-608	83		54.9	-	7	
Panola(D)	82		54.2	-	5	
VA05W-101	82		54.6	-	6	
VA06W-6	82		58.5	+	1	-
VA06W-112	82		56.9		5	
VA05W-777	82		58.7	+	4	
USG 3209(D)	81		54.6	-	4	
VA05W-250	81		54.5	-	6	
VA06W-194	81		56.9		4	
Pioneer 26R24(D)	80		56.3		6	
VA04W-495	80		56.9		4	
Progeny 127(D)	80		56.4		2	-
SS 8309(RT)	79	-	56.4		5	
VA04W-592	79	-	56.9		6	
VA06W-627	79	-	55.8		4	
COKER 9436(D)	78	-	54.8	-	3	

Table 23. Summary of performance of entries in the Virginia Tech Wheat Test planted at Shenandoah Valley at C. E. Martin & Sons Farm, Stuarts Draft, VA, 2008 harvest, continued.

Line	Yield (Bu/a)		Test Weight (Lb/bu)		Lodging (0-9)	
VA04W-571	78	-	59.3	+	3	
VA06W-392	78	-	57.0		4	
McCormick	76	-	59.2	+	7	
USG 3592(D)	75	-	55.3	-	8	+
Massey	72	-	56.5		6	
Progeny 145(D)	70	-	54.7	-	4	
Magnolia(D)	65	-	54.1	-	2	-
Average	86		57.0		5	
LSD (0.05)	7		1.4		3	
C.V.	5		1.7		---	

Released cultivars are shown in bold print.

Varieties are ordered by descending yield averages. 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, where 0 = highly resistant and 9 = highly susceptible.

Table 24. Summary of performance of entries in the Virginia Tech Wheat Test, Kentland farm, Blacksburg, VA, 2008 harvest.

Line	Yield (Bu/a)		Test Weight (Lb/bu)		Date Headed (Mar31+)		Height (In)		Lodging (0-9)		Powdery Mildew (0-9)		Leaf Rust (0-9)		Barley Yellow Dwarf Virus (0-9)	
SS 8641(R)	115	+	56.2	+	37		39	+	2		0	-	0	-	4	+
COKER 9553(D)	112	+	58.8	+	35	-	39	+	0	-	2		4	+	2	-
USG 3555 (D)	111	+	54.1		36	-	35	-	2		1		5	+	2	-
Chesapeake(RT)	110	+	57.9	+	36	-	36		4		0	-	3		2	-
VA03W-409	110	+	53.7		38	+	36		3		0	-	0	-	2	-
VA03W-412	108	+	55.5		36	-	38		1	-	1		3		5	+
Tribute(D)	105	+	59.7	+	36	-	36		4		0	-	1	-	3	
VA04W-306	105	+	53.3		36	-	36		4		0	-	3		3	
VA05W-168	105	+	60.7	+	36	-	35	-	4		0	-	0	-	2	-
Branson(D)	105	+	53.0		36	-	36		0	-	1		5	+	2	-
USG 3342(D)	104	+	54.7		35	-	35	-	2		0	-	2	-	3	
SS-MPV 57(RT)	104	+	55.6		38	+	41	+	3		2		4	+	5	+
VA05W-139	104	+	54.4		38	+	37		0	-	2		5	+	3	
VA05W-78	103	+	53.5		37		36		2		0	-	3		3	
VA05W-151	103	+	57.8	+	35	-	35	-	7	+	0	-	5	+	2	-
Pioneer 26R15(D)	102		54.1		37		38		2		1		1	-	4	+
USG 3665(D)	102		54.6		37		40	+	1	-	3		6	+	2	-
VA06W-392	102		54.3		38	+	35	-	5	+	2		0	-	3	
Jamestown	101		56.9	+	35	-	35	-	3		1		3		1	-
Pioneer 26R87(D)	101		58.6	+	35	-	36		3		2		0	-	4	+
VA06W-6	101		56.3	+	37		33	-	4		0	-	0	-	3	
VA06W-93	101		55.4		38	+	33	-	2		4	+	2	-	2	-
USG 3725(D)	101		53.0		36	-	40	+	1	-	5	+	4	+	3	
Pioneer 26R12(D)	100		57.1	+	37		40	+	0	-	2		4	+	3	
VA05W-258	100		54.3		38	+	40	+	4		3		5	+	4	+
Progeny 117(D)	100		56.4	+	34	-	40	+	3		6	+	5	+	3	
VA01W-205	99		54.3		37		34	-	4		2		0	-	2	-
SS 520(RT)	99		54.0		35	-	39	+	4		1		5	+	4	+
SS 560(RT)	99		55.0		39	+	38		0	-	3		4	+	4	+
VA05W-251	99		53.5		36	-	36		5	+	1		0	-	2	-
VA06W-194	99		54.1		37		36		5	+	3		0	-	4	+
VA06W-256	99		53.3		37		38		5	+	2		0	-	5	+
VA04W-90	98		55.2		37		38		4		1		5	+	3	
Oglethorpe(D)	98		55.3		34	-	35	-	4		5	+	1	-	4	+
Featherstone 176(RT)	97		54.2		36	-	38		4		0	-	6	+	2	-
VA03W-235	97		56.5	+	38	+	38		5	+	0	-	4	+	2	-
VA03W-310	97		51.3	-	36	-	35	-	3		1		1	-	2	-
VA04W-259	97		52.5	-	39	+	35	-	3		1		2	-	3	
VA06W-600	97		54.3		38	+	39	+	0	-	5	+	6	+	3	
Dominion(D)	96		56.0	+	37		35	-	5	+	0	-	5	+	3	
SS 8302(RT)	96		55.5		38	+	40	+	1	-	5	+	4	+	4	+
VA04W-495	96		54.8		37		38		3		0	-	5	+	3	
SS 548(DE)	96		55.1		37		39	+	0	-	4	+	6	+	3	

Table 24. Summary of performance of entries in the Virginia Tech Wheat Test, Kentland farm, Blacksburg, VA, 2008 harvest, continued.

Line	Yield (Bu/a)		Test Weight (Lb/bu)		Date Headed (Mar31+)		Height (In)		Lodging (0-9)		Powdery Mildew (0-9)		Leaf Rust (0-9)		Barley Yellow Dwarf Virus (0-9)	
COKER 9804(D)	95		54.0		36	-	40	+	1	-	2		6	+	4	+
Pioneer 26R31(D)	94		53.8		36	-	35	-	0	-	0	-	5	+	4	+
VA05W-22	94		52.9		39	+	38		1	-	0	-	4	+	3	
Progeny 185(D)	94		53.5		37		41	+	0	-	4	+	4	+	3	
SS 8309(RT)	93		54.1		38	+	39	+	1	-	3		4	+	2	-
W-1377(D)	93		57.4	+	39	+	40	+	2		5	+	6	+	2	-
VA04W-592	93		53.2		38	+	38		5	+	2		1	-	3	
VA03W-509	93		54.4		37		35	-	3		0	-	2	-	3	
VA06W-608	93		53.4		36	-	36		6	+	0	-	0	-	3	
VA05W-250	92		51.3	-	38	+	36		5	+	1		0	-	4	+
VA06W-237	92		53.3		37		36		4		3		0	-	2	-
VA04W-360	92		54.9		36	-	39	+	3		1		5	+	2	-
Progeny 145(D)	92		53.6		36	-	44	+	1	-	7	+	1	-	5	+
Progeny 122(D)	92		52.8		38	+	41	+	5	+	1		7	+	2	-
Renwood 3633(D)	92		55.4		37		42	+	2		6	+	4	+	4	+
USG 3592(D)	91		54.5		38	+	40	+	5	+	3		0	-	3	
VA05W-414	91		53.0		37		38		6	+	1		6	+	2	-
VA06W-423	91		52.6	-	39	+	38		7	+	0	-	3		4	+
Panola(D)	90		54.1		36	-	39	+	1	-	2		6	+	4	+
VA04W-571	89		57.1	+	38	+	37		3		6	+	5	+	2	-
Vigoro V9510(D)	89		52.6	-	37		38		3		2		6	+	3	
VA05W-376	89		54.4		38	+	36		4		1		0	-	4	+
Progeny 166(D)	89		53.9		36	-	41	+	0	-	7	+	1	-	5	+
Pioneer 26R24(D)	88		52.5	-	36	-	38		4		5	+	3		3	
VA03W-434	88		52.0	-	38	+	34	-	3		0	-	7	+	2	-
VA05W-641	88		53.7		37		38		4		0	-	6	+	3	
VA05W-668	87		57.1	+	38	+	36		5	+	6	+	5	+	2	-
VA05W-777	87		56.3	+	38	+	37		3		5	+	4	+	3	
VA04W-230	86		51.2	-	36	-	37		4		4	+	6	+	3	
VA05W-436	86		52.4	-	38	+	37		3		5	+	1	-	5	+
VA06W-112	86		52.4	-	38	+	35	-	6	+	4	+	0	-	4	+
VA06W-215	86		52.6	-	37		37		5	+	0	-	0	-	2	-
Red Ruby(RT)	85	-	53.4		38	+	39	+	2		2		8	+	3	
VA05W-686	84	-	56.2	+	38	+	37		3		5	+	4	+	2	-
VA06W-627	84	-	51.2	-	40	+	35	-	5	+	3		1	-	3	
Progeny 127(D)	83	-	54.0		38	+	40	+	1	-	6	+	4	+	3	
COKER 9436(D)	82	-	50.3	-	40	+	36		3		2		4	+	3	
Sisson	82	-	52.3	-	36	-	35	-	5	+	0	-	8	+	2	-
Magnolia(D)	81	-	53.1		38	+	43	+	0	-	4	+	3		4	+
VA05W-108	80	-	51.6	-	39	+	35	-	7	+	3		2	-	3	
SS 8404(RT)	79	-	56.5	+	37		35	-	1	-	5	+	5	+	2	-
McCormick	77	-	56.1	+	37		35	-	2		0	-	8	+	3	
VA05W-125	76	-	52.1	-	35	-	36		6	+	0	-	7	+	3	

Table 24. Summary of performance of entries in the Virginia Tech Wheat Test, Kentland farm, Blacksburg, VA, 2008 harvest, continued.

