Virginia Cooperative Extension

**REVISED 2004** 



Grains and Other Agronomic Crops PUBLICATION 424-001

## **SMALL GRAINS IN 2004**

The following are the small grain variety recommendations for Virginia in 2004. 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.

* These lines are no	Arranged in Or of daylength sensitive and	TIES RECOMMENDED der of Maturity should not be planted eau eze damage.	rly in order to avoid
COASTAL PLAIN	PIED	MONT	WEST OF BLUE RIDGE
	South of James River	North of James River	
	Hulled Barl	ey Varieties	
Callao	Callao	Callao	Callao
		Nomini	Nomini
Price	Price	Price	Price
Thoroughbred	Thoroughbred	Thoroughbred	Thoroughbred
	Soft Red W	inter Wheat	
SS 520*	SS 520*	SS 520*	SS 520*
Sisson	Sisson	Sisson	Sisson
Pioneer Brand 26R24	Pioneer Brand 26R24	Pioneer Brand 26R24	Pioneer Brand 26R24
Crawford	Crawford	Crawford	Crawford
USG 3209*	USG 3209*	USG 3209*	USG 3209*
Pioneer Brand 26R58	Pioneer Brand 26R58	Pioneer Brand 26R58	
Tribute	Tribute	Tribute	Tribute
SS 550	SS 550	SS 550	SS 550
McCormick	McCormick	McCormick	McCormick
SS 560	SS 560	SS 560	SS 560



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### SECTION 8 - SELECTING WHEAT VARIETIES FOR SPECIFIC PLANTING DATES

#### **COMMERCIAL BARLEY ENTRIES**

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

#### COMMERCIAL AND EXPERIMENTAL WHEAT ENTRIES

AgriPro Wheat, PO Box 411, 520 East 1050 South, Brookston, IN 47923 - Crawford.

University of Arkansas, Dept. of Agronomy, 115 Plant Science, Fayetteville, AR 72701 - Pat.

Featherstone Seed Company, 13941 Genito Road, Amelia, VA 23002 - Featherstone 520.

University of Georgia, GA Station, 1109 Experiment Street, Griffin, GA 30223 - GA931233E17.

Hubner Seed Company, Inc., 524 Bermuda Hundred, Chester, VA 23836 – H-84.

JGL Limited, Inc., 3540 South US 231, Greencastle, IN 46135 - Rachel.

University of Maryland, CMREC/Beltsville Facility, 12000 Beaver Dam Road, Laurel, MD 2 0708 – Choptank, MD5-46, MD71-5, MV6-82, MV8-29, MV27-0187.

North Carolina State University, 840 Method Rd, Unit 3, Box 7629, Raleigh, NC 27695-7629 – Neuse, NC99-13022, NC00-15332, and NC00-15389.

Pioneer Hibred International, Inc., Eastern Division, Tipton, IN 47072 - Pioneer Brand 26R24, Pioneer Brand 26R58, Pioneer Brand 26R12, Pioneer Brand 26R15, and Pioneer Brand XW02M.

Renwood Farms, Inc., 17303 Sandy Point Road, Charles City, VA 23030 - Renwood 3706.

Resource Seeds, Inc., 2355 Rice Pike, Union, KY 41091 – RSI 42203, Trical 2115, and Trical 2205 (all triticales). Royster-Clark, Inc., 70 N. Market St., Mt. Sterling, OH 43143 – Tribute, V9212, and V9412.

Southern States Cooperative, PO Box 26234, Richmond, VA 23260 - SS 520, SS 550, SS 560, SS 8302, SS 8308, and SS 8309.

Syngenta Seeds, Inc., PO Box 1240, Winterville, NC 28590 – Coker 9375, Coker 9184, Coker 9295, Coker 9312, and Coker B970051.

Uni-South Genetics, 2640-C Nolensville Road, Nashville, TN 37211 - USG 3209, USG 3350, USG 3592, and USG 3706.

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

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#### **INTRODUCTION**

The tables included in this publication present results from barley and wheat varietal tests conducted in Virginia during 2002-2004. Yield data are given for individual locations and across locations and years with yield and other performance characteristics averaged over the indicated number of locations. 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. All tests conducted during 2002-2004 were grown in seven-inch rows planted at 22 seeds per row foot with the exception of those at Blacksburg and Warsaw which were grown in six-inch rows at 22 seeds per row foot. The plots were trimmed during the winter to 9 feet in length. Details about management practices for barley and wheat are listed for each experimental location.

#### The Season

The 2003-2004 small grain crop began in the wake of hurricane Isabel with planting of some doublecrop fields delayed due to hurricane damage and heavy rains. Otherwise planting conditions were mostly favorable.

#### Barley

Virginia producers planted an estimated 50,000 acres of barley in 2003-04 compared with slightly under 75,000 acres in 2002-03. Grain harvest occurred on 60% of planted acres for the 2002-03 crop and an estimated 80 % for the current year. At a projected 70 bushels per acre, yields were slightly above the 62 bushel per acre average of 2002-2003 but below the 10-yr state-wide average of 75 bushels per acre.

#### Wheat

Planted acres for wheat were down from 210,000 acres in 2002-03 to 180,000 acres in 2004. However the percentage harvested for grain this year was slightly over 86%, a ten percent increase from the previous season. Statewide average yield was reported at 63 bushels per acre, up from the dismal performance of 46 bushels per acre in 2002-03 and five bushels per acre better than the 10 year average.

#### **Temperature and Rainfall**

Temperatures were warm from October into early November but then much wetter and cooler by the middle of the month. The winter months brought temperatures and precipitation slightly below normal for the state. Late winter evidenced many small grain fields that were stunted or tillering poorly due to late planting, inadequate topsoil moisture, and especially cold temperatures. This same trend was evident into March with small grains developing slowly. Concerns over inadequate moisture were felt statewide but more so in the Southern and Eastern counties as this area was well below normal rainfall. Average daily temperatures in March were also five degrees below normal for the entire state. April ended on a warm and mostly dry note with temperatures above normal. Showers at heading and flowering caused concerns about scab incidence in most of the wheat crop. In many areas of eastern Virginia, high temperatures reached 85° F on more than 15 days of the month. The mostly average yields in 2004 are largely related to the dry, warmer than normal May which shortened the normal grain filling period. Combined with dry conditions, this impeded and shortened the normal grain filling time and the mostly average reported yields in the region reflect this. Barley harvest occurred well ahead of normal due to the dry and hot conditions. Most areas reported good yields, ranging from 60-100 bu/ac. Wheat harvest began mostly ahead of schedule because of the continued dry conditions but was then delayed by rain and cloudy days. Wheat grain quality was affected by the occurrence of scab in many areas but not as severely as the previous season.

Rainfall across the Commonwealth over the 2003-04 growing season and for the previous 100 years is presented in Figure 1. Overall, timely rains were received throughout most of the season with excessive rain received in some areas at harvest time.





#### **SECTION 1 - BARLEY VARIETIES**

#### **Hulless Barley**

Hulless barley grows and looks like regular barley until nearly mature. When almost mature, the glumes start to separate from the seed. The grain is separated from the glumes when combined. Grain of hulless barley looks more like wheat than traditional barley.

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. Rapid progress in this new program at Virginia Tech by Dr. Carl Griffey's small grains breeding group is evident when three-year average yield of hulless check H585 at 71 bushels per acre is compared with those of Doyce at 80 bushels per acre and VA00H-65 at 81 bushels per acre. Test weight of hulless barley is generally in the 56 to 60 pounds per bushel range. Standability of Doyce and most of the hulless barley lines is good. Limited quantities of Doyce will be available to producers for fall 2004 planting.

The impact of hulless barley production in the mid-Atlantic on the animal feeding industries could be significant. Swine feeding trials conducted by Dr. Allen Harper, Virginia Tech Animal Scientist, indicate that the feed value of hulless barley is near that for corn, based on gain, making it a locally grown best-cost ration additive. Work with poultry has also shown favorable results with feed consumption and feed efficiency equal to or greater than corn. Barley may still have a bright future in Virginia and the mid-Atlantic region if we strive to produce what the customer wants. Quality and consistency need to improve to take advantage of market opportunities. Management practices should be optimized so that producers can take advantage of the excellent hulless barley lines being developed at Virginia Tech by Dr. Griffey's "barley team" of Wynse Brooks and Mark Vaughn. We have a great deal to lose if barley becomes obsolete and is no longer a viable crop in our rotation system.

#### **Hulled Barley**

Virginia grown barley typically yields in excess of 100 bushels per acre, and fits well in many crop rotation systems. Hulled barley makes good feed for horses, dairy animals, beef, sheep, and some laying hens. The problem is that these industries in Virginia and the mid-Atlantic region use only limited quantities of barley. Profitable barley production on over 50,000 acres in Virginia is going to require revival of international market opportunities and/or development of barley varieties that livestock feeders want to buy.

Newer hulled barley lines performed well with statewide trials with yields of Thoroughbred at 129 bushels per acre and average test weights exceeding 48 pounds per bushel. Thoroughbred has plump, bright, seed and large awns

that break easily at harvest. The 2002 release Price averaged 112 bushels per acre with a test weight of 48.7 pounds per bushel. Two year average yields of the released varieties Thoroughbred, Callao, Nomini, and Price all reached 98 bushels per acre or better. Price, Callao, and Thoroughbred all had two year mean test weight values significantly higher than the test mean. Hopefully these new varieties with improved genetic traits for test weight and other quality factors along with improved agronomic traits will enhance the marketability of Virginia grown barley.

# <u>Summary of barley management practices for the 2004 harvest season (All rates are given on a per acre basis.)</u>

**Blacksburg** - Planted October 8, 2003. Preplant fertilizer was 25-60-100 on October 7, 2003. Site was fertilized with 60-0-0 plus 0.6 oz Harmony Extra® on April 7, 2004. Harvest occurred on June 10, 2004.

**Blackstone** - Planted October 21, 2003. Preplant fertilizer was 10-10-10 on October 9, 2004. Site was fertilized with 100 lb N using 30%UAN on March 3, 2004. Site was sprayed with 0.5 oz Harmony Extra® on March 4, 2004. Site was sprayed with 2.56 oz Warrior T® on April 27, 2004. Harvest occurred on June 2, 2004.

**Painter** - Planted November 11, 2003. Preplant fertilizer was 500 lb 5-10-10. Site was fertilized with 120 lb N and 0.5 oz Harmony Extra was applied March 3, 2004. Warrior T® was applied at 2.5 oz May 6, 2004. Harvest occurred on June 22, 2004.

**Warsaw** - Planted October 16, 2003. Preplant fertilizer was 30-80-100-5 applied October 13, 2003. Site was sprayed with 0.4 oz Finesse® on December 9, 2003. Fertilization at 25 lb N using 15-0-0 was applied December 20, 2003 and again on February 23, 2004. Fertilization at 40 lb N using 24-0-0-3 was applied March 30, 2004. Warrior T® at 2.56 oz was applied May 11, 2004. Harvest occurred June 8, 2004.

**Orange** - Planted October 10, 2003. Preplant fertilization was 500 lb 5-10-10-3 on October 3, 2003. Sixty lb N and Harmony Extra® at 0.4 oz were applied March 4, 2004. Harvest occurred on June 2, 2004.