Line	Yield (Bu/a)		Test Weight (Lb/bu)		Date Headed (Mar31+)		Height (In)		Lodging (0-9)		Powdery Mildew (0-9)		Leaf Rust (0-9)		Barley Yellow Dwarf Virus (0-9)	
USG 3209(D)	75	-	50.7	-	36	-	35	-	6	+	2		7	+	3	
VA05W-257	75	-	48.7	-	38	+	34	-	3		5	+	5	+	2	-
Vigoro V9713(D)	75	-	51.6	-	38	+	35	-	5	+	1		5	+	4	+
VA05W-101	74	-	48.3	-	38	+	35	-	7	+	1		8	+	4	+
Massey	68	-	51.4	-	38	+	40	+	5	+	1		7	+	5	+
Average	94		54.2		37		37		3		2		3		3	
LSD (0.05)	9		1.5		1		2		2		2		1		1	
C.V.	7		2.0		2		3		---		---		---		---	

Released cultivars are shown in bold print.

Varieties are ordered by descending yield averages. 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, where 0 = highly resistant and 9 = highly susceptible.

Table 25. Summary of performance of entries in the Virginia Tech Wheat Test, planted No-Till at Tidewater AREC, Holland, VA, 2008 harvest.

Line	Yield (Bu/a)		Test Weight (Lb/bu)		Fusarium Head Blight (0-9)	
Progeny 117(D)	74	+	61.6	-	2.0	
VA05W-414	73	+	62.0	-	1.1	-
Red Ruby(RT)	72	+	62.6		1.4	
Progeny 185(D)	72	+	61.5	-	1.3	
Progeny 122(D)	71		62.9		1.0	-
USG 3725(D)	71		61.3	-	1.3	
Pioneer 26R15(D)	70		61.5	-	0.8	-
VA05W-257	70		61.9	-	1.0	-
VA01W-205	69		63.1	+	2.5	
SS 8309(RT)	69		62.6		0.5	-
VA03W-409	69		60.8	-	1.3	
VA04W-90	69		63.4	+	2.0	
VA04W-259	69		62.2		2.3	
VA04W-306	69		61.4	-	2.8	
USG 3665(D)	69		63.5	+	1.8	
VA05W-151	69		64.9	+	1.8	
VA05W-250	69		62.0	-	1.1	-
VA05W-251	69		61.7	-	3.3	+
VA04W-592	69		62.5		0.9	-
Branson(D)	69		61.7	-	0.8	-
VA06W-423	69		61.8	-	1.0	-
VA06W-608	69		63.2	+	0.8	-
Progeny 127(D)	69		62.1		0.8	-
SS 8404(RT)	68		63.3	+	3.5	+
Pioneer 26R24(D)	68		62.9		4.0	+
USG 3592(D)	68		62.7		3.3	+
VA04W-230	68		62.4		2.5	
VA05W-108	68		61.6	-	2.0	
Vigoro V9713(D)	68		62.9		0.9	-
VA05W-101	68		62.6		1.0	-
VA06W-256	68		63.0	+	2.5	
VA06W-392	68		63.1	+	2.0	
VA05W-641	68		63.2	+	2.3	
USG 3209(D)	67		62.9		3.3	+
SS 8302(RT)	67		62.7		0.8	-
SS 560(RT)	67		61.3	-	2.0	
VA03W-434	67		61.7	-	3.0	+
VA05W-258	67		61.5	-	2.8	
Vigoro V9510(D)	67		62.8		4.3	+
VA06W-6	67		63.1	+	1.3	
VA06W-215	67		60.9	-	1.5	
VA04W-360	67		63.7	+	1.3	
SS 548(DE)	67		63.4	+	3.0	+

Table 25. Summary of performance of entries in the Virginia Tech Wheat Test, planted No-Till at Tidewater AREC, Holland, VA, 2008 harvest, continued.

Line	Yield (Bu/a)		Test Weight (Lb/bu)		Fusarium Head Blight (0-9)	
Sisson	66		62.6		3.5	+
USG 3555 (D)	66		61.8	-	3.0	+
VA03W-235	66		62.3		0.6	-
VA03W-310	66		61.7	-	4.3	+
VA05W-168	66		64.9	+	2.3	
VA05W-436	66		62.2		1.0	-
VA05W-668	66		63.4	+	0.5	-
VA04W-495	66		62.8		0.8	-
VA06W-627	66		63.1	+	0.6	-
Pioneer 26R31(D)	65		61.7	-	4.8	+
W-1377(D)	65		63.6	+	1.1	-
VA04W-571	65		63.8	+	0.5	-
VA05W-22	65		61.8	-	1.0	-
VA05W-139	65		62.9		2.3	
VA06W-93	65		63.6	+	1.5	
VA06W-194	65		62.5		1.8	
VA06W-237	65		61.8	-	2.8	
SS 8641(R)	65		62.8		4.0	+
Dominion(D)	64		62.7		1.8	
McCormick	64		64.5	+	0.8	-
VA05W-777	64		63.8	+	0.5	-
VA05W-686	64		63.8	+	0.6	-
VA06W-600	64		63.8	+	0.8	-
Progeny 166(D)	64		62.1		0.9	-
SS 520(RT)	63		60.6	-	4.5	+
VA03W-412	63		63.2	+	3.0	+
VA03W-509	63		61.8	-	4.0	+
VA06W-112	63		61.7	-	3.0	+
COKER 9436(D)	62		61.4	-	0.5	-
Pioneer 26R12(D)	62		62.6		2.5	
SS-MPV 57(RT)	62		60.8	-	3.0	+
Tribute(D)	62		64.5	+	1.4	
Chesapeake(RT)	62		62.8		1.8	
Panola(D)	62		61.5	-	5.0	+
Magnolia(D)	62		61.5	-	3.3	+
VA05W-376	62		62.9		0.6	-
Progeny 145(D)	62		62.0	-	2.5	
Featherstone 176(RT)	61		62.8		4.3	+
Oglethorpe(D)	61		62.3		5.3	+
Pioneer 26R87(D)	60	-	64.0	+	5.5	+
COKER 9553(D)	60	-	63.4	+	5.3	+
VA05W-125	60	-	63.6	+	1.5	
COKER 9804(D)	60	-	61.5	-	3.5	+

Table 25. Summary of performance of entries in the Virginia Tech Wheat Test, planted No-Till at Tidewater AREC, Holland, VA, 2008 harvest, continued.

Line	Yield (Bu/a)		Test Weight (Lb/bu)		Fusarium Head Blight (0-9)	
Massey	59	-	62.6		1.3	
VA05W-78	58	-	61.9	-	3.0	+
USG 3342(D)	57	-	63.1	+	1.8	
Jamestown	57	-	64.4	+	4.3	+
Renwood 3633(D)	57	-	61.7	-	2.5	
Average	66		62.5		2.0	
LSD (0.05)	6		0.5		0.9	
C.V.	6		0.6		---	

Released cultivars are shown in bold print.

Varieties are ordered by descending yield averages. 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, where 0 = highly resistant and 9 = highly susceptible.

Table 26. Summary of performance of entries in the Virginia Tech Wheat Test planted No-Till at Warsaw, 2008 harvest.

Line	Yield (Bu/a)		Test Weight (Lb/bu)		Date Headed (Mar31+)		Height (In)		Lodging (0-9)		Leaf Rust (0-9)		Early Height (In)	
VA04W-230	100	+	59.1	+	23	-	33		1		2		10	
Pioneer 26R15(D)	97	+	57.9		25		32		0	-	3	+	10	
VA03W-409	97	+	57.2	-	25		33		2		1	-	10	
VA05W-257	97	+	56.5	-	24	-	34		1		3	+	10	
USG 3725(D)	97	+	56.1	-	24	-	37	+	1		3	+	11	+
SS 8309(RT)	96	+	58.2		25		35	+	1		2		9	-
SS-MPV 57(RT)	95		57.5	-	26	+	36	+	1		3	+	10	
VA04W-306	95		58.4		23	-	33		3		2		11	+
VA05W-139	95		58.7	+	25		31	-	0	-	1	-	10	
VA01W-205	94		58.7	+	24	-	31	-	1		0	-	11	+
Tribute(D)	94		60.7	+	23	-	32		3		1	-	9	-
USG 3555 (D)	94		57.5	-	24	-	30	-	0	-	3	+	12	+
VA03W-434	94		57.8		25		30	-	0	-	1	-	9	-
VA04W-90	94		58.3		24	-	34		0	-	2		12	+
Red Ruby(RT)	94		58.1		25		35	+	1		3	+	11	+
VA06W-93	94		58.4		25		32		4	+	2		9	-
SS 548(DE)	94		59.0	+	24	-	34		1		1	-	11	+
VA06W-423	93		57.4	-	27	+	35	+	4	+	1	-	12	+
VA04W-495	93		58.5		24	-	35	+	1		3	+	11	+
Pioneer 26R12(D)	92		58.3		26	+	34		0	-	1	-	9	-
VA05W-78	92		58.6	+	24	-	31	-	3		1	-	9	-
VA05W-151	92		59.9	+	24	-	33		1		3	+	11	+
VA05W-251	92		58.0		24	-	32		1		0	-	10	
VA04W-592	92		57.5	-	26	+	36	+	2		2		9	-
VA05W-641	92		58.1		23	-	34		1		2		12	+
Pioneer 26R31(D)	91		58.0		24	-	30	-	0	-	2		11	+
SS 8302(RT)	91		58.5		26	+	36	+	1		3	+	11	+
SS 8404(RT)	91		58.6	+	25		31	-	0	-	2		10	
VA03W-235	91		59.2	+	26	+	35	+	3		4	+	11	+
Vigoro V9713(D)	91		57.7		26	+	33		2		3	+	10	
Progeny 117(D)	91		58.5		23	-	36	+	3		2		11	+
SS 560(RT)	90		57.0	-	25		33		1		3	+	10	
Jamestown	90		59.9	+	23	-	33		0	-	1	-	12	+
VA03W-412	90		59.3	+	24	-	33		0	-	3	+	11	+
VA05W-376	90		58.3		27	+	34		4	+	0	-	9	-
SS 520(RT)	89		57.3	-	20	-	35	+	0	-	2		12	+
VA05W-258	89		57.0	-	24	-	35	+	1		2		11	+
VA05W-668	89		59.2	+	26	+	34		2		3	+	8	-
VA05W-101	89		56.7	-	25		35	+	7	+	4	+	11	+
VA06W-215	89		57.1	-	25		34		4	+	0	-	10	
VA06W-600	89		57.8		25		34		1		5	+	9	-
VA06W-608	89		57.9		25		32		6	+	1	-	8	-
Pioneer 26R24(D)	88		58.0		24	-	37	+	3		2		11	+

Table 26. Summary of performance of entries in the Virginia Tech Wheat Test planted No-Till at Warsaw, 2008 harvest, continued.

Line	Yield (Bu/a)		Test Weight (Lb/bu)		Date Headed (Mar31+)		Height (In)		Lodging (0-9)		Leaf Rust (0-9)		Early Height (In)	
VA05W-108	88		58.1		25		34		3		1	-	11	+
VA05W-414	88		58.1		26	+	36	+	3		2		10	
Branson(D)	88		57.0	-	24	-	33		2		1	-	9	-
Vigoro V9510(D)	88		58.3		24	-	34		4	+	3	+	10	
VA06W-392	88		57.8		27	+	34		4	+	0	-	9	-
USG 3209(D)	87		58.0		24	-	33		3		6	+	11	+
Dominion(D)	87		58.2		25		31	-	1		2		10	
USG 3665(D)	87		58.5		24	-	33		1		1	-	9	-
VA05W-22	87		57.0	-	26	+	33		1		1	-	9	-
VA06W-237	87		57.1	-	25		33		2		0	-	9	-
Sisson	86		58.1		24	-	32		2		7	+	10	
VA05W-436	86		58.1		27	+	34		2		0	-	9	-
VA06W-6	86		59.3	+	26	+	30	-	1		0	-	8	-
VA03W-310	85		56.4	-	23	-	33		2		1	-	12	+
Panola(D)	85		56.5	-	24	-	33		1		3	+	10	
VA06W-256	85		59.0	+	23	-	34		3		1	-	10	
Progeny 122(D)	85		57.8		27	+	35	+	4	+	2		8	-
Renwood 3633(D)	85		57.8		24	-	35	+	1		2		10	
USG 3342(D)	84		56.9	-	23	-	31	-	1		2		12	+
McCormick	84		60.5	+	25		31	-	1		5	+	9	-
Chesapeake(RT)	84		59.1	+	24	-	32		1		5	+	11	+
USG 3592(D)	84		58.4		24	-	35	+	2		0	-	10	
VA05W-168	84		60.7	+	23	-	32		1		0	-	10	
VA05W-250	84		57.1	-	27	+	34		3		0	-	9	-
VA06W-112	84		58.0		25		32		4	+	0	-	8	-
VA04W-360	84		58.9	+	24	-	34		2		3	+	10	
Progeny 166(D)	84		57.0	-	25		38	+	2		2		9	-
VA06W-194	83		57.6	-	24	-	32		1		1	-	9	-
SS 8641(R)	83		58.8	+	26	+	35	+	1		0	-	10	
COKER 9553(D)	82		58.2		23	-	32		0	-	1	-	11	+
Magnolia(D)	82		56.9	-	26	+	37	+	0	-	2		10	
VA05W-686	82		59.3	+	27	+	34		0	-	3	+	9	-
Progeny 145(D)	82		57.6	-	24	-	37	+	3		3	+	10	
COKER 9436(D)	81		55.7	-	32	+	32		4	+	2		9	-
VA05W-125	81		58.5		23	-	31	-	2		4	+	10	
Oglethorpe(D)	81		57.7		20	-	31	-	1		2		12	+
VA04W-259	80		57.9		25		31	-	1		1	-	11	+
COKER 9804(D)	80		56.3	-	24	-	33		1		2		10	
W-1377(D)	79		58.8	+	27	+	35	+	1		3	+	9	-
VA03W-509	79		58.0		24	-	31	-	2		2		9	-
VA06W-627	79		58.3		28	+	32		5	+	0	-	9	-
Progeny 185(D)	79		57.5	-	24	-	32		1		2		10	
Progeny 127(D)	79		57.5	-	28	+	36	+	1		3	+	7	-

Table 26. Summary of performance of entries in the Virginia Tech Wheat Test planted No-Till at Warsaw, 2008 harvest, continued.

Line	Yield (Bu/a)		Test Weight (Lb/bu)		Date Headed (Mar31+)		Height (In)		Lodging (0-9)		Leaf Rust (0-9)		Early Height (In)	
Massey	78	-	57.7		24	-	38	+	4	+	8	+	11	+
Featherstone 176(RT)	76	-	57.7		23	-	34		2		3	+	11	+
Pioneer 26R87(D)	76	-	60.1	+	23	-	32		0	-	1	-	10	
VA04W-571	74	-	59.2	+	27	+	32		1		2		8	-
VA05W-777	73	-	58.9	+	27	+	31	-	1		3	+	7	-
Average	87		58.1		25		33		2		2		10	
LSD (0.05)	9		0.5		1		2		2		1		1	
C.V.	7		0.6		3		4		---		---		10	

Released cultivars are shown in bold print.

Varieties are ordered by descending yield averages. 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, where 0 = highly resistant and 9 = highly susceptible.

Table 27. Summary of performance of entries planted No-Till in the Virginia Tech Wheat Test (Warsaw and Holland), 2008 harvest.