Test         Date         Net         Leaf           Hulless Lines         (Bu'a)         (Lb/bu)         (Mar31+)         (n)         (0.2-10)         Blotch         Rust           (3)         (3)         (3)         (3)         (3)         (3)         (3)         (1)         (1)           DOYCE         81         +         54.7         23         34         +         0.4         6         1         -           VA01H-68         76         +         56.5         +         22         -         34         +         0.5         5         4         -           VA00H-74         75         +         55.6         23         32         0.4         6         6         4         -           VA00H-89         74         53.5         -         24         +         32         0.3         6         6         4         -           VA01H-37         74         52.8         -         24         +         32         0.3         6         6         4         -           VA01H-26         73         55.6         24         +         32         0.3         5         2         -	harvest.												
Hulless Lines         (Bu/a)         (Lb/bu)         (Mar31+)         (In)         (0.2-10)         (0-9)           (3)         (3)         (3)         (3)         (3)         (3)         (1)         (1)           DOYCE         81         + 54.7         23         34         + 0.4         6         1           VA01H-68         76         + 56.5         + 22         - 34         + 0.4         6         6         4           VA00H-70         75         + 55.6         22         - 34         + 0.4         6         6         4           VA00H-70         75         + 55.4         23         32         0.4         6         6         4           VA0H-89         74         53.5         - 24         + 32         0.9         + 6         1         -           VA0H-50         73         55.6         24         + 31         - 0.4         5         1         -           VA0H-62         73         55.8         24         + 31         - 0.4         6         5         -           VA0H-72         72         54.9         24         + 32         0.5         7         6         +				Test		Date					Net	Lea	f
Hulless Lines         (Bu/a)         (Lb/bu)         (Mar31+)         (In)         (0.2-10)         (0-9)           (3)         (3)         (3)         (3)         (3)         (3)         (1)         (1)           DOYCE         81         + 54.7         23         34         + 0.4         6         1           VA01H-68         76         + 56.5         + 22         - 34         + 0.4         6         6         4           VA00H-70         75         + 55.6         22         - 34         + 0.4         6         6         4           VA00H-70         75         + 55.4         23         32         0.4         6         6         4           VA0H-89         74         53.5         - 24         + 32         0.9         + 6         1         -           VA0H-50         73         55.6         24         + 31         - 0.4         5         1         -           VA0H-62         73         55.8         24         + 31         - 0.4         6         5         -           VA0H-72         72         54.9         24         + 32         0.5         7         6         +		Yield	_	Weight		Headed		Heigh	t	Lodging	Blotch	Rus	t
(3)       (3)       (3)       (3)       (3)       (1)       (1)         DOYCE       81       +       54.7       23       34       +       0.4       6       1         VA01H-68       76       +       56.5       +       22       -       34       +       0.5       5       4         VA00H-74       75       +       55.6       23       32       0.4       6       6       4         VA00H-70       75       +       55.6       23       32       0.4       6       6       4         VA0H-37       74       52.8       -       24       +       32       0.3       6       6       4         VA0H-37       74       52.8       -       24       +       32       0.3       6       6       1         VA0H-426       73       54.8       24       +       32       0.3       5       2       7         VA0H-72       72       55.8       24       +       31       -       0.4       6       5       -         VA0H-72       72       55.8       24       +       32       0.5       7       6<	Hulless Lines	(Bu/a)	)			(Mar31+	• )	-			(	0-9)	
DOYCE         81         +         54.7         23         34         +         0.4         6         1         ·           VA01H-68         76         +         56.5         +         22         -         34         +         0.5         5         4           VA00H-70         75         +         55.4         23         32         0.4         6         6         4           VA0H-89         74         53.5         -         24         +         32         0.9         +         6         1         -           VA0H-37         74         52.8         -         24         +         32         0.9         +         6         1         -           VA0H-55         73         55.6         24         +         32         0.3         5         2         -           VA0H-26         73         54.8         24         +         31         -         0.4         6         5           VA0H-88         71         54.6         24         +         32         0.3         7         6         4           VA0H-99         69         55.5         24         +		, ,		. ,			<u> </u>			, ,			
VA01H-68       76       +       56.5       +       22       -       34       +       0.5       5       4       -         VA00H-74       75       +       55.6       23       32       0.4       6       6       4       -         VA00H-89       74       53.5       -       24       +       32       0.3       6       6       4       -         VA01H-37       74       52.8       -       24       +       31       -       0.4       5       1       -         VA01H-37       74       52.8       -       24       +       31       -       0.4       5       1       -         VA01H-65       73       55.6       24       +       32       0.3       6       6       6       -       VA01H-3       72       55.8       24       +       31       -       0.4       6       5       -       -       VA0H-6       5       7       2       -       VA0H-7       71       55.2       24       +       33       +       0.3       6       7       4       VA0H-9       9       55.5       24       +       31       - </td <td></td> <td>(3)</td> <td></td> <td>(3)</td> <td></td> <td>(3)</td> <td></td> <td>(3)</td> <td>_</td> <td>(3)</td> <td>(1)</td> <td>(1)</td> <td></td>		(3)		(3)		(3)		(3)	_	(3)	(1)	(1)	
VA01H-68       76       +       56.5       +       22       -       34       +       0.5       5       4       -         VA00H-74       75       +       55.6       23       32       0.4       6       6       4       -         VA00H-89       74       53.5       -       24       +       32       0.3       6       6       4       -         VA01H-37       74       52.8       -       24       +       31       -       0.4       5       1       -         VA01H-37       74       52.8       -       24       +       31       -       0.4       5       1       -         VA01H-65       73       55.6       24       +       32       0.3       6       6       6       -       VA01H-3       72       55.8       24       +       31       -       0.4       6       5       -       -       VA0H-6       5       7       2       -       VA0H-7       71       55.2       24       +       33       +       0.3       6       7       4       VA0H-9       9       55.5       24       +       31       - </td <td>DOVCE</td> <td>81</td> <td>+</td> <td>54.7</td> <td>_</td> <td>23</td> <td></td> <td>34</td> <td>+</td> <td>0.4</td> <td>6</td> <td>1</td> <td>+</td>	DOVCE	81	+	54.7	_	23		34	+	0.4	6	1	+
VA00H-74       75       +       55.6       23       32       0.4       6       6       4         VA00H-70       75       +       55.4       23       32       0.4       6       4       4         VA0H-89       74       53.5       -       24       +       32       0.3       6       6       4         VA01H-37       74       52.8       -       24       +       32       0.3       6       6       1       -         VA01H-44       74       54.4       24       +       31       -       0.4       5       1       -         VA0H-65       73       55.6       24       +       32       0.3       6       6       5         VA0H-20       72       55.8       24       +       31       -       0.4       6       5       5         VA0H-88       71       54.6       24       +       32       0.3       7       6       4       4       432       0.3       6       7       4       4       6       7       4       4       6       7       4       4       6       7       4       4				-	+		-						
VA00H-70       75       +       55.4       23       32       0.4       6       4       -         VA00H-89       74       53.5       -       24       +       32       0.9       +       6       1       -         VA01H-37       74       52.8       -       24       +       32       0.9       +       6       1       -         VA01H-44       74       54.4       24       +       31       -       0.4       5       1       -         VA01H-26       73       55.6       24       +       30       -       0.3       5       2       -       -       24       +       31       -       0.4       6       5       -       -       24       +       32       0.3       7       6       +       32       0.5       7       2       -       VA0H-7       71       55.2       24       +       32       0.3       7       6       +       4       43       -       0.3       6       7       4       4       400H-10       69       55.5       24       +       31       -       0.3       6       7       4       4 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>-</td> <td></td> <td></td> <td></td> <td></td> <td>-</td> <td>_</td>							-					-	_
VA00H-89       74       53.5       -       24       +       32       0.3       6       6       4         VA01H-37       74       52.8       -       24       +       32       0.9       +       6       1       -         VA01H-44       74       54.4       24       +       31       -       0.4       55       1       -         VA00H-65       73       55.6       24       +       32       0.3       6       6       6       4         VA01H-26       73       54.8       24       +       30       -       0.3       5       2       2       -       VA01H-26       7       2       55.8       24       +       33       +       0.5       7       2       -       VA00H-37       71       55.2       24       +       32       0.3       7       6       4         VA00H-97       71       55.5       24       +       33       +       0.3       6       7       4         VA00H-99       69       55.5       24       +       31       -       0.3       6       7       4         VA01H-124       59 <td></td> <td></td> <td></td> <td></td> <td>_</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>-</td>					_								-
VA01H-37       74       52.8       -       24       +       32       0.9       +       6       1       -         VA01H-44       74       54.4       24       +       31       -       0.4       55       1       -         VA00H-65       73       55.6       24       +       32       0.3       6       6       4         VA0H-26       73       54.8       24       +       30       -       0.3       55       2       -         VA0H-26       73       54.8       24       +       31       -       0.4       6       5       2       -         VA0H-37       72       54.9       24       +       33       +       0.5       7       2       -         VA0H-88       71       54.6       24       +       32       0.3       7       6       4         VA0H-97       71       55.2       24       +       31       -       0.3       6       7       4         VA0H-99       69       55.5       24       +       31       -       0.3       7       6       4         VA0H-124       59 <td></td> <td></td> <td>T</td> <td></td> <td>_</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>-</td> <td></td>			T		_							-	
VA01H-44       74       54.4       24       +       31       -       0.4       5       1       -         VA00H-65       73       55.6       24       +       32       0.3       6       6       4         VA0H-26       73       54.8       24       +       30       -       0.3       5       2       -         VA0H-72       72       55.8       24       +       31       -       0.4       6       5       -         VA0H-72       72       54.9       24       +       33       +       0.5       7       6       4         VA0H-13       72       54.9       24       +       32       0.3       7       6       4         VA0H-97       71       55.2       24       +       31       -       0.3       6       7       4         VA0H-99       69       55.5       24       +       31       -       0.3       6       7       4         VA0H-199       68       55.0       22       -       27       -       0.3       7       6       4         SC880248       65       -       55.3 <td></td> <td></td> <td>_</td> <td></td> <td>_</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>_</td>			_		_								_
VA00H-65       73       55.6       24       +       32       0.3       6       6       4         VA01H-26       73       54.8       24       +       30       -       0.3       5       2       -         VA00H-72       72       55.8       24       +       31       -       0.4       6       55       -       2       -         VA01H-13       72       54.9       24       +       33       +       0.5       7       2       -         VA00H-88       71       54.6       24       +       32       0.5       7       6       +         VA00H-97       71       55.2       24       +       33       +       0.3       6       7       +         VA00H-99       69       55.5       24       +       31       -       0.3       6       7       +         SC880248       65       -       53.8       -       23       35       +       0.4       6       6       4       4       0.3       7       2       -         VA01H-124       59       -       66.4       +       22       -       26					-								1
VA01H-26       73       54.8       24       +       30       -       0.3       5       2       -         VA00H-72       72       55.8       24       +       31       -       0.4       6       5       -         VA00H-72       72       55.8       24       +       33       +       0.5       7       2       -         VA00H-88       71       54.6       24       +       32       0.5       7       6       4         VA00H-97       71       55.2       24       +       33       +       0.3       6       7       4         VA00H-99       69       55.5       24       +       31       -       0.3       6       7       4         VA00H-99       69       55.5       24       +       31       -       0.3       6       7       4         VA01H-124       59       -       56.2       +       22       -       26       -       0.4       6       6       4         VA01H-125       58       -       56.4       +       22       -       26       -       0.4       6       4       4									-				1
VA00H-72       72       55.8       24       +       31       -       0.4       6       5       -         VA01H-13       72       54.9       24       +       33       +       0.5       7       2       -         VA00H-88       71       55.2       24       +       32       0.5       7       6       +         VA00H-97       71       55.2       24       +       32       0.3       7       6       +         VA00H-10       69       53.6       -       24       +       33       +       0.3       6       7       +         VA00H-99       69       55.5       24       +       31       -       0.3       6       7       +         VA01H-124       59       -       56.2       +       22       -       27       -       0.3       7       6       +         VA01H-122       52       -       55.0       23       32       0.4       6       6       4         VA01H-122       52       -       55.0       23       32       0.4       6       4       4       109       18       26       26 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>+</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>+</td>							+						+
VA01H-13       72       54.9       24       +       33       +       0.5       7       2       -         VA00H-88       71       54.6       24       +       32       0.5       7       6       4         VA00H-97       71       55.2       24       +       33       +       0.3       6       7       4         VA00H-99       69       55.5       24       +       31       -       0.3       6       6       4         VA00H-99       69       55.5       24       +       31       -       0.3       6       7       4         VA00H-124       59       56.2       +       22       -       34       +       0.3       6       7       4         VA01H-124       59       56.2       +       22       -       26       -       0.4       6       6       4         VA01H-122       52       -       55.0       23       32       0.4       6       4       4       26       26       0.4       6       4       26       26       26       0.4       6       4       4       26       26       26							+		-				1
VA00H-88       71       54.6       24       +       32       0.5       7       6       +         VA00H-97       71       55.2       24       +       32       0.3       7       6       +         VA00H-10       69       53.6       -       24       +       33       +       0.3       6       7       +         VA00H-99       69       55.5       24       +       31       -       0.3       6       6       +         H-585       68       55.0       22       -       34       +       0.3       6       7       +         VA01H-124       59       -       56.4       +       22       -       27       -       0.3       7       6       +         VA01H-125       58       -       56.4       +       22       -       26       -       0.4       6       6       4         VA01H-122       52       -       55.0       23       32       0.4       6       4       4       26       26       26       26       26       26       26       26       26       26       24       3       4		72		55.8		24	+	31	-	0.4		5	-
VA00H-97       71       55.2       24       +       32       0.3       7       6       4         VA00H-10       69       53.6       -       24       +       33       +       0.3       6       7       4         VA00H-99       69       55.5       24       +       31       -       0.3       6       6       4         VA00H-99       69       55.5       24       +       31       -       0.3       6       7       4         VA00H-99       69       55.5       24       +       31       -       0.3       6       7       4         SC880248       65       -       53.8       -       23       35       +       0.4       6       7       4         VA01H-124       59       -       56.4       +       22       -       26       -       0.4       6       6       4         VA01H-122       52       -       55.0       23       32       0.4       6       4       4         LSD (0.05)       5       1.1       1       1       0.3       2       2       2         C.V.       9	VA01H-13	72		54.9		24	+	33	+	0.5	7	2	-
VA00H-10       69       53.6       -       24       +       33       +       0.3       6       7       +         VA00H-99       69       55.5       24       +       31       -       0.3       6       6       4         H-585       68       55.0       22       -       34       +       0.3       6       7       4         SC880248       65       -       53.8       -       23       35       +       0.4       6       7       4         VA01H-124       59       -       56.2       +       22       -       277       -       0.3       7       6       4         VA01H-122       52       -       55.3       25       +       34       +       0.3       7       2       -         Average       70       55.0       23       32       0.4       6       4       4       109       18       26       22       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2	VA00H-88	71		54.6		24	+	32		0.5	7	6	+
VA00H-99       69       55.5       24       + 31       - 0.3       6       6       +         H-585       68       55.0       22       - 34       + 0.3       6       7       +         SC880248       65       - 53.8       - 23       35       + 0.4       6       7       +         VA01H-124       59       - 56.2       + 22       - 27       - 0.3       7       6       +         VA01H-125       58       - 56.4       + 22       - 26       - 0.4       6       6       +         VA01H-122       52       - 55.3       25       + 34       + 0.3       7       2       -         Average       70       55.0       23       32       0.4       6       4         LSD (0.05)       5       1.1       1       1       0.3       2       2       -         C.V.       9       2.4       3       4       109       18       26       -         Released cultivars are shown in bold print.       Varieties are ordered by descending statewide yield average. A plus or minus sign indicates a performance significantly above or below the test average, where hulled and hulless lines have       -       -       -       -	VA00H-97	71		55.2		24	+	32		0.3	7	6	+
H-585       68       55.0       22       -       34       +       0.3       6       7       4         SC880248       65       -       53.8       -       23       35       +       0.4       6       7       4         VA01H-124       59       -       56.2       +       22       -       27       -       0.3       7       6       4         VA01H-125       58       -       56.4       +       22       -       26       -       0.4       6       6       4         VA01H-122       52       -       55.0       23       32       0.4       6       4       4         LSD (0.05)       5       1.1       1       1       0.3       2       2       2         C.V.       9       2.4       3       4       109       18       26       26         Released cultivars are shown in bold print.       Varieties are ordered by descending statewide yield averages. A plus or minus sign indicates a performance significantly above or below the test average, where hulled and hulless lines have       5       5       5       6       4       6       4       4       6       4       6       4       6	VA00H-10	69		53.6	-	24	+	33	+	0.3	6	7	+
SC880248       65       -       53.8       -       23       35       +       0.4       6       7       +         VA01H-124       59       -       56.2       +       22       -       27       -       0.3       7       6       +         VA01H-125       58       -       56.4       +       22       -       26       -       0.4       6       6       +         VA01H-122       52       -       55.0       23       32       0.4       6       4       4       0.3       7       2       -         Average       70       55.0       23       32       0.4       6       4       4       4       4       4       4       4       4       4       4       4       4       4       4       4       4       4       4       4       4       4       4       4       4       4       4       4       4       4       4       4       4       4       4       4       4       4       4       4       4       4       4       4       4       4       4       4       4       4       4       4	VA00H-99	69		55.5		24	+	31	-	0.3	6	6	+
VA01H-124       59       -       56.2       +       22       -       27       -       0.3       7       6       +         VA01H-125       58       -       56.4       +       22       -       26       -       0.4       6       6       +         VA01H-122       52       -       55.3       25       +       34       +       0.3       7       2       -         Average       70       55.0       23       32       0.4       6       4       4       0.3       7       2       -         Average       70       55.0       23       32       0.4       6       4       4       4       109       18       26       6       4       4       4       109       18       26       6       4       6       4       4       4       109       18       26       6       4       6       4       6       4       6       4       6       4       6       4       6       4       6       4       6       4       6       4       6       4       6       4       6       4       6       4       6	H-585	68		55.0	-	22	-	34	+	0.3	6	7	+
VA01H-124       59       -       56.2       +       22       -       27       -       0.3       7       6       +         VA01H-125       58       -       56.4       +       22       -       26       -       0.4       6       6       +         VA01H-122       52       -       55.3       25       +       34       +       0.3       7       2       -         Average       70       55.0       23       32       0.4       6       4       4       0.3       7       2       -         Average       70       55.0       23       32       0.4       6       4       4       4       109       18       26       6       4       4       4       109       18       26       6       4       6       4       4       4       109       18       26       6       4       6       4       6       4       6       4       6       4       6       4       6       4       6       4       6       4       6       4       6       4       6       4       6       4       6       4       6	SC880248	65	-	53.8	-	23		35	+	0.4	6	7	+
VA01H-125       58       -       56.4       +       22       -       26       -       0.4       6       6       +         VA01H-122       52       -       55.3       25       +       34       +       0.3       7       2       -         Average       70       55.0       23       32       0.4       6       4       4       0.3       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2       2	VA01H-124		-		+		-		-			6	+
VA01H-12252-55.325+34+0.372-Average7055.023320.4644LSD (0.05)51.1110.3222C.V.92.4341091826Released cultivars are shown in bold printVarieties are ordered by descending statewide yield averages. A plus or minus sign indicates a performance significantly above or below the test average, where hulled and hulless lines havebeen statistically analyzed separatelyThe 0-9 ratings indicate a genotype's response to disease, where 0 = highly resistant and99 = highly susceptibleBelgian Lodging Scale=Area X Intensity X 0.2.Area=1-10, where 1 is barley unaffected and 10 isentire plot affected and Intensity = 1-5, where 1 is barley standing upright and 5 is barley totally flatHulless barley is similar to hulled barley except the glumes thrash free of the seed when combined	VA01H-125	58	-	56.4	+	22	-	26	_	0.4	6	6	+
LSD (0.05)51.1110.322C.V.92.4341091826Released cultivars are shown in bold print	VA01H-122		-				+						-
LSD (0.05)51.1110.322C.V.92.4341091826Released cultivars are shown in bold print	Average	70	_	55.0		23		32		0.4	6	4	╀
C.V.       9       2.4       3       4       109       18       26         Released cultivars are shown in bold print.       Varieties are ordered by descending statewide yield averages. A plus or minus sign indicates a performance significantly above or below the test average, where hulled and hulless lines have been statistically analyzed separately.       Image: C.V.       Image: C	•	5		1.1	-	1		1		0.3	2	2	+
Varieties are ordered by descending statewide yield averages. A plus or minus sign indicates a performance significantly above or below the test average, where hulled and hulless lines have been statistically analyzed separately. The number in parentheses below column headings indicates the number of locations on which data are based. The 0-9 ratings indicate a genotype's response to disease, where 0 = highly resistant and 9 = highly susceptible. Belgian Lodging Scale=Area X Intensity X 0.2. Area=1-10, where 1 is barley unaffected and 10 is entire plot affected and Intensity = 1-5, where 1 is barley standing upright and 5 is barley totally flat. Hulless barley is similar to hulled barley except the glumes thrash free of the seed when combined.	C.V.											26	t
been statistically analyzed separately. The number in parentheses below column headings indicates the number of locations on which data are based. The 0-9 ratings indicate a genotype's response to disease, where 0 = highly resistant and 9 = highly susceptible. Belgian Lodging Scale=Area X Intensity X 0.2. Area=1-10, where 1 is barley unaffected and 10 is entire plot affected and Intensity = 1-5, where 1 is barley standing upright and 5 is barley totally flat. Hulless barley is similar to hulled barley except the glumes thrash free of the seed when combined.	Varieties are ordered	d by descend	ling s	tatewide y		-		-		-			
The number in parentheses below column headings indicates the number of locations on which data are based. The 0-9 ratings indicate a genotype's response to disease, where 0 = highly resistant and 9 = highly susceptible. Belgian Lodging Scale=Area X Intensity X 0.2. Area=1-10, where 1 is barley unaffected and 10 is entire plot affected and Intensity = 1-5, where 1 is barley standing upright and 5 is barley totally flat. Hulless barley is similar to hulled barley except the glumes thrash free of the seed when combined.		-			ιa\	verage, wr	ere	nullea a	inia r	iuliess lines	nave		_
data are based.         The 0-9 ratings indicate a genotype's response to disease, where 0 = highly resistant and         9 = highly susceptible.         Belgian Lodging Scale=Area X Intensity X 0.2.         Area=1-10, where 1 is barley unaffected and 10 is         entire plot affected and Intensity = 1-5, where 1 is barley standing upright and 5 is barley totally flat.         Hulless barley is similar to hulled barley except the glumes thrash free of the seed when combined.	-	•	-			line all'est d					- de la la		
The 0-9 ratings indicate a genotype's response to disease, where 0 = highly resistant and 9 = highly susceptible. Belgian Lodging Scale=Area X Intensity X 0.2. Area=1-10, where 1 is barley unaffected and 10 is entire plot affected and Intensity = 1-5, where 1 is barley standing upright and 5 is barley totally flat. Hulless barley is similar to hulled barley except the glumes thrash free of the seed when combined.	-	itneses belov	v coli	umn headi	ngs	Indicates	the	numbe	rotl	ocations on	which		
9 = highly susceptible. Belgian Lodging Scale=Area X Intensity X 0.2. Area=1-10, where 1 is barley unaffected and 10 is entire plot affected and Intensity = 1-5, where 1 is barley standing upright and 5 is barley totally flat. Hulless barley is similar to hulled barley except the glumes thrash free of the seed when combined.													
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entire plot affected and Intensity = 1-5, where 1 is barley standing upright and 5 is barley totally flat. Hulless barley is similar to hulled barley except the glumes thrash free of the seed when combined.													
Hulless barley is similar to hulled barley except the glumes thrash free of the seed when combined.				-					-				
	entire plot affected a	nd Intensity =	= 1-5	, where 1	is	barley sta	ndin	g uprigh	t an	d 5 is barley	totally flat.		
	Hulless barley is sim	ilar to hulled	barle	ey except	the	glumes th	nras	h free of	fthe	seed when	combined.		

-			Test		Date	;					Net	<u> </u>	Lea	f
	Yield		Weight		Heade	d	Heigh	nt	Lodging		Blotch	ר ו	Rus	t
Hulless Lines	(Bu/a	)	(Lb/bu)		(Mar31	+)	(In)		(0.2-10)	)		(0-9	9)	
		, 	,	-	``	,	( )					, T	,	T
	(7)		(7)		(6)		(6)		(7)		(4)		(2)	t
DOYCE	73	+	53.4	-	26	+	34	+	2.1		4	$\left  \right $	1	╞
VA00H-89	72	+	53.8		27	+	34	+	1.1	-	4	$\square$	6	Ŀ
VA00H-65	71		55.3	+	27	+	33		1.5		4		7	Ŀ
VA01H-37	71		52.2	-	27	+	32	-	2.8	+	4		1	T
VA01H-13	71		53.7		27	+	34	+	2.2	+	4		1	T
VA01H-26	71		53.7	1	27	+	31	-	1.8		4		1	T
VA00H-74	70		55.2	+	26	+	33		1.4		4		7	Ŀ
VA00H-70	70		54.9		27	+	33		1.4		4		6	T
VA01H-44	70		53.2	-	27	+	31	-	2.1		4		1	Т
VA00H-72	69		54.7		27	+	33		1.9		5	+	6	Ŀ
VA00H-88	69		54.4		27	+	33		1.5		5	+	6	Ē
VA00H-97	69		54.9		27	+	33		1.4		4	$\square$	6	Ŀ
VA00H-99	69		55.1	+	27	+	33		1.1	-	4		6	T
SC880248	67		53.9		26	+	36	+	2.3	+	4	$\square$	7	T
H-585	66	-	54.6		25		35	+	1.8		4		7	ŀ
VA01H-124	64	-	55.2	+	25		28	-	0.8	-	4		6	ŀ
VA00H-10	63	-	53.5	-	27	+	33		1.4		4		7	Ŀ
VA01H-122	56	-	55.4	+	28	+	36	+	1.3		5	+	1	
Average	69		54.3	-	27		33		1.7		4	$\vdash$	4	╈
LSD (0.05)	3		0.7		1		1		0.5		1		1	
C.V.	9		2.3	_	3		4		61		20		20	T
Released cultivars are Varieties are ordered performance significar statistically analyzed	by descend htly above o	ding st	atewide yiel		-	-		-			n			
			mn hooding	, indi	aataa tha	num	hor of k	pootio	n vooro or	whi	oh data			-
The number in parent are based.			nin neauli ly:	5 11 101				Jano	-years or	1 111	uald			-
The 0-9 ratings indica	te a cenot	ne's r	senonse to	dison	sa whor	<u> </u>	highly	reciet	ant and O	= hir	ably			÷
susceptible.	a yenoly	pesit		uised		- 0 5	i iigi iiy	5151		- 110	Jiliy	_		+
Belgian Lodging Scale	a = Area X	Intonci		rea =	= 1_10 \	horo	1 ie har		naffected a	nd 1	0 ie			÷
entire plot affected an			•					•						+
Hulless barley is simi	-				•	• ·	•		•	•				4

Virginia Tech Barley           Yie           Hulless Lines         (Bu/           Hulless Lines         (Bu/           VA00H-65         81           DOYCE         80           VA00H-88         79           VA00H-74         78           VA00H-70         77           SC880248         73           VA00H-10         72           H-585         71           Average         77           LSD (0.05)         3           C.V.         9			003	and 2	~ ~	_							
Hulless Lines         (Bulless Lines)           (12         (12           VA00H-65         81           DOYCE         80           VA00H-88         79           VA00H-74         78           VA00H-99         78           VA00H-70         77           SC880248         73           VA00H-10         72           H-585         71           Average         77           LSD (0.05)         3				J, anu ∠	00	4 harv	est	s.					
Hulless Lines         (Bulless Lines)           (12         (12           VA00H-65         81           DOYCE         80           VA00H-88         79           VA00H-74         78           VA00H-99         78           VA00H-70         77           SC880248         73           VA00H-10         72           H-585         71           Average         77           LSD (0.05)         3		Test		Date						Net	L	.eaf	_
(12         VA00H-65       81         DOYCE       80         VA00H-88       79         VA00H-74       78         VA00H-99       78         VA00H-70       77         SC880248       73         VA00H-10       72         H-585       71         Average       77         LSD (0.05)       3	ld	Weight		Headeo	b	Heigh	t	Lodging	1	Blotch	R	lust	
VA00H-65 81 <b>DOYCE</b> 80 VA00H-88 79 VA00H-74 78 VA00H-99 78 VA00H-70 77 SC880248 73 VA00H-10 72 <b>H-585</b> 71 Average 77 LSD (0.05) 3	a)	(Lb/bu)		(Mar31-	+)	(ln)		(0.2-10)	)	(	0-9)		
VA00H-65 81 <b>DOYCE</b> 80 VA00H-88 79 VA00H-74 78 VA00H-99 78 VA00H-70 77 SC880248 73 VA00H-10 72 <b>H-585</b> 71 Average 77 LSD (0.05) 3													
DOYCE         80           VA00H-88         79           VA00H-74         78           VA00H-99         78           VA00H-70         77           SC880248         73           VA00H-10         72           H-585         71           Average         77           LSD (0.05)         3	)	(11)	_	(10)		(10)		(10)	_	(5)		(4)	_
DOYCE         80           VA00H-88         79           VA00H-74         78           VA00H-99         78           VA00H-70         77           SC880248         73           VA00H-10         72           H-585         71           Average         77           LSD (0.05)         3													L
VA00H-88         79           VA00H-74         78           VA00H-99         78           VA00H-70         77           SC880248         73           VA00H-10         72           H-585         71           Average         77           LSD (0.05)         3	+	56.5	+	22		33	-	1.7		5	5		
VA00H-74         78           VA00H-99         78           VA00H-70         77           SC880248         73           VA00H-10         72           H-585         71           Average         77           LSD (0.05)         3	+	54.4	-	23	+	34		2.4	+	5	0		-
VA00H-99         78           VA00H-70         77           SC880248         73           VA00H-10         72           H-585         71           Average         77           LSD (0.05)         3		55.5		22		33	-	1.7		5	5		
VA00H-70 77 SC880248 73 VA00H-10 72 <b>H-585</b> 71 Average 77 LSD (0.05) 3		56.2	+	22		33	-	1.7		5	6	6	+
SC880248         73           VA00H-10         72           H-585         71           Average         77           LSD (0.05)         3		56.1	+	23	+	33	-	1.4	-	5	5	5	
VA00H-10 72 H-585 71 Average 77 LSD (0.05) 3		55.9		22		33	-	1.9		5	5	5	
H-585 71 Average 77 LSD (0.05) 3	-	54.7	-	22		36	+	2.5	+	5	6	6	+
Average         77           LSD (0.05)         3	-	54.8	-	23	+	33	-	1.8		5	5	5	Γ
LSD (0.05) 3	-	55.1		21	-	35	+	2.1		5	7	,	+
LSD (0.05) 3		<b>.</b>		22		24		1.9		5	5	-	
		55.5				34				-			-
C.V. 9		0.5		1		1		0.4		1	1		⊢
		2.3		4		3		52		16	1	9	-
Released cultivars are show	n in be	old print.									_		┢
Varieties are ordered by des	cendi	ng statewide	e yie	eld averag	es.	A plus	or r	ninus sign	indi	cates a			
performance significantly ab	ove or	below the t	est	average,	whe	ere hulled	l an	d hulless li	ines	have be	en		Γ
statistically analyzed separa	ately.												Γ
The number in parentheses	below	column hea	din	gs indicat	es	the numl	ber	of location-	-yea	irs on wh	ich da	ta	
are based.													
Belgian Lodging Scale = Are	a X Ir	tensity X0.	2. /	Area = 1-	10,	where 1	is b	arley unaff	ecte	ed and 10	) is		Г
entire plot affected and Inter													F
Hulless barley is similar to h	-			-		• • •	•			-			F
Since the hulls make up abo													t
about 15% lower than hulled								<b></b>					t
The 0-9 ratings indicate a ge		2	e to	disease.	wh	nere 0 = ł	hiah	lv resistan	t an	d 9 = hio	hlv		F
susceptible.								,			,		