Line	Yield (Bu/a)		Test Weight (Lb/bu)		Date Headed (Mar31+)		Height (In)		Lodging (0-9)		Leaf Rust (0-9)		Fusarium Head Blight (0-9)		Early Height (In)	
	(2)		(2)		(1)		(1)		(1)		(1)		(1)		(1)	
VA04W-230	84	+	60.7	+	23	-	33		1		2		2.5		10	
VA05W-257	84	+	59.2	-	24	-	34		1		3	+	1.0	-	10	
USG 3725(D)	84	+	58.7	-	24	-	37	+	1		3	+	1.3		11	+
Pioneer 26R15(D)	83	+	59.7	-	25		32		0	-	3	+	0.8	-	10	
VA03W-409	83	+	59.0	-	25		33		2		1	-	1.3		10	
Red Ruby(RT)	83	+	60.4		25		35	+	1		3	+	1.4		11	+
VA06W-423	83	+	59.3	-	27	+	35	+	4	+	1	-	1.0	-	12	+
VA01W-205	82	+	60.9	+	24	-	31	-	1		0	-	2.5		11	+
SS 8309(RT)	82	+	60.4		25		35	+	1		2		0.5	-	9	-
VA03W-434	82	+	59.5	-	25		30	-	0	-	1	-	3.0	+	9	-
VA04W-306	82	+	59.9	-	23	-	33		3		2		2.8		11	+
Progeny 117(D)	82	+	60.1		23	-	36	+	3		2		2.0		11	+
VA04W-90	81		60.8	+	24	-	34		0	-	2		2.0		12	+
VA04W-592	81		60.0		26	+	36	+	2		2		0.9	-	9	-
Pioneer 26R24(D)	80		60.1		24	-	37	+	3		2		4.0	+	11	+
USG 3555 (D)	80		59.7	-	24	-	30	-	0	-	3	+	3.0	+	12	+
VA05W-151	80		62.4	+	24	-	33		1		3	+	1.8		11	+
VA05W-251	80		59.9	-	24	-	32		1		0	-	3.3	+	10	
VA05W-414	80		60.1		26	+	36	+	3		2		1.1	-	10	
VA05W-139	80		60.8	+	25		31	-	0	-	1	-	2.3		10	
VA06W-93	80		61.0	+	25		32		4	+	2		1.5		9	-
VA04W-495	80		60.7	+	24	-	35	+	1		3	+	0.8	-	11	+
VA05W-641	80		60.6		23	-	34		1		2		2.3		12	+
VA06W-608	80		60.2		25		32		6	+	1	-	0.8	-	8	-
SS 548(DE)	80		61.2	+	24	-	34		1		1	-	3.0	+	11	+
SS 8302(RT)	79		60.6		26	+	36	+	1		3	+	0.8	-	11	+
SS 8404(RT)	79		60.9	+	25		31	-	0	-	2		3.5	+	10	
SS-MPV 57(RT)	79		59.2	-	26	+	36	+	1		3	+	3.0	+	10	
SS 560(RT)	79		59.2	-	25		33		1		3	+	2.0		10	
VA05W-108	79		59.6	-	25		34		3		1	-	2.0		11	+
Branson(D)	79		59.4	-	24	-	33		2		1	-	0.8	-	9	-
Vigoro V9713(D)	79		60.3		26	+	33		2		3	+	0.9	-	10	
Pioneer 26R31(D)	78		59.8	-	24	-	30	-	0	-	2		4.8	+	11	+
Tribute(D)	78		62.6	+	23	-	32		3		1	-	1.4		9	-
VA03W-235	78		60.7	+	26	+	35	+	3		4	+	0.6	-	11	+
VA05W-258	78		59.2	-	24	-	35	+	1		2		2.8		11	+
VA05W-668	78		61.3	+	26	+	34		2		3	+	0.5	-	8	-
Vigoro V9510(D)	78		60.6		24	-	34		4	+	3	+	4.3	+	10	
VA05W-101	78		59.6	-	25		35	+	7	+	4	+	1.0	-	11	+
VA06W-215	78		59.0	-	25		34		4	+	0	-	1.5		10	
VA06W-237	78		59.5	-	25		33		2		0	-	2.8		9	-
VA06W-392	78		60.5		27	+	34		4	+	0	-	2.0		9	-

Table 27. Summary of performance of entries planted No-Till in the Virginia Tech Wheat Test (Warsaw and Holland), 2008 harvest, continued.

Line	Yield (Bu/a) (2)		Test Weight (Lb/bu) (2)		Date Headed (Mar31+) (1)		Height (In) (1)		Lodging (0-9) (1)		Leaf Rust (0-9) (1)		Fusarium Head Blight (0-9) (1)		Early Height (In) (1)	
Progeny 122(D)	78		60.4		27	+	35	+	4	+	2		1.0	-	8	-
USG 3209(D)	77		60.5		24	-	33		3		6	+	3.3	+	11	+
Pioneer 26R12(D)	77		60.5		26	+	34		0	-	1	-	2.5		9	-
VA03W-412	77		61.2	+	24	-	33		0	-	3	+	3.0	+	11	+
USG 3665(D)	77		61.0	+	24	-	33		1		1	-	1.8		9	-
VA05W-250	77		59.5	-	27	+	34		3		0	-	1.1	-	9	-
VA06W-600	77		60.8	+	25		34		1		5	+	0.8	-	9	-
Dominion(D)	76		60.4		25		31	-	1		2		1.8		10	
Sisson	76		60.3		24	-	32		2		7	+	3.5	+	10	
SS 520(RT)	76		58.9	-	20	-	35	+	0	-	2		4.5	+	12	+
USG 3592(D)	76		60.5		24	-	35	+	2		0	-	3.3	+	10	
VA05W-436	76		60.1		27	+	34		2		0	-	1.0	-	9	-
VA05W-22	76		59.4	-	26	+	33		1		1	-	1.0	-	9	-
VA05W-376	76		60.6		27	+	34		4	+	0	-	0.6	-	9	-
VA06W-6	76		61.2	+	26	+	30	-	1		0	-	1.3		8	-
VA06W-256	76		61.0	+	23	-	34		3		1	-	2.5		10	
Progeny 166(D)	76		59.1	-	25		38	+	2		2		0.9	-	9	-
VA03W-310	75		59.0	-	23	-	33		2		1	-	4.3	+	12	+
VA05W-78	75		60.3		24	-	31	-	3		1	-	3.0	+	9	-
VA05W-168	75		62.8	+	23	-	32		1		0	-	2.3		10	
VA04W-360	75		61.3	+	24	-	34		2		3	+	1.3		10	
Progeny 185(D)	75		59.5	-	24	-	32		1		2		1.3		10	
Progeny 127(D)	75		59.8	-	28	+	36	+	1		3	+	0.8	-	7	-
McCormick	74		62.5	+	25		31	-	1		5	+	0.8	-	9	-
VA04W-259	74		60.1		25		31	-	1		1	-	2.3		11	+
Panola(D)	74		59.0	-	24	-	33		1		3	+	5.0	+	10	
VA06W-194	74		60.1		24	-	32		1		1	-	1.8		9	-
SS 8641(R)	74		60.8	+	26	+	35	+	1		0	-	4.0	+	10	
USG 3342(D)	73		59.5	-	23	-	31	-	1		2		1.8		12	+
Chesapeake(RT)	73		60.9	+	24	-	32		1		5	+	1.8		11	+
Jamestown	73		62.2	+	23	-	33		0	-	1	-	4.3	+	12	+
VA06W-112	73		59.8	-	25		32		4	+	0	-	3.0	+	8	-
VA05W-686	73		61.5	+	27	+	34		0	-	3	+	0.6	-	9	-
COKER 9436(D)	72	-	58.5	-	32	+	32		4	+	2		0.5	-	9	-
W-1377(D)	72	-	61.2	+	27	+	35	+	1		3	+	1.1	-	9	-
Magnolia(D)	72	-	59.2	-	26	+	37	+	0	-	2		3.3	+	10	
VA06W-627	72	-	60.7	+	28	+	32		5	+	0	-	0.6	-	9	-
Progeny 145(D)	72	-	59.8	-	24	-	37	+	3		3	+	2.5		10	
COKER 9553(D)	71	-	60.8	+	23	-	32		0	-	1	-	5.3	+	11	+
VA03W-509	71	-	59.9	-	24	-	31	-	2		2		4.0	+	9	-
Renwood 3633(D)	71	-	59.8	-	24	-	35	+	1		2		2.5		10	
Massey	70	-	59.8	-	24	-	38	+	4	+	8	+	1.3		11	+

Table 27. Summary of performance of entries planted No-Till in the Virginia Tech Wheat Test (Warsaw and Holland), 2008 harvest, continued.

Line	Yield (Bu/a)		Test Weight (Lb/bu)		Date Headed (Mar31+)		Height (In)		Lodging (0-9)		Leaf Rust (0-9)		Fusarium Head Blight (0-9)		Early Height (In)	
	(2)		(2)		(1)		(1)		(1)		(1)		(1)		(1)	
VA05W-125	70	-	61.0	+	23	-	31	-	2		4	+	1.5		10	
COKER 9804(D)	70	-	58.9	-	24	-	33		1		2		3.5	+	10	
VA04W-571	69	-	61.5	+	27	+	32		1		2		0.5	-	8	-
Oglethorpe(D)	69	-	60.0		20	-	31	-	1		2		5.3	+	12	+
Featherstone 176(RT)	68	-	60.3		23	-	34		2		3	+	4.3	+	11	+
Pioneer 26R87(D)	68	-	62.0	+	23	-	32		0	-	1	-	5.5	+	10	
VA05W-777	68	-	61.3	+	27	+	31	-	1		3	+	0.5	-	7	-
Average	77		60.3		25		33		2		2		2.1		10	
LSD (0.05)	5		0.4		1		2		2		1		0.9		1	
C.V.	7		0.6		3		4		---		---		---		10	

Released cultivars are shown in bold print.