			Test		Date	;				
	Yield		Weight		Heade	d	Heigh	t	Lodging	
Hulless Lines	(Bu/a)		(Lb/bu)		(Mar31	+)	(In)		(0.2-10)	
	,		,		,	,	( )		. ,	
VA01H-68	90	+	57.0		21	-	32	+	1.0	+
DOYCE	82	+	55.5	-	22		29		0.5	-
VA01H-37	78		55.3	-	23	+	27		0.8	
VA00H-72	78		56.9		22		28		0.6	_
VA00H-74	74		56.9		23	+	29		0.6	
VA01H-13	74		56.3		23	+	29		0.6	1
VA00H-65	74		56.8		23	+	28		0.4	
VA01H-26	74		56.2		23	+	26	-	0.4	1
VA01H-44	73		55.6	-	23	+	27		0.8	
VA00H-89	73		55.7	-	22		29		0.4	1
VA00H-97	72		56.5		23	+	28		0.5	1
VA00H-70	71	_	56.8		23	+	27		0.6	-
VA00H-10	70		55.4	-	23	+	29		0.4	
VA00H-88	70	_	56.4		23	+	27		0.4	-
VA00H-99	69		56.9		23	+	28		0.4	
SC880248	68		55.2	-	22		32	+	0.7	
VA01H-124	66		58.2	+	21	-	24	-	0.6	-
H-585	64		56.8		21	-	31	+	0.4	-
VA01H-125	63	-	58.1	+	21	-	24	-	0.8	
VA01H-122	52	-	57.6	+	23	+	29		0.4	
Average	72		56.5		22		28		0.5	+-
LSD (0.05)	9		0.7		1		2		0.4	
C.V.	9		0.9		2		5		47	
Released cultivars are	e shown in bol	d print.								-
Varieties are ordered	-		-			-				
performance significar have been statistically	•			rage,	where hu	illed ar	id hulles	s lines		
Belgian Lodging Scale		-		a = 1	-10 whe	re 1 is	barley i	Inaffect	ed	_
and 10 is entire plot a		-					-		cu	
and 5 is barley totally										
Hulless barley is simi	lar to hulled ba	arley ex	cept the g	lumes	thrash f	ree of	the seed	d when		
combined. Since the	hulls make u	p about	15% of th	ne dry ed ba	grain we	eight, y	ields of	hulless		

			Test		Date				
	Yield		Weight		Heade	-	Height		Lodging
Hulless Lines	(Bu/a)		(Lb/bu)	_	(Mar31	+)	(In)		(0.2-10)
VA00H-97	84 -	+	54.5		22	+	36		0.2
VA00H-65	83 -	+	54.7		21		37		0.2
DOYCE	81		53.9		22	+	38	+	0.2
VA01H-44	81		52.4		22	+	36		0.2
VA00H-89	80		51.2	-	21		37		0.2
H-585	79		53.5		21		38	+	0.2
VA00H-70	79		53.7		22	+	36		0.2
VA00H-10	78		52.1		21		37		0.2
VA01H-37	78		50.6	-	22	+	36		0.2
VA00H-88	78		52.1		21		36		0.2
VA00H-74	77		53.9		21		36		0.2
VA00H-99	76		53.8		22	+	36		0.2
VA00H-72	75		55.1		22	+	35		0.2
VA01H-26	73		53.5		22	+	33	-	0.2
SC880248	71		53.9		21		40	+	0.2
VA01H-68	71		57.7	+	20	-	38	+	0.2
VA01H-13	71		53.5		21		37		0.2
VA01H-122	62	-	53.6		21		39	+	0.2
VA01H-124	61	-	55.1		20	-	30	-	0.2
VA01H-125	60	-	55.8		20	-	30	-	0.2
Average	75		53.6		21		36		0.2
LSD (.0.05)	8		2.3		1		2		0.0
C.V.	8		2.7		3		3		0.0
Released cultivars ar									
Varieties are ordered			-	•					
performance significa lines have been statis	•			age,	where hu		and nulles	s	
Belgian Lodging Scal unaffected and 10 is								anding	
upright and 5 is barle									
Hulless barley is simi	ilar to hulled barley	/ e>	cept the glu	lme	s thrash f	free c	f the see	d	
when combined. Sin	ce the hulls make	un	about 15%	oft	he dry ar	ain w	reiaht vie	alds	

Table 5. Summary of performance of hulless entries in the Virginia Tech Barley Test, Northern Piedmont AREC, Orange, VA, 2004 harvest

Test, Kentlan	d Farm, Bl	acksbu	rg, VA	, 2004 ł	harv	vest.						Т
			Test	Date						Net	Lea	af
	Yield	V	/eight	Headed	1	Height		Lodging		Blotch	Rus	st
Hulless Lines	(Bu/a)	(L	.b/bu)	(Mar31+	)	(In)		(0.2-10)	_	(0	-9)	_
DOYCE	82	+ 54	.7	26	-	34	+	0.5		6	1	+
VA00H-70	75		.6	26	-	33	+	0.5		6	4	+
VA01H-26	73		.8	28	+	31		0.2		5	2	+
VA00H-74	72		.5	26	-	32		0.4	-	6	6	
VA01H-13	70		.5	28	+	32		0.6		7	2	÷
VA01H-44	69		.7	28	+	30		0.2		5	1	÷
VA00H-89	68		.7	28	+	31		0.2		6	6	÷.
VA01H-68	67		.2	25	- 1	32		0.2		5	4	+
VA01H-37	67	52	.5	27		31		1.6	+	6	1	+
VA00H-88	66		.6	27		32		0.8		7	6	÷
VA00H-72	65	55	.2	27	t t	31		0.4		6	5	Ť
H-585	63	54	.7	25	- 1	33	+	0.2		6	7	ŀ
VA00H-99	62	55	.5	28	+	31		0.2		6	6	Ť
VA00H-65	61	55	.3	27		31		0.2		6	6	ŀ
VA00H-10	60	53	.4	28	+	32		0.2		6	7	T
VA00H-97	58	54	.4	28	+	31		0.4		7	6	ŀ
SC880248	56	52	3	26	-	33	+	0.4		6	7	T
VA01H-125	52	- 55	.3	25	- 1	25	-	0.2		6	6	ŀ
VA01H-124	51	- 55	.2	25	- 1	26	-	0.2		7	6	T
VA01H-122	41	- 54	.4	29	+	33	+	0.2		7	2	
Average	64	54	.6	27	$\square$	31		0.4	-	6	4	+
LSD (0.05)	10	2	.4	1	$\square$	2		0.9		2	2	t
C.V.	11		.1	3		4		176		18	26	
Released cultivars a Varieties are ordered performance significa	d by descendin	g yield av	-			-						
have been statistical		-										T
Belgian Lodging Sca		-					-					4
and 10 is entire plot		tensity =	1-5, whe	re 1 is barl	ey si	tanding u	prigh	nt				
and 5 is barley totall	-											4
The 0-9 ratings indic and 9 = highly susce		e's respon	se to dise	ease, wher	e 0 =	= highly r	esist	tant				+
Hulless barley is sim	-	arley exce	pt the al	umes thras	sh fre	e of the s	seed	when				+
combined. Since th		•										╉
barley are expected		•			9	, ,						_

 Table 6. Summary of performance of hulless entries in the Virginia Tech Barley

 Test
 Kentland Form

 Plackaburg
 VA

 2004 horvest

2004 harvest.														
200111011000			Test		Date	1					Net		Lea	f
	Yield		Weight	t	Headed	1	Heigh	nt	Lodging	-	Blotcl	n I	Rus	t
Hulled Lines	(Bu/a)		(Lb/bu)		(Mar31+		(ln)	_	(0.2-10			(0-9		
	(2 0. 0.)		(_0, 00.)	/	(	<u> </u>	()		(0.2.10	, 		(0.0	-)	T
	(3)		(3)		(3)	-	(3)		(3)		(1)		(1)	_
	,		( )		,		( )		( )		. ,		( )	
THOROUGHBRED	129	+	48.1	+	25	+	33		0.3	-	4		7	+
VA98B-213	125	+	48.3	+	23	+	32	-	0.4	-	6	+	5	+
VA01B-62	125	+	49.7	+	21	-	35	+	2.3	+	6	+	1	1-
VA01B-8	123	+	48.1	+	22		29	-	1.9	+	5	+	1	-
CALLAO	122	+	49.0	+	21	-	32	-	2.8	+	4		3	T
VA99B-125	117		48.2	+	23	+	32	-	1.7	+	5	+	4	+
VA97B-175	117		48.0	+	22		32	-	0.9	Н	5	+	3	T
VA99B-161	116		47.3		22		32	-	0.4	-	5	+	6	+
VA97B-176	114		49.7	+	22		33		1.0	П	5	+	3	T
VA98B-208	113		48.3	+	24	+	28	-	0.2	-	4		4	+
VA01B-26	113		44.0	-	23	+	35	+	0.8	Π	3	-	1	1-
PRICE	112		48.7	+	23	+	32	-	0.6		5	+	4	+
VA96-44-304	112		48.3	+	20	-	32	-	1.3	П	6	+	3	$\top$
VA92-42-46	112		45.7	-	23	+	40	+	0.6		7	+	0	- 1
NOMINI	111		45.5	-	22		40	+	1.4	П	2	-	4	+
VA99B-327	108		44.4	-	22		35	+	1.2		3	-	6	+
VA01B-87	108		48.4	+	23	+	32	-	0.5	П	7	+	1	1-
VA00B-279	106		44.8	-	21	-	36	+	0.8		2	-	1	-
WYSOR	103	-	45.1	-	24	+	38	+	1.1		4		8	+
VA00B-91	95	-	46.2	-	25	+	31	-	0.3	-	3	-	1	-
VA01B-50	92	-	45.0	-	23	+	32	-	1.2		3	-	4	+
BARSOY	82	-	46.4		20	-	35	+	0.5		4		8	+
Average	112		47.1		22		33		1.0	$\square$	4		3	-
LSD (0.05)	7		0.9	_	1		1		0.6	$\square$	- 1		1	+-
C.V.	8		2.3	_	3		4	-	78		22		31	-
0. V.	0		2.0	_	5	+		-	70				51	+-
Released cultivars are	shown in b	old p	rint	_		++						_		+-
Varieties are ordered b				vielo	averages	. A	plus or	· mir	nus sian in	dica	ates a			+-
performance significant												1		_
statistically analyzed s	eparately.													T
The number in parenth		colu	ımn head	ings	indicates	the	numbe	rofl	ocations o	on v	vhich			+
data are based.				-										$\pm$
The 0-9 ratings indicate	e a genotyp	be's r	esponse	to c	disease, w	/here	0 = hi	ghly	resistant	and				+
9 = highly susceptible.														T
Belgian Lodging Scale=	Area X Inte	ensit	y X 0.2.	Are	a=1-10, v	vhere	e 1 is b	arley	unaffecte	d a	nd 10 is			_
entire plot affected and	Intensity =	1-5	, where 1	lisl	barley sta	nding	g uprigh	nt an	d 5 is bar	ley i	totally fla	ıt.		
														Т

lulled Lines	Yield				Date						Net		Lea	
Hulled Lines	11010		Weight		Heade	ed	Heigh	nt	Lodging	J	Blotc	h	Rus	t
	(Bu/a	)	(Lb/bu)		(Mar31	+)	(In)		(0.2-10	))		(0-9	9)	
														1
	(7)		(7)		(6)		(6)		(7)		(4)	$\square$	(2)	
HOROUGHBRED	110	+	47.3	+	28	+	35	+	1.3	_	3		6	+
/A98B-213	104	+	47.1	+	26	+	32	-	2.2		3	+-+	5	+
/A99B-161	102	+	45.7		25		33	-	3.8	+	3	+	6	+
/A97B-175	102	+	47.0	+	24	-	32	-	2.3		3	+++	3	1-
CALLAO	101		47.4	+	24	-	32	-	4.7	+	3	+ +	3	1-
/A01B-26	101		44.3	-	25		36	+	1.8	-	3	+	1	1-
/A97B-176	100		48.4	+	25		33	-	2.9		4	+	3	-
/A96-44-304	100		47.0	+	22	-	32	-	2.9		4	+	3	1-
NOMINI	99		44.0	-	24	-	41	+	3.0		2	-	5	+
/A99B-125	99		47.5	+	26	+	32	-	3.6	+	3		4	T
PRICE	98		46.9	+	26	+	33	-	2.8		4	+	4	1
/A98B-208	98		47.0	+	27	+	29	-	1.1	-	3		3	1-
/A00B-279	94		44.4	-	22	-	37	+	2.1		2	- 1	1	-
/A92-42-46	91	-	43.7	-	26	+	40	+	3.3	+	7	+	0	1-
NYSOR	85	-	43.7	-	27	+	39	+	3.5	+	3		8	+
BARSOY	84	-	46.3		22	-	36	+	2.3		3		8	+
/A00B-91	84	-	45.7	-	28	+	32	-	1.3	-	3		1	-
Verage	97		46.1		25		34		2.6		3	$\left  \right $	4	⊢
SD (0.05)	5		0.7		1		1		0.7		1		1	T
C.V.	9		2.7		4		4		50		23		26	
Released cultivars are	shown in l	oold pri	nt.									$\square$		+
/arieties are ordered	by descen	ding sta	atewide vie	ld ave	rages. A	) plus	or minu	us sic	an indicate	es a				
performance significant	•	•	-		-	•		-	-		n			
statistically analyzed s	-													$^{+}$
The number in parenth		w colur	nn heading	s india	cates the	e num	ber of lo	catio	n-years o	n whi	ch data			
are based.									-					Т
The 0-9 ratings indicat	e a genoty	/pe's re	esponse to	disea	se, wher	e 0 =	highly r	esist	ant and 9	= hig	ghly	_		
susceptible.			-											+
Belgian Lodging Scale	= Area X	Intensi	ty X 0.2. A	rea =	= 1-10, w	here	1 is bar	ley ur	naffected a	and 1	0 is			+

Hulled Lines	Yield		Test											
Hulled Lines	1 1010		Weight	/	Date Headeo		Height	t	Lodging		Net Blotcl		Leaf Rust	
	(Bu/a)		(Lb/bu)		(Mar31+		(In)		(0.2-10)			(0-9		<u> </u>
	(100,0)						("')		(0.2 10)	<u>'</u> '	<b> </b>	(0.	<i>'</i> )	
	(12)		(11)		(10)		(10)		(10)		(5)		(4)	
THOROUGHBRED	114	+	49.6	+	25	+	35	+	1.6	-	3	-	5	+
VA98B-213	107	+	49.1	+	22	++	32	-	2.5	+	4	++	3	+
VA99B-161	106		47.4	-	22		32	-	3.2		4		4	+
VA96-44-304	106		48.9	+	19	-	32	-	2.8	+	5	+	2	-
NOMINI	105		46.3	-	21	-	40	+	3.1	+	2	-	3	+
VA97B-176	105		50.5	+	21	-	33	-	3.3	+	4	+++	2	-
VA97B-175	105		48.7	1	20	-	32	-	2.5		3	-	2	-
PRICE	103	+	48.7	+	22	+	33	-	2.9	+ -	4	+++	3	-
VA99B-125	103	+	49.3	+	22		32	-	3.7	+	3	-	3	-
VA98B-208	102		49.3	+	23	+	29	-	1.4	-	3	-	2	-
CALLAO	101		49.4	+	20	-	31	-	4.6	+	4		2	-
VA92-42-46	95	-	46.1	-	22		40	+	2.9		7	+	0	-
WYSOR	92	-	46.2	-	24	+	39	+	3.7	+	4		5	+
Average	103	+	48.4	+	22		34		2.9	_	4		3	_
LSD (0.05)	4	+++	0.5	+	1	++	1	+	0.6	+ -	1	++	1	+
C.V.	9		2.5	上	5		4		44		20	<u> </u>	35	_
Released cultivars are	shown in ba	old prin	t.	+										_
Varieties are ordered b		•		d aver	ages. A	olus (	or minus	sign	indicates a	4				+
performance significant	•	•	•		• •	•		•						+
statistically analyzed s	eparately.			T										+
The number in parenth	ieses below	colum	n headings	indic	ates the r	umbr	er of loca	ation-	years on w	hich	data	_		-
are based.														+
Belgian Lodging Scale	= Area X In	itensity	/X0.2. Ar	rea =	1-10, wh	ere 1	is barley	/ unaf	ffected and	10 is	;			-
entire plot affected and														-
The 0-9 ratings indicate	e a genotyp	e's res	sponse to c	liseas	se, where	0 = ł	nighly res	sistan	it and $9 = 1$	nighly	/			
susceptible.				Т										

Test, Eastern Vir	ginia ARF	<b>ΞC</b> ,	, Warsaw,	VA	, 2004	harv	/est.					
			Test	Т	Date							
	Yield		Weight		Headed	d	Height		Lodging			
Hulled Lines	(Bu/a)		(Lb/bu)		(Mar31-	+)	(In)		(0.2-10)			
	1										1	
THOROUGHBRED	128	+	46.4		23	+	30		0.6	-		
VA01B-62	125	+	48.2	+	20	-	31		4.2	+		
VA01B-8	123	+	47.5	+	21		25	-	5.0	+		
PRICE	117	+	47.8	+	22	+	29		1.3	-		
VA97B-175	115		46.9	+	21		29		2.4			
VA98B-213	115	-	46.6	$\square$	22	+	28	-	0.7	-	1	
CALLAO	114		48.1	+	21		28	-	5.0	+		
VA99B-125	114		47.6	+	21	+++	29		3.6	+		
VA97B-176	113		47.8	+	21		30		2.6		_	
VA96-44-304	112	+	47.3	+	19	-	30	$\uparrow$	3.3	+		
VA01B-26	112	+	43.1	-	21	+++	33	+	1.9			
VA98B-208	111	+	46.7	+	22	+	26	1-1	0.3	-		
VA99B-161	108	+	45.5	+	21	+++	29	+	0.8	-	-	
VA99B-327	107	+	43.5	-	20	-	34	+	3.2	+		
VA92-42-46	100	+	45.0	-	22	+	36	+	1.4		_	
VA01B-87	100	1	47.1	+	21	+++	28	-	1.1	-		
VA01B-50	99	-	43.9	- 1	22	+	31	$\square$	2.5			
VA00B-91	98	-	45.5	$\square$	24	+	27	-	0.6	-		
VA00B-279	96	-	42.9	-	20	-	35	+	1.9			
NOMINI	95	-	44.6	-	21		37	+	2.9			1
WYSOR	95	-	43.8	-	24	+	35	+	2.6			
BARSOY	86	-	45.9		19	-	32	+	1.2	-		
Average	108	+-'	46.0	+	21	+++	30	+	2.2		_	_
LSD (0.05)	9	+	0.7	+	1		2	++	0.9		_	
C.V.	6	+	1.0	+	2	+++	4	+	30			
Released cultivars are s		•										
Varieties are ordered by	y descending	yield	Javerages. F	A plus	s or minu	is sign	indicates	s a				
performance significantly	•			age, v	where hu	led an	d hulless	lines				
have been statistically a			-	Ļ								
Belgian Lodging Scale =		-					-		ed			
and 10 is entire plot affe		Insit	y = 1-5, wher	re 1 ir	s barley s	standi	ng upright	٤				
and 5 is barley totally fla	at.											

Table 11. Summa Tech Barley Test										st
	<u> </u>		Test		Date		90, 17	, _•		
	Yield		Weight		Heade		Height		Lodging	
Hulled Lines	(Bu/a)	_	(Lb/bu)		(Mar31		(ln)		(0.2-10)	
	~ /		( )			ŕ	( )		· /	
VA98B-213	135	+	47.9	_	21		35	-	0.2	
VA01B-8	133	+	46.4		21		33	-	0.2	
CALLAO	132	+	46.7		20	-	37		2.4	+
THOROUGHBRED	129		46.1		23	+	37		0.2	
VA99B-125	128		46.9		21		37		0.2	
VA99B-161	127		47.4		21		35	-	0.2	
VA01B-62	126		49.3	+	19	-	40	+	1.4	
VA97B-175	126		47.3		21		36		0.2	
VA92-42-46	124		44.5		21		45	+	0.2	
VA97B-176	122		49.5	+	20	-	38		0.2	
VA01B-87	121		48.0		21		37		0.2	
NOMINI	119		45.7		21		43	+	1.2	
VA96-44-304	116		47.8		19	-	35	-	0.2	
VA98B-208	115		48.8		22	+	30	-	0.2	
PRICE	111		49.0		22	+	34	-	0.2	
WYSOR	109		45.0		22	+	43	+	0.5	
VA00B-279	106		44.2		19	-	39	+	0.2	
VA01B-26	106		40.8	-	21		38		0.2	
VA99B-327	105		43.6		20	-	38		0.2	
VA00B-91	105		44.8		22	+	36		0.2	
VA01B-50	84	-	43.4	-	22	+	35	-	0.2	
BARSOY	78	-	45.2		19	-	39	+	0.2	
A	440		40.0		04		07		0.4	
Average LSD (.0.05)	116 14		46.3 2.8		21 1		37 2		0.4 1.6	_
C.V.	9		3.8	_	3		2			_
C.V.	9		3.0	_	3		3		270	-
Released cultivars are s	hown in bold	print.		_						-
Varieties are ordered by		•		A plu	us or min	us sig	an indicat	es a		
performance significantly										
lines have been statistic				J,						
Belgian Lodging Scale =	Area X Inter	nsity	X 0.2. Are	a = '	1-10, whe	ere 1	is barley			
unaffected and 10 is ent		-					-	anding	1	
upright and 5 is barley t	otally flat.									
	-									

Fech Barley Te	st, Ken	lan	d Farn	n,	Black	sb	urg, V	Ά,	2004	ha	rvest.			
			Test		Date						Net		Lea	
	Yield		Weight		Heade	d	Height		Lodging	9	Blotc	h	Rust	t
ulled Lines	(Bu/a	)	(Lb/bu)	)	(Mar31	+)	(In)		(0.2-10	))		(0-9	9)	
HOROUGHBRED	128	+	51.7	+	29	+	33		0.2		4		7	+
A98B-213	125	+	50.3		26	+	33		0.2		6	+	5	+
A01B-62	124	+	51.5	+	23	-	34		1.5	+	6	+	1	-
OMINI	120		46.2	-	25		40	+	0.2		2	-	4	+
ALLAO	120		51.7	+	24	-	32		1.1	+	4		3	
A01B-26	120		47.4	-	26	+	34	H	0.2		3	-	1	1-
A98B-208	115		49.6	F	28	+	29	-	0.2	$\vdash$	4		4	+
A00B-279	115		47.1	-	23	-	35	+	0.2	+	2	-	1	-
A99B-161	113	$\square$	49.0	t	25		31	-	0.2	$\square$	5	+	6	+
A99B-327	113		46.2	-	25		34		0.2	+	3	-	6	+
A01B-8	112		49.9		25		29	-	0.4		5	+	1	-
A97B-175	111		50.0	$\vdash$	25		31	-	0.2	+	5	+	3	
A92-42-46	111		47.4	-	26	+	39	+	0.2		7	+	0	-
A96-44-304	110		49.8		23	-	30	-	0.5	+	6	+	3	
A99B-125	108		49.7	-	26	+	32		1.2	+	5	+	4	+
RICE	108		49.5		27	+	32	-	0.2		5	+	4	+
A97B-176	108		51.7	+	25		31	-	0.2		5	+	3	
/YSOR	106		46.4	-	27	+	37	+	0.2	-	4		8	+
A01B-87	105		50.1	+	26	+	32		0.2		7	+	1	-
A01B-50	94	-	47.3	-	26	+	30	-	0.8		3	-	4	+
ARSOY	83	-	48.0	-	22	-	35	+	0.2		4		8	+
A00B-91	83	-	47.9	-	30	+	30	-	0.2		3	-	1	-
														T
verage	111		49.0		25		33		0.4		4		3	
SD (0.05)	13	$\square$	1.1	t	1		2		0.6	$\square$	1		1	
.V.	8		1.6		3		5		114		22		31	
eleased cultivars are	shown in	bold	print.											
arieties are ordered	by descen	ding	yield aver	age	es. A p	lus d	or minus	sig	n indicate	es a				
erformance significant	ly above o	or be	low the te	est	average	, wh	nere hulle	d a	nd hulles	s lin	es			
ave been statistically	•		-											
elgian Lodging Scale	= Area X	Inte	nsity X0.	2.	Area =	1-1(	), where	1 is	s barley ι	unaf	fected			
nd 10 is entire plot at nd 5 is barley totally		l Inte	ensity = 1	-5,	where '	1 is	barley st	anc	ling uprig	ht				
he 0-9 ratings indicat	e a genot	/pe's	respons	e to	diseas	e, w	/here 0 =	hiç	ghly resis	tan	t			
nd 9 = highly suscep			•											
				H										

#### **SECTION 2 - WHEAT VARIETIES**

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. For example, USG3209 (RT) indicates that this entry was treated with raxil and thiram. "B" is Baytan®, "D" is Dividend®, "R" is raxil, and "T" is thiram. Virginia Tech experimental lines and some of the public varieties such as Massey were treated with raxil and thiram.

Selecting the best wheat varieties is challenging but becomes easier with adequate information of 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. He is developing varieties for accessing specialty markets such as white-seeded lines including VA97W-375WS. They are also conducting a massive effort to introduce scab resistance into adapted lines as well as developing adapted varieties that can successfully be used for making bread.

The top-yielding released varieties in 2004 were USG 3209 treated with Raxil and Thiram, and two Virginia releases that are as yet unnamed, VA99W-176 and VA97W-24. These varieties excelled in all geographic regions of the Commonwealth in 2004. It should be noted that disease pressure, especially from powdery mildew, was slight in the 2003-04 growing season. Test weights for these and most other varieties were less than desirable, mainly due to warmer than optimum temperatures during grain filling resulting in lower than expected yields and test weights. USG 3209 is a relatively early wheat that is shorter than average with below average test weight and good standability. VA99W-176 also had test weight significantly below average this season. It is a moderately tall, early wheat with good standability and resistance to powdery mildew. VA97W-24 has average test weight, is later heading than most varieties in the test and is also tall in height (Table 13). In forage trials conducted at NPAREC in Orange, VA during the past two years, VA97W-24 has produced high forage yields in addition to high grain yields.

Tribute, VA99W-176, and VA97W-24 all have statewide average yields above 75 bushels per acre over the past three years (Table 15). Among the varieties having three year average yields significantly higher than the mean, only Tribute and McCormick have test weights that are also significantly better. Other varieties with above average two year mean yields are SS 520 (R) and USG 3209 (RT). These varieties have been available for several years and the high yield of these two varieties is also indicative of the fact that Virginia has not had a major late spring freeze during the past two years. These two varieties tend to initiate reproductive growth early in the year if conditions are warm enough, increasing the likelihood of spring freeze damage. Refer to tables 13-15 for more information on yield, test weight, maturity, height, lodging, and disease ratings for released varieties.

Released varieties producing average statewide yields over the past two seasons include Sisson, Crawford, VA97W-375WS, SS 560, Pioneer 26R24, SS 550, Pioneer 26R58, McCormick, GA931233E17, Choptank, Featherstone 520, Vigoro 9212, Renwood 3706, and Coker 9375. Some of these varieties performed very well at one or more test locations so refer to specific location yields listed in Tables 16-22.

Released varieties yielding less than average over the past two seasons include Coker 9184, USG 3650 (RT), Coker 9295, Neuse, and Massey.

# Summary of wheat management practices for the 2004 harvest season (All rates are given on a per acre basis.)

**Blacksburg** - Planted October 9, 2003. Preplant fertilizer was 25-60-100 applied October 7, 2003. Harmony Extra® was applied at 0.6 oz on April 7, 2004 with 60-0-0. Harvest occurred on June 22, 2004.

**Warsaw** - Planted October 19, 2003. Preplant fertilizer was 30-60-60-5 applied October 17, 2003. Site received 0.4 oz Finesse® December 9, 2003 and 25 lb 15-0-0 December 21, 2003. Site was fertilized with 25 lb 15-0-0 on February 17, 2004 and with 60 lb 24-0-0-3 on March 30, 2004. Fungicide plots received 4 oz Tilt® May 6, 2004. Warrior T® was applied at 2.56 oz on May 11, 2004. Harvest occurred June 14, 2004.

**Blackstone** - Planted October 21, 2003. Preplant fertilizer was 10-10-10 on October 9, 2004. Site was fertilized with 100 lb N using 30%UAN on March 3, 2004. Site was sprayed with 0.5 oz Harmony Extra® on March 4, 2004. Site was sprayed with 2.56 oz Warrior T® on April 27, 2004. Harvest occurred on June 10, 2004.

**Painter** - Planted November 11, 2003. Preplant fertilizer was 500 lb 5-10-10. Site was fertilized with 120 lb N and 0.5 oz Harmony Extra® was applied March 3, 2004. Warrior T® was applied at 2.5 oz May 6, 2004. Fungicide plots received 4 oz Tilt® on May 6, 2004. Harvest occurred on June 22, 2004.

**Holland** - Planted November 10, 2003. Area received 1 Ton lime and 400 lb 8-16-32 on November 4, 2003. Site was fertilized with 60 units N on February 24, 2004 and again on March 9, 2004. Warrior T® at 2 oz was applied April 30, 2004. Harvest occurred June 9, 2004.

**Orange** - Planted October 10, 2003. Preplant fertilizer was 500 lb 5-10-10-3 applied October 3, 2003. Sixty units N with Harmony Extra® at 0.4 oz were applied March 4, 2004. Harvest occurred on June 15 (reps 1 and 2) and June 20 (reps 3 and 4), 2004.