The number in parentheses below column headings indicates the number of locations on which data are based.

Varieties are ordered by descending yield averages. 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, where 0 = highly resistant and 9 = highly susceptible.

Section 3: Milling and Baking Quality

Milling and baking quality of wheat lines grown in the 2006-2007 Virginia State Wheat Test were assessed by the USDA-ARS Soft Wheat Quality Laboratory (SWQL) in Wooster, Ohio (Table 31). Quality evaluations were conducted using 500 gram grain samples from wheat lines grown at the Painter, VA test site. The data presented here are for a single location and, therefore, are not a definitive measure of a given wheat line's milling and baking quality. Quality varies from location to location and from year to year; therefore, data from multiple years and locations are needed to accurately define quality of a given wheat line. While wheat lines are listed in the table from highest to lowest "Milling Quality Score", this parameter alone is not indicative of end use quality, which relates to a cultivar's suitability for use in manufacturing a vast array of products requiring flour with specific and diverse quality characteristics.

Milling and baking quality of wheat lines were compared to that of the check cultivar McCormick. On the basis of nine independent Allis-Chalmers milling quality evaluations conducted by the SWQL, McCormick has a historical milling quality score of 67.7 and ranks 350th out of 768 wheat cultivars evaluated to date. For the 2007 crop, McCormick received a milling quality score of 68.1. Most of the wheat cultivars evaluated in 2007 produced flour yields that were typical of their respective historical values, but tended to be a little softer in texture than normal with 3% to 5% higher softness equivalent values. Wheat lines having a flour yield of one percentage point or greater below that of USG 3209 would be considered as having poor flour yields. Pastry baking quality of McCormick on the basis of cookie spread diameter (18.4 cm) was considerably above the historical average value of 17.2 cm. With the exception of Pioneer Brand 26R24 and SS 520, which had typical cookie spread diameters, the remaining cultivars produced cookies that were often in excess of 0.7 cm larger than their historical values. Thus, 41.1 points were subtracted from the Baking Quality Score of each wheat line. Lines receiving milling quality scores of "A" or "B" and baking quality scores above "E" likely have better overall pastry quality than McCormick. Most of the wheat cultivars and lines evaluated had acceptable milling and baking quality. Wheat lines receiving milling quality scores below "C" or baking quality scores below "E" may have less desirable milling quality and/or baking quality properties than McCormick.

Milling quality scores of released cultivars ranged from 76.6 for Neuse to 56.9 for Panola with nine cultivars and six experimental lines having higher scores than McCormick. Baking quality scores for released cultivars ranged from a high of 78.7 for Red Ruby to a low of 21.8 for SS 520 and USG 3209 with 14 cultivars and 17 experimental lines having higher scores than McCormick. Flour yields among the cultivars ranged from a high of 72.3% for Neuse to a low of 68.4% for Panola. Cookie diameters of released cultivars ranged from a high of 19.39 cm for Red Ruby to a low of 17.68 cm for USG 3209 and SS 520.

Among released cultivars, flour protein concentration varied from 6.96% for Panola to 8.27% for USG 3342. Protein quality, specifically gluten strength, based on Lactic Acid Solvent Retention Capacity varied from a high of 122% for Magnolia to a low of 83.7% for USG 3342. Lines having lower Lactic Acid scores would produce a dough having weak gluten strength and more suitable for pastry products such as cookies, while lines having higher Lactic Acid scores such as Magnolia, Pioneer Brand 26R15, Tribute, and Renwood 3260 would produce a dough having stronger gluten strength and suitable for cracker or certain bread products.

Table 28. Milling and baking quality of entries in the Virginia Tech Wheat Test based on evaluation of the 2007 harvest.

	Historical			Milling Quality Score		Baking Quality Score		Straight Grade Flour Yield		Softness Equivalent Score %		Flour Protein %	Cookie Diameter CM.		Lactic Acid Adj.
	Milling Quality Score	No. Obs	Cookie Diameter CM.												
Standard = McCormick	67.7	9	17.2	68.1	C	46.6	E	70.7		61.9		7.35	18.43		101.4
Released Varieties															
Neuse	89.0	6	17.5	76.6	B	62.8	C	72.3		59.5		7.89	18.92		95.2
SS 8309	na	na	na	75.3	B	76.2	B	72.1		67.4		7.13	19.32		95.2
Renwood 3260	74.9	4	16.9	75.1	B	42.4	E	72.1		56.6	*	8.08	18.30		115.1
USG 3706	77.4	6	17.3	74.9	B	47.1	E	72.0		54.7	Q	7.79	18.45		108.7
Dominion	79.3	6	17.1	72.9	B	48.4	E	71.6		54.5	Q	7.70	18.48		99.8
USG 3592	67.6	3	17.5	72.8	B	49.4	E	71.6		60.9		7.67	18.51		110.7
USG 3665	na	na	na	72.5	B	67.4	C	71.5		63.7		7.02	19.05		96.3
26R15	74.3	5	17.4	71.0	B	62.7	C	71.2		64.8		7.72	18.91		120.5
SS 520	77.7	1	16.5	70.5	B	21.8	F	71.1		57.1	*	7.30	17.68	Q	102.9
Red Ruby	na	na	na	69.6	C	78.7	B	71.0		67.1		6.98	19.39		99.4
SS-MPV 57	77.7	4	17.3	69.5	C	58.8	D	70.9		60.8		7.45	18.80		85.9
SS 8404	78.8	2	17.7	69.4	C	52.1	D	70.9		56.8	*	7.56	18.59		93.3
Tribute	65.9	12	16.9	68.9	C	42.8	E	70.8		58.5	*	7.51	18.32		115.2
Branson	64.4	1	17.5	68.3	C	71.6	B	70.7		65.4		7.38	19.18		106.3
Sisson	70.0	10	17.3	68.2	C	64.6	C	70.7		60.6		7.20	18.97		88.6
McCormick	67.7	9	17.2	68.1	C	46.6	E	70.7		61.9		7.35	18.43		101.4
Magnolia	73.3	1	16.8	67.7	C	56.1	D	70.6		61.7		7.71	18.72		121.8
26R24	64.7	10	17.3	67.5	C	23.3	F	70.5		58.4	*	7.86	17.73	Q	110.1
USG 3342	62.5	5	17.3	67.0	C	45.3	E	70.4		58.7		8.27	18.39		83.7

Table 28. Milling and baking quality of entries in the Virginia Tech Wheat Test based on evaluation of the 2007 harvest, continued.

	Historical			Milling		Baking		Straight		Softness		Flour	Cookie		Lactic
	Milling Quality Score	No. Obs	Cookie Diameter CM.	Quality Score		Quality Score		Grade Flour Yield		Equivalent Score %		Protein %	Diameter CM.		Acid Adj.
Standard = McCormick	67.7	9	17.2	68.1	C	46.6	E	70.7		61.9		7.35	18.43		101.4
SS 560	67.4	8	17.1	66.9	C	47.2	E	70.4		61.2		7.30	18.45		95.3
26R12	71.8	1	18.3	66.9	C	43.4	E	70.4		62.2		7.60	18.33		106.6
SS 8302	61.6	2	17.5	66.8	C	43.2	E	70.4		65.4		7.61	18.33		107.3
Jamestown	62.7	2	16.8	64.7	C	29.2	F	70.0		55.8	*	7.47	17.91	Q	106.4
Featherstone 176	68.1	6	17.3	64.0	C	53.1	D	69.8	*	55.9	*	7.58	18.63		112.6
USG 3555	57.6	2	16.8	63.7	C	50.4	D	69.8	*	55.4	*	7.60	18.54		104.1
USG 3209	55.3	8	16.9	62.6	C	21.8	F	69.6	*	56.4	*	7.04	17.68	Q	97.9
W-1377	na	na	na	61.8	C	64.6	C	69.4	*	60.5		7.33	18.97		101.1
Chesapeake	61.3	5	17.0	60.2	C	37.8	F	69.1	Q	59.4		7.84	18.17	*	98.9
Vigoro V9510	54.5	1	17.2	59.3	D	58.7	D	68.9	Q	61.7		7.45	18.79		105.3
Panola	60.6	2	16.8	56.9	D	33.5	F	68.4	Q	59.4		6.96	18.04	*	102.8
Experimental Lines															
VA01W-205*	75.1	2	17.5	77.1	B	76.9	B	72.4		64.1		7.15	19.34		105.9
VA04W-230	na	na	na	74.3	B	58.1	D	71.9		64.0		7.09	18.77		94.5
VA05W-414	na	na	na	74.1	B	76.5	B	71.8		61.3		6.96	19.33		87.3
VA05W-436	na	na	na	73.3	B	71.1	B	71.7		63.0		7.11	19.16		108.7
VA03W-310	68.9	1	17.2	72.4	B	65.8	C	71.5		63.3		7.16	19.01		94.2
VA03W-412	70.3	2	17.1	71.5	B	69.2	C	71.3		61.4		7.38	19.11		95.8
VA03W-235	77.8	2	17.5	69.8	C	66.1	C	71.0		64.6		7.50	19.01		88.5

Table 28. Milling and baking quality of entries in the Virginia Tech Wheat Test based on evaluation of the 2007 harvest, continued.