**Shenandoah Valley** - Planted October 9, 2003. Preplant fertilizer was 25-40-60 plus lime as soil test indicated. Thirty lb N and 0.5 oz Harmony Extra® were applied December 3, 2003. Eighty lb N and 0.5 oz Harmony Extra® were applied March 4, 2004. Harvest occurred June 30, 2004.

Table 13. Summary of Wheat Tests, 2004 ha	-											Ē	9"					+
wheat rests, 2004 ha	rvest.	_		_		_				Ц		Ц						
						_					David	Ц			Daula			
											Pow				Barle Yello		Whe Spino	
		_	Test	L	Dete				Lodg-		dery Mil-		Loof		Dwa			
	Yield	-	Weigh	+	Date Heade	4	Heig	ht	-		dew		Leaf Rust		Dwa Viru		Strea Viru	
Lino			-			-	-		ing		uew		Rusi	10	-	5	VIIL	JS
Line	(Bu/	a)	(Lb/bu	)	(Mar31·	+)	(In	)	(0.2-10	り				((	)-9)		_	_
	(7)		(7)	_	(2)		(2)		(2)	Ц	(1)	Ц	(1)	Щ	(2)		(1)	,
	(7)		(7)	_	(3)	_	(3)		(3)	_	(1)	-	(1)	_	(3)		(1)	)
USG 3209(RT)	78	+	56.9	-	32		32	-	1.4	Н	1	Н	4	+	1	-	0	_
VA99W-176	74	+	56.6	-	31		36	+	1.2	Н	1	Н	3	+	2		0	+
VA97W-24	74	+	57.2		34	+	37	+	1.2	Н	1	Н	2	-	2		0	-
JSG 3706(RT)	72	+	57.2		32		33	-	1.4	Н	1	Н	2	+	2		0	+
SS 8308(R)	72	+	58.0	+	32		35	$\vdash$	0.4	Η	1	Η	3	+	1	-	0	
V9412(D)	71	+	58.3	+	32	-	35	H	0.4	Η	2	+	4	+	2		0	+
USG 3592(RT)	71	+	57.3		33	+	38	+	3.1	+	1	Η	1	-	1	-	0	+
CRAWFORD	70	+	57.2		31		35		1.4	Η	1	Η	1	-	2		0	-
PIONEER 26R24(D)	70	+	56.9	-	31		36	+	1.9	Η	2	+	2	+	1	-	0	
PIONEER 26R15(D)	70	+	55.8	-	33	+	35		0.7	Н	2	+	1	-	1	-	0	
PIONEER 26R58(D)	69		55.6	-	32		33	-	0.7		2	+	3	+	3	+	0	-
SS 8302(R)	69		57.7	+	34	+	36	+	0.2	Н	2	Ŧ	2	Ħ	2		0	
SS 560(R)	69		57.1		33	+	34	-	1.4	H	1	H	2		1	-	0	
RENWOOD 3260	69		58.3	+	32		36	+	1.1	Н	1	Н	1	-	1	-	0	-
SISSON	68		56.9	-	31		33	-	1.2	H	1	H	6	+	2		0	-
SS 550(B)	68	1	56.8	-	32		34	-	0.9	П	1	П	5	+	2		0	٦
COKER 9312(D)	68		57.7	+	31		33	-	1.9		2	+	1	-	2		0	
PIONEER 26R12(D)	68		58.5	+	33	+	34	-	1.3	Н	2	+	1	-	2		0	1
TRIBUTE	68		59.0	+	32		32	-	0.5		2	+	0	-	2		0	-
GA931233E17(D)	67		57.8	+	33	+	37	+	3.9	+	2	+	2	П	2		0	Τ
McCORMICK	67		58.3	+	32		33	-	1.9		1	П	1	-	1	-	0	
COKER 9184(D)	66		59.3	+	34	+	34	-	0.2	П	2	+	1	-	2		0	T
VA97W-375WS	66		56.2	-	32		31	-	0.6		1	П	1	-	2		0	
COKER 9375	65		55.3	-	34	+	38	+	1.5	Π	1	П	3	+	2		0	Τ
EATHERSTONE 520(RT)	65		57.9	+	32		35		1.3		1		3	+	2		0	
SS 8309(R)	65		56.9	-	33	+	36	+	0.3		1	Π	2		2		0	
RACHEL	64	-	56.5	-	31		34	-	0.3		1		5	+	3	+	1	
SS 520(R)	64	-	55.9	-	31		35		1.6		2	+	2		2		0	
USG 3650(RT)	64	-	56.8	-	33	+	36	+	0.4		2	+	1	-	2		0	
COKER 9295(D)	63	-	56.0	-	34	+	35		0.6		1		0	-	2		1	
H-84(D)	63	-	57.2		32		35		1.1		3	+	3	+	2		0	
PAT(R)	63	-	57.6	+	37	+	36	+	0.2		2	+	3	+	2		0	
CHOPTANK	63	-	56.9	-	32		31	-	0.3		1		1	-	2		0	
√9212(D)	62	-	56.1	-	32		37	+	0.9		1		3	+	2		1	
RENWOOD 3706	62	-	56.8	-	32		32	-	0.4		2	+	2		3	+	0	
MASSEY	62	-	57.3		33	+	41	+	2.7	+	1		8	+	2		0	
NEUSE(R)	62	-	59.1	+	34	+	35		1.2		1	П	0	-	2		0	

Table 13, continued.	Sun	n	nary o	f perf	orr	nan	се	of rele	eased	varieti	es i	n the	,
Virginia Tech Wheat	Test	ts,	2004	harve	est								
									Pow-		E	Barley	Wheat
									dery		Y	'ellow	Spindle
			Test	Dat	e			Lodg-	Mil-	Leaf	[	Dwarf	Streak
	Yiel	d	Weigh	Head	led	Heig	ght	ing	dew	Rust		Virus	Virus
Line	(Bu/	a)	(Lb/bu)	(Mar3	31+)	(In	)	(0.2-10)	)		(0-9	))	
Average	67		57.2	33		35		1.1	1	2		2	0
LSD (0.05)	3		0.3	0		1		1.0	1	1		1	0
C.V.	9		1.1	2	_	4		114	42	41	4	3	501
Varieties are ordered by des	scend	ing	statew	ide yiel	d a	verag	es	. A plus	or min	us sign ir	ndica	ates a	
performance significantly ab	ove o	r b	elow the	e test a	vera	age.							
The number in parentheses	below	/ C	olumn h	eading	s in	dicat	es	the num	ber of l	ocations	on v	which o	lata are
based.													
Belgian Lodging Scale = Are	ea X li	nte	ensity X	0.2. A	rea	= 1-1	10,	where 1	is whe	at unaffe	cted	and 1	0 is
entire plot affected and Inter	nsity =	= 1	-5, whe	re 1 is	whe	eat st	an	ding upri	ght and	5 is whe	at to	otally f	lat.
The 0-9 ratings indicate a ge	enotyp	be'	s respo	nse to	dise	ease,	wł	nere 0 =	highly r	esistant	and	9 = hi	ghly
susceptible.													

Table 14. Two year a	iverag	es	sumr	na	ary of	ре	rfo	rm	anc	e o	f rel	eas	sed	Vá	arieti	es	in the	)		
Virginia Tech Wheat	Tests,	20	003 a	nc	d 2004	4 h	arv	est	S.									Г		Τ
											Pov	V-			Barle	ey	Whea	at		
											der	у			Yello	W	Spindl	е		-
			Tes	t	Date	е			Loc	lg-	Mi	-	Le	af	Dwa	rf	Strea	k	Glur	ne
	Yield	1	Weig	ht	Head	ed	Hei	ght	inę	g	dev	N	Ru	st	Viru	s	Virus	5	Blot	ch
Line	(Bu/a	a)	(Lb/b	u)	(Mar3	1+)	(	n)	(0.2-	-10)					(0	-9)				_
	(12)		(12)	)	(6)		(	6)	(6	6)	(5	)	(3	)	(3)	)	(1)		(2	)
VA99W-176	73	+	56.1	t	34		37	+	1.6		0	-	2	-	2		0	1-1	2	+
VA97W-24	72	+	56.1		37	+	39	+	1.9		2	+	3	_	2		0	-	2	+-
USG 3209(RT)	70	+	55.4	-	35		34	-	1.7		1		5	+	1	-	0	-	3	+
SS 520(R)	69	+	56.0		34		37	+	1.4		1		2	-	2		0	-	1	-
TRIBUTE	69	+	58.4	+	35		34	-	1.0		0	-	1	-	2		0	-	1	-
SISSON	68		56.4		34		34	-	1.7		1		6	+	2		0	1-1	2	-
CRAWFORD	68		56.6	E	34		36		1.5		1		0	-	2		0	-	2	+
VA97W-375WS	68		55.9	-	35		33	-	1.0		0	-	0	-	2		0	-	2	+
SS 560(R)	68		55.9	F	36		34	-	0.9		1		4	+	1	-	0	-	2	t
PIONEER 26R24(D)	68		55.8	-	34		37	+	1.8		1		2	-	1	-	0	-	2	-
SS 550(B)	68		55.9	-	35		35	-	1.6		1		5	+	2		0	1-	1	-
PIONEER 26R58(D)	67		54.9	-	35		34	-	0.4	-	2	+	4	+	3	+	0	-	4	+
McCORMICK	67		57.9	+	35		33	-	1.1		0	-	0	-	1	-	0	-	1	-
GA931233E17(D)	66		56.9	+	35		38	+	3.4	+	1		1	-	2		0	-	2	
CHOPTANK	66		56.5	Г	34		32	-	0.5	-	0	-	1	-	2		0	-	2	Т
FEATHERSTONE 520(RT)	65		56.9	+	35		36		2.3	+	2	+	4	+	2		0	1-	2	-
V9212(D)	64		55.7	-	34		39	+	1.2		3	+	3		2		1	+	3	+
RENWOOD 3706	64		56.4		35		33	-	0.5	-	1		1	-	3	+	0	-	3	+
COKER 9375	64		54.5	-	36		39	+	1.8		2	+	5	+	2		0	-	1	-
COKER 9184(D)	63	-	58.0	+	37	+	34	-	0.3	-	2	+	1	-	2		0	-	2	
USG 3650(RT)	62	-	55.6	-	35		37	+	0.5	-	2	+	1	-	2		0	-	3	+
COKER 9295(D)	61	-	54.8	-	35		36		0.8		2	+	0	-	2		1	+	2	
NEUSE(R)	60	-	58.4	+	37	+	35	-	1.7		0	-	0	-	2		0	-	2	Т
MASSEY	59	-	56.3		36		41	+	3.3	+	2	+	8	+	2		0	-	2	
Average	66		56.3		35		36		1.4		1		3		2		0		2	
LSD (0.05)	3		0.4		2		1		0.7		0.5		1		1		0.4		1	
C.V.	9		1.7	Г	8		3		86		52		37		43		479		33	Τ
Varieties are ordered by desc	ending s	tate	ewide y	yiel	d avera	ges.	Α	plus	or m	inus	sign	indi	cate	s a						
performance significantly above					•															
statistically analyzed separate	-			۱p	arenthe	ses	belc	wc	olumr	hea	adings	s ind	dicat	es t	the nu	mbe	er			
of location-years on which dat																				
Belgian Lodging Scale = Area		-																		
entire plot affected and Intensi	•						-	•	•					-						
The 0-9 ratings indicate a gen	otype's i	res	ponse	to	disease	, wł	nere	0 =	highly	y res	sistan	t ar	nd 9	= r	nighly					
susceptible.	1	1		1	I –															

/irginia Tech Wheat	Iests	3, Z	:002,	20	103, a	na	2004	4 n	arve	SI	5.	_				_				-	
							-				Pov	N-			Barl	ev	Whea	at		⊢	
				-							der				Yello	-	Spind			+	
		-	Tes	t	Date	<u> </u>			Lodo	1_	Mil	-	Lea	əf	Dwa		Strea		Glun	ne	Earl
	Yiel	d	Weig	-	Heade		Heig	ht	ing	·	dev		Rus		Viru		Virus		Blote	-	Heigh
Line	(Bu/	-	(Lb/b		(Mar3		(In		(0.2-1		ucv	v	T	51		)-9)	VIIU	5	Diot		(In)
	(Bu/	a)	(LD/D	u)	(IVIAI S	1+)	(11)	)	(0.2-1	0)					(t	J-9)				—	(11)
	(18	3)	(18	6)	(10)	)	(9	)	(9)		(8)	)	(5	)	(5	)	(1)		(2)	)	(1)
VA97W-24	77	+	56.7	_	33	+	38	+	1.4		2	+	3	+	2		0	_	2		6.7
VA99W-176	75	+		-	30	<u> </u>	36	+	1.5	_	0	-	3	• +	2	-	0	_	2	+	6.8
TRIBUTE	75	+	50.5 59.1		30	-	33	-	0.9	-	0	-	0	- -	2	-	0	-	2	-	5.0
SS 520(R)	73	+			30		36	+	1.3	-	1		3	- +	2	-	0	_	1	-	8.7
USG 3209(RT)	74	+	56.0		30	-	30	-	1.3	+	1		3 5	+ +	2		0	-	3	-+	8.0
SISSON	74	+	56.9	Ļ-	30		33	<u> </u>	1.0	F	1		_				0	-	2		7.3
SISSON SS 550(R)	74	++	56.9 56.5	_	30	-	33	-	1.6	-	1		5 4	++	2 2		0	-	2	-	7.3
VA97W-375WS	_			_				-								_	-	-		-	
McCORMICK	74	++	56.5 58.5	-	31 31		32 33	-	0.8 0.9	_	0	-	0	-	2		0	-	2	-	6.5 5.5
				_	-	-		-		_		-				_	-	-			
SS 560(R) CHOPTANK	73	+		-	33	+	34	-	0.7	-	2	+	3	+	2		0	-	2		6.0
	72		57.0	_	31		31	-	0.4	-	0	-	1	-	2	_	0	-	2	$\vdash$	7.5
PIONEER 26R24(B)	72		56.6	-	31		36	+	1.5	_	1		3	+	1	-	0	-	2	Ŀ	6.3
RENWOOD 3706	70		57.2	_	31		33	-	0.4	-	1		1	-	3	+	0	-	3	+	5.5
FEATHERSTONE 520(RT)	68	-	57.5	_	32	+	35		2.0	+	2	+	3	+	2		0	-	2		8.7
USG 3650 (RT)	68	-	56.4	-	32	+	36	+	0.7	-	2	+	1	-	2		0	-	3	+	6.7
COKER 9184(D)	67	-	58.4		34	+	34	-	0.4	-	2	+	•	-	3	+	0	-	2		6.2
NEUSE(R)	66	-			34	+	35		1.3		0	-	0	-	2		0	-	2		6.0
COKER 9295(D)	65	-	55.4		32	+	36	+	0.7	-	2	+	0	-	3	+	1		2		9.0
MASSEY	61	-	56.5	-	32	+	40	+	3.2	+	2	+	7	+	2		0	-	2	1	8.7
Average	71		57.0		31		35	$\vdash$	1.2	-	1		2	$\vdash$	2	-	0		2	⊢	6.9
LSD (0.05)	2		0.3	1	1	-	1	Ē	0.5	1	0.4		1		1		0.3		1	$\square$	1.4
C.V.	9		1.7		8		3		92		59		41		41		616		33	E	11.8
Varieties are ordered by desc	onding	oto	towide		ald aver	2000			or mi	nue	eian	ind	licat		2						
-	-			-		-	-				-									┢	
performance significantly above statistically analyzed separate		low	the te	SU	average	, wr	lere n	uie	u anu	nui	ess II	nes	nav	μ	een						
		alı umr		din	no indio	otoo	the r		hor of	laa	otion				ubiob	dat	-				
The number in parentheses be		JULL	in nea	uni	js indica	ales	the r	lum		IOC	ation	-yea	arso	ע ווכ	VIICI	uat	a				
are based.	XIII				•			_				<i>m</i>			1 40 '					-	
Belgian Lodging Scale = Area entire plot affected and Intensi		-																		+	
The 0-9 ratings indicate a gen	-						-		-						-					+	

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Eastern Shore AREC	, Painter, VA,	2004 ha	arve	est.			
		Test		Powde	ery		
	Yield	Weigh	t	Milde	w		
Line	(Bu/a)	(Lb/bu	)	(0-9	9)		
PIONEER 26R24(D)	68 +	56.3		2	+		
PIONEER 26R15(D)	66 +	55.0	-	2	+		
VA02W-519	65 +	56.0		1			
VA01W-21	65 +	57.0		1			
VA99W-28	64	54.1	-	1			
VA01W-310	64	57.8	+	2	+		
USG 3209(RT)	64	56.7		1			
SS 8308(R)	64	55.7		1	-		
PIONEER 26R58(D)	64	54.8	-	2	+		
VA01W-353	63	54.3	-	1	-		
TRIBUTE	63	58.0	+	2	+		
VA98W-631	62	53.6	-	2	+		
VA97W-24	62	56.7	_	1	-		
VA02W-553	62	57.3	+	1	-		
VA02W-124	62	56.7		1	-		
VA01W-205	62	55.9		2	+		
VA01W-148	62	56.4		1	-		
VA00W-286	62	56.1		1	-		
PIONEER XW02M(D)	62	55.9		1	-		
NC00-15389(R)	62	57.3	+	1	-		
MV8-29	62	57.2	+	1			
McCORMICK	62	56.2	_	1	-		
GA931233E17(D)	62	57.3	+	2	+		
CRAWFORD	62	55.3	-	1	-		
VAN98W-342	61	55.5	-	1	-		
VA98W-627RS	61	55.8		1	-		
VA02W-683	61	55.2	-	1	-		
VA02W-555	61	55.8		1	-	_	
VA01W-145	61	56.8		1	-		
VA01W-112	61	56.1		1	-		
USG 3706(RT)	61	56.1	-	1	-		
SS 8309(R)	61	55.3	-	1			
VAN98W-170WS	60	56.4		1	-		
VA98W-335	60	55.9		1	-		
/A97W-375RS	60	56.1		1	-		
/A02W-398	60	55.0	-	1			
/9412(D)	60	57.4	+	2	+		
JSG 3650(RT)	60	56.5		2	+		
MV5-46	60	56.6		1	-		
MD71-5	60	55.0	-	1	-		
COKER 9312(D)	60	56.7		2	+		
COKER 9295(D)	60	55.7		- 1			
CHOPTANK	60	56.5		1	-		
VA99W-176	59	56.1		1	-	 	