	Historical			Milling		Baking		Straight		Softness		Flour	Cookie		Lactic
	Milling Quality Score	No. Obs	Cookie Diameter CM.	Quality Score		Quality Score		Grade Flour Yield		Equivalent Score %		Protein %	Diameter CM.		Acid Adj.
Standard = McCormick	67.7	9	17.2	68.1	C	46.6	E	70.7		61.9		7.35	18.43		101.4
VA03W-409*	75.0	2	17.5	68.2	C	60.0	D	70.7		60.0		7.21	18.83		86.5
VA04W-259	69.4	1	17.2	68.2	C	61.7	C	70.7		60.1		7.70	18.88		94.2
VA05W-151	na	na	na	68.0	C	46.9	E	70.6		55.2	Q	7.71	18.44		108.2
VA05W-168	na	na	na	67.9	C	54.0	D	70.6		57.6	*	7.39	18.65		105.9
VA05W-78	na	na	na	67.8	C	44.5	E	70.6		60.4		7.43	18.37		107.1
VA04W-90	63.8	1	17.0	67.4	C	48.0	E	70.5		60.2		7.78	18.47		106.3
VA05W-257	na	na	na	67.3	C	54.8	D	70.5		59.2		7.42	18.67		86.6
VA05W-251	na	na	na	66.6	C	48.3	E	70.3		57.0	*	7.19	18.48		88.4
VA05W-108	na	na	na	66.3	C	79.0	B	70.3		62.3		7.35	19.40		103.7
VA03W-135	na	na	na	64.5	C	73.2	B	69.9		60.8		7.42	19.23		87.0
VA04W-306	59.9	1	17.2	63.0	C	57.2	D	69.6	*	60.1		7.21	18.75		102.1
VA03W-434*	59.9	2	17.3	62.9	C	42.7	E	69.6	*	62.2		7.39	18.31		100.6
VA04W-592	na	na	na	61.6	C	51.0	D	69.4	*	62.2		7.54	18.56		119.4
VA05W-258	na	na	na	61.3	C	20.2	F	69.3	*	58.8		7.58	17.64	Q	111.1
VA05W-125	na	na	na	59.1	D	33.6	F	68.9	Q	59.5		7.26	18.04	*	101.6
VA04W-571	na	na	na	56.2	D	58.3	D	68.3	Q	62.2		7.30	18.78		107.3
VA05W-250	na	na	na	56.2	D	56.9	D	68.3	Q	61.9		7.70	18.74		116.0
VA05W-668	na	na	na	53.7	D	37.3	F	67.8	Q	63.2		7.42	18.15	*	110.4
NC00-15332	na	na	na	47.8	E	49.7	E	66.6	Q	62.1		7.16	18.52		92.2

*Released Varieties Not Yet Named

Section 4: Wheat Scab Research

One of the primary research objectives of the Virginia Tech wheat breeding program is to identify and develop cultivars possessing resistance to Fusarium Head Blight (FHB) or scab. Each year all wheat entries in Virginia's Official State Variety Trials are evaluated for FHB resistance in an inoculated, irrigated nursery at the Blacksburg test site. Data from this test for the current crop year and two and three year averages for FHB incidence, FHB severity and FHB Index (incidence x severity / 100) are included in this bulletin (Tables 29 – 31) to aid producers in selection of cultivars on the basis of FHB resistance. Cultivars possessing complete resistance or immunity to FHB have not been identified and resistance levels in currently available cultivars vary from moderately resistant to highly susceptible.

A major goal of the breeding program is to identify and incorporate unique and complementary types of FHB resistance into cultivars to enhance the overall level of resistance. Genes controlling FHB resistance have been identified on more than six chromosomes in wheat and some of these genes are complementary in nature and affect different disease resistance components such as FHB incidence, severity, and DON toxin content. Incorporating such multiple resistance genes having additive effects on FHB resistance into cultivars will enhance the overall level of resistance. Because the individual resistance genes are located on different wheat chromosomes and each gene confers only partial resistance to FHB, identifying wheat lines having multiple resistance genes is difficult using traditional breeding techniques. To overcome this limitation, our program is currently identifying and using DNA markers located close to these resistance genes on the same chromosome as "tags" for selecting wheat lines possessing different combinations of these complementary resistance genes.

Entries were inoculated by spreading scabby corn seeds in plots at the booting stage and by spraying a *Fusarium graminearum* spore suspension directly onto spikes at the 80% flowering stage. A high FHB infection level was obtained in 2008. Among 90 lines and varieties tested in 2008, the FHB index varied from 6% to 50% with FHB incidence ranging from 18% to 70% and FHB severity ranging from 16% to 76% (Table 29). Twenty-eight lines and 26 varieties had FHB index values lower than the mean (<18%) and expressing moderate resistant to FHB. The toxin level (DON) ranged from 0.4 to 3.3 ppm in 2006 and from 0 to 3.7 ppm in 2007 (Table 29). Based on two year mean data for 2007 and 2008 (Table 33), ten lines and 26 varieties had FHB index values lower than the test mean (<12%). Four wheat lines (VA04W-90, VA01W-205, VA03W-412, and VA03W-235) tested across three years (2006-2008) had average FHB index values lower than the test mean of 15% (Table 31). Varieties expressing consistent resistance to FHB based on two or three year mean data are: Massey, USG3342, Jamestown, Tribute, Coker 9436, Coker9553, Red Ruby, V9510, Pioneer26R15, SS8302, Dominion, Pioneer 26R87, SS-MPV57, USG3665, McCormick, Chesapeake, Magnolia, V9713, Oglethorpe, and Branson.

Table 29. Summary of reaction of entries in the 2007-08 Virginia Tech State Wheat Test to Fusarium head blight (scab) and glume blotch resistance, 2008 harvest.

LINE	Heading date (Julian)		FHB Incidence[1] (%)		FHB Severity[2] (%)		FHB Index[3] (0-100)	Rank FHB Index	Barley yellow dwarf (0-9)		*S.Nod* Glume blotch (0-9)		Leaf rust (0-9)		Powdery mildew (0-9)		Don Value 2006	Don Value 2007
VA04W-90	128		35		16	-	6	1	1		3		8		2		0.6	0.10
VA05W-125	126	-	18	-	41		7	2	1		6		8		0	-	---	0.22
COKER 9436(D)	131	+	33		22		7	3	3		8		2		4		2.0	0.36
USG 3342(D)	128		25		29		7	4	1		4		5		0	-	0.7	0.00
VA05W-777	127		23		35		8	5	3		7		7		6	+	---	---
SS-MPV 57(RT)	129		38		23		9	6	0		2		9	+	3		2.5	1.07
VA04W-360	127		35		25		9	7	1		7		6		1		---	---
Progeny 166(D)	127		23		39		9	8	4	+	9	+	0	-	6	+	---	---
VA05W-22	130	+	20		46		9	9	3		6		7		2		---	---
PIONEER 26R87(D)	127		30		32		9	10	0		6		3		1		1.6	0.34
VA05W-251	127		33		29		9	11	0		2		1	-	3		---	0.23
Branson(D)	126	-	30		32		10	12	2		8		8		1		---	0.68
VA06W-194	128		20		50		10	13	1		1	-	2		2		---	---
Massey	130	+	30		34		10	14	2		9	+	9	+	2		0.5	0.50
VA04W-571	129		28		37		10	15	2		9	+	9	+	6	+	---	0.00
Dominion(D)	128		38		27		10	16	1		3		7		1		0.4	0.53
Magnolia(D)	131	+	23		46		10	17	1		8		5		5		---	1.17
VA05W-151	128		33		33		11	18	1		5		6		0	-	---	0.55
VA06W-608	128		48		23		11	19	2		9	+	2		4		---	---
Progeny 117(D)	126	-	25		44		11	20	0		8		7		5		---	---
Tribute(D)	126	-	28		41		11	21	0		1	-	4		0	-	0.6	0.00
VA05W-641	128		25		47		12	22	2		4		8		0	-	---	---
VA06W-256	127		28		43		12	23	2		6		1	-	2		---	---
USG 3725(D)	127		30		41		12	24	1		7		8		6	+	---	---
Vigoro V9510(D)	128		35		36		13	25	1		5		8		4		3.4	0.65
VA05W-250	131	+	65	+	20		13	26	2		1	-	2		1		---	0.00
VA05W-436	130	+	53		25		13	27	0		7		1	-	6	+	---	0.71

Table 29. Summary of reaction of entries in the 2007-08 Virginia Tech State Wheat Test to Fusarium head blight (scab) and glume blotch resistance, 2008 harvest, continued.

LINE	Heading date (Julian)		FHB Incidence[1] (%)		FHB Severity[2] (%)		FHB Index[3] (0-100)	Rank FHB Index	Barley yellow dwarf		*S.Nod* Glume blotch		Leaf rust (0-9)		Powdery mildew (0-9)		Don Value 2006	Don Value 2007
Jamestown	125	-	35		39		14	28	0		4		6		1		0.7	0.64
PIONEER 26R12(D)	130	+	35		39		14	29	3		9	+	8		5		2.6	0.62
Progeny 127(D)	129		33		42		14	30	0		7		9	+	6	+	---	---
VA01W-205	128		38		37		14	31	0		8		1	-	2		1.0	0.32
VA06W-93	129		40		35		14	32	0		4		5		7	+	---	---
VA05W-376	132	+	38		37		14	33	2		3		0	-	3		---	---
Vigoro V9713(D)	128		35		41		14	34	0		7		6		6	+	---	0.97
Oglethorpe(D)	125	-	40		36		14	35	1		8		0	-	7	+	---	0.74
Sisson	128		48		30		14	36	0		5		9	+	0	-	0.7	1.94
USG 3665(D)	128		33		45		14	37	1		6		6		5		1.5	0.60
VA04W-230	129		38		39		15	38	0		7		9	+	5		---	0.99
Red Ruby(RT)	128		43		34		15	39	1		4		9	+	3		1.1	0.63
VA05W-78	127		48		31		15	40	0		2		3		0	-	---	0.43
COKER 9553(D)	126	-	30		51		15	41	2		9	+	3		3		1.7	0.42
VA05W-101	130	+	53		30		16	42	2		5		7		1		---	---
VA05W-668	128		30		53		16	43	0		8		9	+	5		---	0.13
VA03W-310	126	-	38		42		16	44	1		5		0	-	0	-	1.6	2.04
VA06W-423	131	+	43		38		16	45	1		2		7		0	-	---	---
VA03W-235	131	+	38		43		16	46	2		3		9	+	0	-	1.8	0.52
McCormick	128		43		39		16	47	0		2		9	+	0	-	0.3	0.55
VA06W-392	128		38		44		16	48	0		4		4		4		---	---
Progeny 122(D)	128		40		42		17	49	0		3		9	+	5		---	---
VA03W-412	128		30		55		17	50	2		5		5		2		1.3	0.73
Progeny 145(D)	126	-	23		76	+	17	51	4	+	9	+	4		7	+	---	---
VA04W-592	128		38		46		17	52	2		8		0	-	3		---	0.38
VA06W-627	131	+	38		46		17	53	1		3		0	-	4		---	---
SS 8302(RT)	130	+	35		50		17	54	2		8		8		6	+	1.2	1.23

Table 29. Summary of reaction of entries in the 2007-08 Virginia Tech State Wheat Test to Fusarium head blight (scab) and glume blotch resistance, 2008 harvest, continued.

LINE	Heading date (Julian)		FHB Incidence[1] (%)		FHB Severity[2] (%)		FHB Index[3] (0-100)	Rank FHB Index	Barley yellow dwarf		*S.Nod* Glume blotch		Leaf rust (0-9)		Powdery mildew (0-9)		Don Value 2006	Don Value 2007
SS 548(DE)	128		35		50		18	55	0		8		8		5		---	---
VA05W-108	130	+	53		34		18	56	5	+	5		3		3		---	0.37
VA03W-409	128		43		42		18	57	2		4		2		0	-	3.1	0.21
PIONEER 26R15(D)	127		33		56		18	58	2		9	+	2		3		1.4	0.61
FEATHERSTONE 176(RT)	126	-	43		44		19	59	0		6		8		0	-	1.5	0.39
Progeny 185(D)	127		40		48		19	60	1		9	+	7		6	+	---	---
USG 3555 (D)	128		43		46		20	61	0		4		6		3		2.1	0.21
W-1377(D)	128		40		49		20	62	0		6		9	+	3		0.8	0.67
PIONEER 26R31(D)	128		43		47		20	63	1		4		5		2		1.6	0.63
VA05W-686	130	+	43		47		20	64	1		9	+	8		6	+	---	---
CHESAPEAKE(RT)	126	-	50		41		21	65	1		3		6		1		1.3	0.36
VA05W-168	126	-	38		56		21	66	0		6		2		3		---	0.42
VA04W-306	127		43		51		22	67	0		3		6		1		2.0	0.43
USG 3209(D)	127		53		42		22	68	2		7		8		2		1.2	0.41
VA05W-258	129		48		47		22	69	3		2		0	-	4		---	0.31
VA06W-600	128		33		69		23	70	4	+	9	+	2		6	+	---	---
VA06W-112	128		50		45		23	71	5	+	2		6		3		---	---
SS 8641(R)	129		55		41		23	72	3		5		0	-	0	-	---	---
COKER 9804(D)	126	-	38		62		23	73	1		9	+	7		2		---	---
VA04W-495	128		43		55		24	74	1		7		8		4		---	---
VA06W-6	128		43		56		24	75	0		0	-	0	-	0	-	---	---
VA06W-237	130	+	60		40		24	76	1		4		0	-	3		---	---
VA03W-434	128		53		48		25	77	3		2		6		1		1.5	0.00
VA05W-139	129		48		55		26	78	0		3		7		3		---	---
USG 3592(D)	128		48		56		27	79	4	+	7		1	-	4		3.0	0.50
VA03W-509	128		48		59		28	80	0		1	-	3		2		---	---
Renwood 3633(D)	129		40		70		28	81	7	+	9	+	0	-	5		---	---

Table 29. Summary of reaction of entries in the 2007-08 Virginia Tech State Wheat Test to Fusarium head blight (scab) and glume blotch resistance, 2008 harvest, continued.

LINE	Heading date (Julian)		FHB Incidence[1] (%)		FHB Severity[2] (%)		FHB Index[3] (0-100)		Rank FHB Index	Barley yellow dwarf		S.Nod Glume blotch		Leaf rust (0-9)		Powdery mildew (0-9)		Don Value 2006	Don Value 2007
VA06W-215	127		53		54		28		82	0		5		0	-	2		---	---
Panola(D)	125	-	55		54		30		83	1		7		8		3		1.4	1.43
SS 8404(RT)	128		50		59		30		84	0		8		9	+	5		1.0	0.56
VA05W-414	130	+	58		53		30		85	0		2		6		4		---	3.25
SS 8309(RT)	129		50		63		32		86	0		7		9	+	5		0.7	0.22
SS 560(RT)	133	+	70	+	46		32		87	3		7		9	+	5		1.8	0.77
VA05W-257	129		58		58		33		88	0		7		9	+	6	+	---	0.35
PIONEER 26R24(D)	127		70	+	60		42	+	89	1		7		8		4		3.3	0.77
SS 520(RT)	125	-	60		71	+	43	+	90	1		4		6		2		1.9	1.69
VA04W-259	131	+	70	+	71	+	50	+	91	1		1	-	0	-	3		2.8	3.68
MEAN	**128**		**40**		**44**		**18**			**1**		**5**		**5**		**3**			
LSD	2		21		27		16			3		4		4		0			
CV(%)	1		---		---		---			---		---		---		---			

Released cultivars are shown in bold print. Varieties are ordered by ascending index averages.

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

Entries were planted in 2-row plots, 4 ft in length at Blacksburg, VA and were inoculated at the boot stage with scabby corn and at 80% flowering stages with Fusarium graminearum spore suspension (50,000 spores/ml).

[1]Scab Incidence (%): Percentage of infected spikes among 10 randomly selected spikes.

[2]Scab Severity (%): Percentage of infected spikelets divided by total number of spikelets among 10 infected spikes.

[3]Scab Index = Incidence X Severity/100; it is an overall indicator of scab resistance/susceptibility level.

Table 30. Two year average summary of reaction of entries in the Virginia Tech State Wheat Tests to Fusarium head blight (scab) and glume blotch resistance, 2007 and 2008 harvests.

LINE	Heading date (Julian)		FHB Incidence[1] (%)		FHB Severity[2] (%)		FHB Index[3] (0-100)		Barley yellow dwarf (0-9)		*S.Nod* Glume blotch (0-9)		Leaf rust (0-9)		Powdery mildew (0-9)	
Coker 9436	132	+	21		14		3	-	3		7		2		4	
Magnolia	131	+	21		25		5		1		7		5		5	
USG 3342	130		30		19		6		1		4		5		0	
VA05W-125	128	-	24		24		6		1		7		8		0	
VA04W-90	130		33		18		6		1		3		8		2	
Massey	131	+	28		23		6		2		7		9	+	2	
VA05W-668	130		23		29		7		0		7		9	+	5	
Jamestown	127	-	28		24		7		0		4		6		1	
USG 3665	130		24		28		7		1		5		6		5	
VA04W-571	130		29		24		7		2		8	+	9	+	6	
Pioneer 26R15	130		24		31		7		2		8	+	2		3	
VA05W-108	131	+	34		22		7		5	+	5		3		3	
Dominion	130		39		20		8		1		4		7		1	
VA01W-205	129	-	34		23		8		0		8	+	1	-	2	
SS-MPV 57	131	+	39		21		8		0		2	-	9	+	3	
VA05W-251	129	-	36		23		8		0		3		1	-	3	
VA03W-235	131	+	31		27		8		2		2	-	9	+	0	
Vigoro V9713	130		33		26		9		0		5		6		6	
VA04W-592	130		29		30		9		2		7		0	-	3	
SS 8302	131	+	30		29		9		2		8	+	8		6	
Pioneer 26R87	129	-	33		27		9		0		6		3		1	
Vigoro V9510	130		30		30		9		1		5		8		4	
Oglethorpe	127	-	38		24		9		1		7		0	-	7	+
VA05W-436	131	+	51		18		9		0		6		1	-	6	
VA05W-250	131	+	58	+	16		9		2		1	-	2		1	
Pioneer 26R31	130		29		32		9		1		5		5		2	
Tribute	129	-	36		26		9		0		1	-	4		0	
Red Ruby	130		36		26		9		1		3		9	+	3	
Branson	129	-	35		27		9		2		6		8		1	
VA05W-151	130		39		25		10		1		4		6		0	
Coker 9553	128	-	28		35		10		2		8	+	3		3	
McCormick	129	-	41		26		11		0		3		9	+	0	
Featherstone 176	128	-	34		32		11		0		6		8		0	
VA03W-434	130		39		28		11		3		2	-	6		1	
USG 3209	129	-	44		25		11		2		7		8		2	
Chesapeake	129	-	38		29		11		1		4		6		1	
USG 3555	129	-	41		27		11		0		5		6		3	
W-1377	130		33		34		11		0		5		9	+	3	
Pioneer 26R12	131	+	38		30		11		3		7		8		5	
VA03W-412	129	-	35		33		12		2		5		5		2	
VA03W-409	130		41		29		12		2		4		2		0	
VA04W-306	129	-	39		33		13		0		3		6		1	
SS 8309	130		35		37		13		0		7		9	+	5	

Table 30. Two year average summary of reaction of entries in the Virginia Tech State Wheat Tests to Fusarium head blight (scab) and glume blotch resistance, 2007 and 2008 harvests, continued.

LINE	Heading date (Julian)		FHB Incidence[1] (%)		FHB Severity[2] (%)		FHB Index[3] (0-100)		Barley yellow dwarf (0-9)		*S.Nod* Glume blotch (0-9)		Leaf rust (0-9)		Powdery mildew (0-9)	
Sisson	130		46		29		13		0		4		9	+	0	
SS 560	132	+	45		31		14		3		6		9	+	5	
VA05W-78	129	-	51		28		14		0		2	-	3		0	
VA03W-310	129	-	46		32		15		1		5		0	-	0	
Panola	128	-	40		37		15		1		7		8		3	
VA05W-258	130		39		39		15		3		2	-	0	-	4	
VA04W-230	130		41		38		16		0		7		9	+	5	
VA05W-168	129	-	44		37		16		0		4		2		3	
SS 8404	130		38		43		16		0		7		9	+	5	
VA05W-257	130		49		37		18		0		6		9	+	6	
VA05W-414	131	+	54		36		19		0		3		6		4	
SS 520	128	-	48		45	+	22	+	1		5		6		2	
VA04W-259	132	+	58	+	42		24	+	1		3		0	-	3	
USG 3592	130		56	+	44		25	+	4	+	6		1	-	4	
Pioneer 26R24	129	-	55	+	56	+	31	+	1		6		8		4	
MEAN	130		37		29		12		1		5		5		3	
LSD	1		18		16		9		3		3		4		4	
CV(%)	1		---		---		---		---		---		---		---	

Released cultivars are shown in bold print. Varieties are ordered by ascending index averages.

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

Entries were planted in 2-row plots, 4 ft in length at Blacksburg, VA and were inoculated at 50% and 100% heading stages with Fusarium graminearum spore suspension (50,000 spores/ml).

[1]Scab Incidence (%): Percentage of infected spikes among 10 randomly selected spikes.

[2]Scab Severity (%): Percentage of infected spikelets divided by total number of spikelets among 10 infected spikes.

[3]Scab Index = Incidence X Severity/100; it is an overall indicator of scab resistance/susceptibility level.

Table 31. Three year average summary of reaction of entries in the Virginia Tech State Wheat Tests to Fusarium head blight (scab) and glume blotch resistance, 2006 - 2008 harvests.

LINE	Heading date (Julian)		FHB Incidence[1] (%)		FHB Severity[2] (%)		FHB Index[3] (0-100)		Barley yellow dwarf (0-9)		*S.Nod* Glume blotch (0-9)		Leaf rust (0-9)		Powdery mildew (0-9)	
Massey	129	+	33	-	19		6	-	2		7		9	+	2	
VA04W-90	128		40		16	-	6	-	1		3		8		2	
USG 3342	127	-	35		20		6	-	1		4		5		0	
Jamestown	126	-	30	-	19		6	-	0		4		6		1	
Tribute	128		39		23		8		0		1	-	4		0	
Coker 9436	130	+	38		18		9		3		7		2	-	4	
Coker 9553	126	-	35		28		10		2		8	+	3	-	3	
Red Ruby	128		43		24		10		1		3		9	+	3	
Vigoro V9510	128		43		26		10		1		5		8		4	
Pioneer 26R15	128		34		28		10		2		8	+	2	-	3	
SS 8302	129	+	40		27		11		2		8	+	8		6	+
VA01W-205	127	-	44		23		11		0		8	+	1	-	2	
VA03W-412	127	-	43		29		11		2		5		5		2	
Dominion	128		49		21		11		1		4		7		1	
Pioneer 26R87	126	-	45		25		11		0		6		3	-	1	
SS-MPV 57	129	+	49		22		11		0		2	-	9	+	3	
USG 3665	128		36		28		12		1		5		6		5	
Chesapeake	127	-	48		24		12		1		4		6		1	
VA03W-235	129	+	44		27		12		2		2	-	9	+	0	
McCormick	128		48		24		13		0		3		9	+	0	
VA03W-409	128		51		28		15		2		4		2	-	0	
VA03W-310	127	-	53		29		15		1		5		0	-	0	
Sisson	127	-	54		28		15		0		4		9	+	0	
W-1377	128		47		32		15		0		5		9	+	3	
USG 3209	127	-	53		27		16		2		7		8		2	
VA03W-434	129	+	48		29		16		3		2	-	6		1	
SS 8404	128		43		35		16		0		7		9	+	5	
SS 8309	129	+	45		33		16		0		7		9	+	5	
Featherstone 176	127	-	46		33		16		0		6		8		0	
USG 3555	127	-	54		29		16		0		5		6		3	
Pioneer 26R31	128		46		34		18		1		5		5		2	
Pioneer 26R12	129	+	52		35		21		3		7		8		5	
Panola	126	-	48		38		21		1		7		8		3	
SS 560	130	+	52		36		22		3		6		9	+	5	
VA04W-306	128		53		38		22		0		3		6		1	
SS 520	126	-	60		41		26	+	1		5		6		2	
USG 3592	128		64	+	50	+	32	+	4	+	6		1	-	4	
Pioneer 26R24	127	-	62	+	55	+	32	+	1		6		8		4	

Table 31. Three year average summary of reaction of entries in the Virginia Tech State Wheat Tests to Fusarium head blight (scab) and glume blotch resistance, 2006 - 2008 harvests, continued.

LINE	Heading date (Julian)		FHB Incidence[1] (%)		FHB Severity[2] (%)		FHB Index[3] (0-100)		Barley yellow dwarf (0-9)	S.Nod Glume blotch (0-9)	Leaf rust (0-9)		Powdery mildew (0-9)
VA04W-259	130	+	67	+	46	+	34	+	1	3	0	-	3
MEAN	128		47		29		15		1	5	6		2
LSD	1		14		13		8		3	3	3		4
CV(%)	1		---		---		---		---	---	---		---

Released cultivars are shown in bold print. Varieties are ordered by ascending index averages.

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

Entries were planted in 2-row plots, 4 ft in length at Blacksburg, VA and were inoculated at 50% and 100% heading stages with Fusarium graminearum spore suspension (50,000 spores/ml).

[1]Scab Incidence (%): Percentage of infected spikes among 10 randomly selected spikes.

[2]Scab Severity (%): Percentage of infected spikelets divided by total number of spikelets among 10 infected spikes.

[3]Scab Index = Incidence X Severity/100; it is an overall indicator of scab resistance/susceptibility level.