Yield         Test Weight         Powdery Mildew           VA37W-375WS         59         55.4         -         1           VA37W-375WS         59         55.5         -         1           VA02W-370         59         55.5         -         1           VA02W-370         59         57.2         +         1           VA0W-526         59         57.5         +         1           SS 8302(R)         59         57.2         +         1           NC99-13022(R)         59         57.2         +         1           MV27-0187         59         55.8         1         -           COKER 9184(D)         59         59.0         +         2         +           VA01W-18         58         56.8         1         -         -           SS 560(R)         58         56.8         1         -         -           VA01W-18         58         56.8         1         -         -           SS 560(R)         58         56.8         1         -         -           VA02W-267         57         54.7         -         1         -           VA02W-513         56 <th>ble 16, continued. Sum heat Test, Eastern Shore</th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th>	ble 16, continued. Sum heat Test, Eastern Shore									
Line         (Bu'a)         (Lb/bu)         (0-9)           VA97W-375WS         59         55.4         -         1           VA02W-370         59         55.5         -         1           VA02W-370         59         57.5         +         1           VA01W-99         59         57.5         +         1           VA02W-326         59         57.5         +         1           SS 8302(R)         59         57.1         +         2         +           RACHEL         59         56.4         1         -         -           NC29-13022(R)         59         57.2         +         1         -           W27-0187         59         55.8         1         -         -           VA02W-267         58         56.8         1         -         -           VA02W-267         58         56.8         1         -         -           VA02W-267         58         56.8         1         -         -           VA02W-267         57         57.5         +         1         -           VA02W-567         57         57.3         +         1         -		-	<u> </u>							
VA97W-375WS         59         55.4         -         1           VA02W-370         59         55.5         -         1           VA01W-99         59         57.2         +         1           VA01W-99         59         57.5         +         1           SS 8302(R)         59         57.5         +         1           SS 8302(R)         59         57.2         +         1           NC99-13022(R)         59         57.2         +         1           MV27-0187         59         55.8         1         -           COKER 9184(D)         59         59.0         +         2         +           VA02W-267         58         55.2         -         1         -           VA02W-267         58         56.8         1         -         -           VA02W-267         58         58.5         1         -         1         -           VA02W-267         58         58.5         58.1         +         1         -           VA02W-267         57         57.5         +         1         -           VA02W-567         57         57.5         +         1		Yield		Weigh	nt	Milde	w			
VA02W-370       59       55.5       -       1       I         VA01W-99       59       57.2       +       1       I         VA00W-526       59       57.5       +       1       I         SS 8302(R)       59       57.1       +       2       +         RCHEL       59       56.4       1       I       I         NC99-13022(R)       59       57.2       +       1       I         W27-0187       59       55.8       1       I       I         VA02W-267       58       55.2       1       I       I         VA02W-267       58       56.8       1       I       I         VA01W-18       58       56.8       1       I       I         SS 660(R)       58       58.1       +       1       I         PIONEER 26R12(D)       58       55.1       -       1       I         VA2W-596       57       55.1       -       1       I         VA2W-596       57       57.5       +       1       I         VA2W-513       56       57.5       +       1       I         VA2W-513		(Bu/a)		(Lb/bu	I)	(0-9	<del>)</del> )			
VA02W-370       59       55.5       -       1       I         VA01W-99       59       57.2       +       1       I         VA00W-526       59       57.5       +       1       I         SS 8302(R)       59       57.1       +       2       +         RCHEL       59       56.4       1       I       I         NC99-13022(R)       59       57.2       +       1       I         WAZOV-267       58       55.8       1       I       I         VA01W-267       58       56.8       1       I       I         VA02W-267       58       56.8       1       I       I         VA01W-18       58       56.8       1       I       I         SS 560(R)       58       58.1       +       1       I         PIONEER 26R12(D)       58       55.1       -       1       I         VA2W-596       57       55.1       -       1       I         VA2W-596       57       57.5       +       1       I         VA2W-513       56       57.5       +       1       I         VA2UV-513	97W-375WS	, ,		•	-		<i>.</i>		_	
VA00W-526       59       57.5       +       1					-	1				
SS 8302(R)       59       57.1       +       2       +         CACHEL       59       56.4       1       -         VC9-13022(R)       59       57.2       +       1       -         MV27-0187       59       55.8       1       -       -         COKER 9184(D)       59       55.2       -       1       -         VA02W-267       58       56.8       1       -       -         VA01W-18       58       56.8       1       -       -         SS 660(R)       58       58.1       +       1       -         VEUSE(R)       58       57.5       +       2       +         VEUSE(R)       58       58.1       -       1       -         VA02W-260       57       57.1       -       1       -         VA02W-566       57       55.1       -       1       -         VA02W-567       57       57.5       +       1       -         VA02W-566       57       55.1       -       1       -         VA02W-513       56       57.5       +       1       -         V9212(D)       56	)1W-99	59		57.2	+	1	-			 
RACHEL       59       56.4       1         NC99-13022(R)       59       57.2       +       1         W127-0187       59       55.8       1       -         COKER 9184(D)       59       59.0       +       2       +         A02W-267       58       55.2       -       1       -         YA01W-18       58       56.8       1       -       -         SS 660(R)       58       56.8       1       -       -         VA02W-267       58       56.8       1       -       -         YA01W-18       58       56.8       1       -       -         SS 660(R)       58       58.1       +       1       -         VEUSE(R)       58       58.1       +       1       -         COKER B970051(D)       58       55.1       -       1       -         /A02W-567       57       55.1       -       1       -         /A02W-513       56       55.0       -       1       -         /9212(D)       56       55.0       -       1       -         /A02W-513       56       55.4       -       1		59			+	1	-		_	
RACHEL       59       56.4       1         NC99-13022(R)       59       57.2       +       1         W127-0187       59       55.8       1       -         COKER 9184(D)       59       59.0       +       2       +         A02W-267       58       55.2       -       1       -         YA01W-18       58       56.8       1       -       -         SS 660(R)       58       56.8       1       -       -         VA02W-267       58       56.8       1       -       -         YA01W-18       58       56.8       1       -       -         SS 660(R)       58       58.1       +       1       -         VEUSE(R)       58       58.1       +       1       -         COKER B970051(D)       58       55.1       -       1       -         /A02W-567       57       55.1       -       1       -         /A02W-513       56       55.0       -       1       -         /9212(D)       56       55.0       -       1       -         /A02W-513       56       55.4       -       1	8302(R)	59		57.1	+	2	+			 
NC99-13022(R)       59       57.2       +       1       I         MV27-0187       59       55.8       1       I       I         COKER 9184(D)       59       55.2       -       1       I         VA02W-267       58       55.2       -       1       I         VA01W-18       58       56.8       1       I       I         VA01W-18       58       56.8       1       I       I         SS 560(R)       58       58.1       +       1       I         RENWOOD 3260       58       58.1       +       1       I         VA02W-567       57       55.1       -       1       I       I         VA02W-567       57       57.3       +       1       I       I       I         VA02W-567       57       57.5       +       1       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I       I	. ,				_			_		
MV27-0187       59       55.8       1         COKER 9184(D)       59       59.0       +       2       +         VA02W-267       58       55.2       -       1       -         VA01W-18       58       56.8       1       -       -         VA01W-18       58       56.8       1       -       -         SS 560(R)       58       56.8       1       -       -         RENWOOD 3260       58       58.1       +       1       -         PIONEER 26R12(D)       58       55.1       -       1       -         VA02W-567       57       55.1       -       1       -         VA02W-567       57       57.3       +       1       -         VA02W-567       57       57.5       +       1       -         VA02W-513       56       55.0       -       1       -         VA02W-513       56       55.4       -       1       -         VA02W-513       56       54.2       -       1       -         VA02W-513       56       55.4       -       1       -         VA00W-366       55 <td< td=""><td></td><td></td><td></td><td></td><td>+</td><td></td><td></td><td></td><td></td><td></td></td<>					+					
COKER 9184(D)       59       59.0       +       2       +         /A02W-267       58       55.2       -       1       -         /A01W-18       58       56.8       1       -       -         SS 560(R)       58       56.8       1       -       -         RENWOOD 3260       58       58.1       +       1       -         PIONEER 26R12(D)       58       57.5       +       2       +         NEUSE(R)       58       58.1       +       1       -         COKER B970051(D)       58       55.1       -       1       -         VA02W-596       57       55.1       -       1       -         VA02W-596       57       57.3       +       1       -         VA02W-597       57       57.5       +       1       -         VA02W-513       56       57.5       +       1       -         VA02W-513       56       55.0       -       1       -         VA01W-154       55       57.6       +       1       -         VA00W-386       55       56.0       2       +         VA00W-366					-		-		_	
VA02W-267       58       55.2       -       1       I         VA01W-18       58       56.8       1       I         SS 560(R)       58       56.8       1       I         SS 560(R)       58       58.1       +       1         PIONEER 26R12(D)       58       57.5       +       2       +         NEUSE(R)       58       58.1       +       1       I         VA02W-5070051(D)       58       55.1       -       1       I         VA02W-567       57       57.3       +       1       I         VA02W-567       57       57.5       +       1       I         VA02W-567       57       57.5       +       1       I         VA02W-513       56       57.5       +       1       I         VA02W-513       56       55.6       2       +       I         VA02W-513       56       55.6       2       +       I         VA01W-154       55       57.6       +       1       I         VA00W-386       55       56.0       2       +       I         VA00W-386       55       56.0					+		+			 
VA01W-18       58       56.8       1         SS 560(R)       58       56.8       1       1         RENWOOD 3260       58       58.1       +       1       1         PIONEER 26R12(D)       58       57.5       +       2       +         NEUSE(R)       58       58.1       -       1       1         COKER B970051(D)       58       55.1       -       1       1         VA02W-596       57       54.7       -       1       1         VA02W-567       57       57.3       +       1       1         JSG 3592(RT)       57       57.5       +       1       1         VA02W-567       57       57.5       +       1       1         JSG 3592(RT)       57       57.5       +       1       1         VA02W-513       56       57.5       +       1       1         VA02W-513       56       55.6       2       +         COKER 9375       56       54.2       -       1       1         VA00W-38       55       56.0       2       +       1         VA00W-38       55       56.6       1 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>· ·</td> <td></td> <td></td> <td></td>							· ·			
SS 560(R)       58       56.8       1       I         RENWOOD 3260       58       58.1       +       1       I         PIONEER 26R12(D)       58       57.5       +       2       +         NEUSE(R)       58       58.8       +       1       I         COKER B970051(D)       58       55.1       -       1       I         VA98W-627WS       57       54.7       -       1       I         VA02W-596       57       57.1       -       1       I         VA02W-567       57       57.3       +       1       I         VA02W-567       57       57.5       +       1       I         VA02W-513       56       57.5       +       1       I         VA02W-513       56       55.6       2       +         COKER 9375       56       55.4       -       1       I         VA00W-38       55       55.4       -       1       I         VA00W-366       55       56.0       2       +         NC00-15332(R)       54       56.6       1       I         SS 50(B)       50       -       55.9 <td></td> <td></td> <td></td> <td></td> <td>-</td> <td></td> <td>-</td> <td>-</td> <td></td> <td> </td>					-		-	-		 
RENWOOD 3260       58       58.1       +       1       -         PIONEER 26R12(D)       58       57.5       +       2       +         NEUSE(R)       58       58.8       +       1       -         COKER B970051(D)       58       55.1       -       1       -         VA98W-627WS       57       54.7       -       1       -         VA02W-596       57       55.1       -       1       -         VA02W-567       57       57.3       +       1       -         VA02W-567       57       57.5       +       1       -         VA02W-513       56       57.5       +       1       -         VA02W-513       56       55.6       2       +         COKER 9375       56       55.6       2       +         VA01W-154       55       57.6       +       1       -         VA00W-38       55       56.0       2       +       -         VA00W-366       55       56.0       2       +       -         NC00-15332(R)       54       56.6       1       -       -         SS 50(B)       50					_		-		_	
PIONEER 26R12(D)       58       57.5       +       2       +         NEUSE(R)       58       58.8       +       1       -         COKER B970051(D)       58       55.1       -       1       -         VA98W-627WS       57       54.7       -       1       -         VA02W-596       57       55.1       -       1       -         VA02W-567       57       57.3       +       1       -         USG 3592(RT)       57       57.5       +       1       -         VA02W-513       56       57.5       +       1       -         VA02W-513       56       55.6       -       1       -         VA02W-38       55       55.4       -       1       -         VA00W-38       55       56.6       -       1       -         VA00	. ,				-		-			 
NEUSE(R)       58       58.8       +       1       I         COKER B970051(D)       58       55.1       -       1       I         VA98W-627WS       57       54.7       -       1       I         VA02W-596       57       55.1       -       1       I         VA02W-567       57       57.3       +       1       I         JSG 3592(RT)       57       57.5       +       1       I         VA02W-567       57       57.5       +       1       I         VA02W-513       56       57.5       +       1       I         VA02W-513       56       55.6       2       +         V20212(D)       56       55.6       2       +         COKER 9375       56       54.2       -       1       I         VA01W-154       55       57.6       +       1       I         VA00W-38       55       56.6       1       I       I         VA00W-366       55       56.6       1       I       I         SS 520(R)       53       -       57.5       +       2       +         PAT(R)       53 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>+</td> <td></td> <td></td> <td></td>							+			
COKER B970051(D)       58       55.1       -       1       I         VA98W-627WS       57       54.7       -       1       I         VA02W-596       57       55.1       -       1       I         VA02W-567       57       57.3       +       1       I         USG 3592(RT)       57       57.5       +       1       I         FEATHERSTONE 520(RT)       57       57.5       +       1       I         VA02W-513       56       57.5       +       1       I         VA02W-513       56       55.6       2       +         VA02W-54       55       57.6       +       1       I         VA01W-154       55       55.4       -       1       I         VA00W-38       55       56.6       1       I       I         VA00W-38       53       -       57.5       +       2       +         PAT(R)       53       -	. ,						-			
//A98W-627WS       57       54.7       -       1       I         //A02W-596       57       55.1       -       1       I         //A02W-567       57       57.3       +       1       I         JSG 3592(RT)       57       57.5       +       1       I         FEATHERSTONE 520(RT)       57       57.5       +       1       I         //A02W-513       56       57.5       +       1       I         //A02W-513       56       55.6       2       +         //A01W-154       55       57.6       +       1       I         //A00W-38       55       56.0       2       +         //A00W-386       55       56.6       1       I       I         //A00W-38       53       -       57.5       +       2       +         //A00W-38       53       -       57.5       +       2       +         AVG08       52       -							_			
VA02W-596       57       55.1       -       1       I         VA02W-567       57       57.3       +       1       I         JSG 3592(RT)       57       56.6       1       I       I         FEATHERSTONE 520(RT)       57       57.5       +       1       I         VA02W-513       56       57.5       +       1       I         V9212(D)       56       55.0       -       1       I         VA02W-513       56       55.6       2       +         V9212(D)       56       55.6       2       +         COKER 9375       56       54.2       -       1       I         VA01W-154       55       57.6       +       1       I         VA00W-38       55       55.4       -       1       I         VA00W-366       55       56.0       2       +         NC00-15332(R)       54       56.6       1       I         SS 520(R)       53       -       57.5       +       2       +         PAT(R)       53       -       57.5       +       1       I         SISSON       51       -	. ,									
VA02W-567       57       57.3       +       1       I         JSG 3592(RT)       57       56.6       1       I         FEATHERSTONE 520(RT)       57       57.5       +       1       I         VA02W-513       56       57.5       +       1       I         V9212(D)       56       55.0       -       1       I         RENWOOD 3706       56       55.6       2       +         COKER 9375       56       54.2       -       1       I         VA00W-38       55       57.6       +       1       I         VA00W-386       55       56.0       2       +       I         VA00W-386       53       -       57.5       +       2       +         VA00W-386       53       -       57.9       +       1       I         SSS0(R)       53       -       57.9       +       1       I		-					_		_	
JSG 3592(RT)       57       56.6       1       I         FEATHERSTONE 520(RT)       57       57.5       +       1       I         VA02W-513       56       57.5       +       1       I         V9212(D)       56       55.0       -       1       I         RENWOOD 3706       56       55.6       2       +         COKER 9375       56       55.6       2       +         VA01W-154       55       57.6       +       1       I         VA00W-38       55       55.4       -       1       I         VA00W-366       55       56.0       2       +       I         VA00W-366       55       56.0       2       +       I         VA00W-38       55       55.4       -       1       I         VA00W-366       55       56.0       2       +       I         SS 520(R)       53       -       57.5       +       2       +         PAT(R)       53       -       57.9       +       1       I         MV6-82       52       -       56.8       1       I       I         SS 550(B) </td <td></td> <td>-</td> <td></td> <td></td> <td></td> <td></td> <td>-</td> <td></td> <td></td> <td></td>		-					-			
FEATHERSTONE 520(RT)       57       57.5       +       1         VA02W-513       56       57.5       +       1          V9212(D)       56       55.0       -       1          RENWOOD 3706       56       55.6       2       +         COKER 9375       56       54.2       -       1          VA01W-154       55       57.6       +       1          VA00W-38       55       55.4       -       1          VA00W-366       55       56.0       2       +         NC00-15332(R)       54       56.6       1          SS 520(R)       53       -       57.9       +       1         MASSEY       53       -       57.9       +       1         MV6-82       52       -       56.8       1          SISSON       51       -       55.9       1          SS 550(B)       50       -       56.0       3       +         Average       59       56.3       1           LSD (0.05)       6       0.8       39		-			+		_			
VA02W-513       56       57.5       +       1       I         V9212(D)       56       55.0       -       1       I         RENWOOD 3706       56       55.6       2       +         COKER 9375       56       54.2       -       1       I         /A01W-154       55       57.6       +       1       I         /A00W-38       55       55.4       -       1       I         /A00W-366       55       56.0       2       +         NC00-15332(R)       54       56.6       1       I         SS 520(R)       53       -       57.5       +       2       +         PAT (R)       53       -       57.9       +       1       I         MV6-82       52       -       56.8       1       I       I         SISSON       51       -       55.9       1       I       I         SS 550(B)       50       -       56.3       1       I       I         Average       59       56.3       1       I       I       I         SS 50(B)       6       0.8       39       I       I		-					_			
/9212(D)       56       55.0       -       1       -         RENWOOD 3706       56       55.6       2       +         COKER 9375       56       54.2       -       1       -         /A01W-154       55       57.6       +       1       -         /A00W-38       55       55.4       -       1       -         /A00W-366       55       56.0       2       +         NC00-15332(R)       54       56.6       1       -         SS 520(R)       53       -       57.9       +       1         MASSEY       53       -       57.9       +       1       -         MV6-82       52       -       56.8       1       -       -         SS 550(B)       50       -       55.5       -       1       -         Average       59       56.3       1       -       -       -         SD (0.05)       6       0.8       39       -       -       -							_			
RENWOOD 3706       56       55.6       2       +         COKER 9375       56       54.2       -       1       -         /A01W-154       55       57.6       +       1       -         /A00W-38       55       55.4       -       1       -         /A00W-366       55       56.0       2       +         /A00W-366       55       56.0       2       +         /A00W-366       55       56.6       1       -         /A00W-366       53       -       53.9       -       2       +         /A000-15332(R)       53       -       57.9       +       1       -         /ASSEY       53       -       57.9       +       1       -         /AV6-82       52       -       56.8       1       -         SS 550(B)       50       -       56.0       3       + <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>_</td> <td></td> <td></td> <td></td>							_			
SOKER 9375       56       54.2       -       1       -         /A01W-154       55       57.6       +       1       -         /A00W-38       55       55.4       -       1       -         /A00W-366       55       56.0       2       +         /A00W-366       55       56.0       2       +         /A00W-366       55       56.0       2       +         /A00W-366       53       -       53.9       -       2       +         /A00W-388       53       -       57.5       +       2       +         /A00W-388       53       -       57.9       +       1       -         /SS 520(R)       53       -       57.9       +       1       -         /AASSEY       53       -       57.9       +       1       -         /MASSENN       51       -       55.9       1       -       -         /SS 550(B)       50       -       56.0       3       +       -         /ASS 550(B)       50       -       56.0       3       1       -         /SD (0.05)       6       0.8       39 <td></td> <td></td> <td></td> <td></td> <td>-</td> <td></td> <td></td> <td></td> <td></td> <td></td>					-					
/A01W-154       55       57.6       +       1       -         /A00W-38       55       55.4       -       1       -         /A00W-366       55       56.0       2       +         NC00-15332(R)       54       56.6       1       -         SS 520(R)       53       -       57.5       +       2       +         PAT (R)       53       -       57.9       +       1       -         MASSEY       53       -       57.9       +       1       -         MV6-82       52       -       56.8       1       -       -         SISSON       51       -       55.9       1       -       -         SS 550(B)       50       -       56.0       3       +         Average       59       56.3       -       1       -         SD (0.05)       6       0.8       39       -       -							+			
/A00W-38       55       55.4       -       1       -         /A00W-366       55       56.0       2       +         NC00-15332(R)       54       56.6       1       -         SS 520(R)       53       -       53.9       -       2       +         PAT (R)       53       -       57.5       +       2       +         MASSEY       53       -       57.9       +       1       -         MV6-82       52       -       56.8       1       -       -         SISSON       51       -       55.9       1       -       -         SS 550(B)       50       -       56.0       3       +         Average       59       56.3       1       -         SD (0.05)       6       0.8       1       -         C.V.       6       0.8       39       -							_			
VA00W-366       55       56.0       2       +         NC00-15332(R)       54       56.6       1       -         SS 520(R)       53       -       53.9       -       2       +         PAT(R)       53       -       57.5       +       2       +         MASSEY       53       -       57.9       +       1       -         MV6-82       52       -       56.8       1       -       -         SISSON       51       -       55.9       1       -       -         SS 550(B)       50       -       56.0       3       +       -         Average       59       56.3       1       -       -       -       -         SD (0.05)       6       0.8       39       -       -       -       -       -					+		_			
NC00-15332(R)       54       56.6       1       -         SS 520(R)       53       -       53.9       -       2       +         PAT(R)       53       -       57.5       +       2       +         MASSEY       53       -       57.9       +       1       -         MV6-82       52       -       56.8       1       -         SISSON       51       -       55.9       1       -         SS 550(B)       50       -       56.0       3       +         Average       59       56.3       1       -         .SD (0.05)       6       0.8       39       -					-					
SS 520(R)       53       -       53.9       -       2       +         PAT(R)       53       -       57.5       +       2       +         MASSEY       53       -       57.5       +       2       +         MASSEY       53       -       57.9       +       1       -         MV6-82       52       -       56.8       1       -         SISSON       51       -       55.9       1       -         SS 550(B)       50       -       56.0       3       +         Average       59       56.3       1       -         LSD (0.05)       6       0.8       39       -							+			
PAT (R)       53       -       57.5       +       2       +         MASSEY       53       -       57.9       +       1       -         MV6-82       52       -       56.8       1       -         SISSON       51       -       55.9       1       -         SS 550(B)       50       -       56.0       3       +         Average       59       56.3       1       -         SD (0.05)       6       0.8       39       -		-								
MASSEY       53       -       57.9       +       1       -         MV6-82       52       -       56.8       1       -         SISSON       51       -       55.9       1       -         SS 550(B)       50       -       55.5       -       1       -         H-84(D)       50       -       56.0       3       +         Average       59       56.3       1       -         _SD (0.05)       6       0.8       1       -	520(R)	53 -		53.9	-	2	+			
MV6-82       52       -       56.8       1       -         SISSON       51       -       55.9       1       -         SS 550(B)       50       -       55.5       -       1       -         H-84(D)       50       -       56.0       3       +         Average       59       56.3       1       -         LSD (0.05)       6       0.8       39       -         C.V.       6       0.8       39       -							+			
SISSON       51       -       55.9       1       -         SS 550(B)       50       -       55.5       -       1       -         H-84(D)       50       -       56.0       3       +         Average       59       56.3       1       -         LSD (0.05)       6       0.8       39       -         C.V.       6       0.8       39       -					+					
SS 550(B)       50       -       55.5       -       1       +         H-84(D)       50       -       56.0       3       +         Average       59       56.3       1       -         LSD (0.05)       6       0.8       1       -         C.V.       6       0.8       39       -										
H-84(D)       50       -       56.0       3       +         Average       59       56.3       1       -         LSD (0.05)       6       0.8       1       -         C.V.       6       0.8       39       -										
Average         59         56.3         1           LSD (0.05)         6         0.8         1           C.V.         6         0.8         39					-					
LSD (0.05)     6     0.8     1       C.V.     6     0.8     39							+			
C.V. 6 0.8 39	-									
Released cultivers are shown in hold print	-	6		0.8		39				
/arieties 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	lus or minus sign indicates a perfo	yield avera	ignific						ge.	

Test, Eastern Virgin	ia AREC.	Wa	rsaw, \	/Α,	2004	har	vest.						
, <b>J</b>			,	ΤÍ					Barley	/	Wheat		
									Yellow		Spindle		
			Test		Date	;			Dwar	F	Streak		
	Yield		Weight		Heade		Heigh	nt	Virus		Virus		
Line	(Bu/a	\	(Lb/bu)		(Mar31	-	(In)		1.1.00	(0			
VA97W-24	89	/ +	56.6	<u> </u>	29	• •	34	+	3	(0	0		
VA99W-176	85		56.0		25		32	-	3		0		
USG 3209(RT)	84	++	55.8	-	20 27	-	32 30	-	3		0		
• •				_					-	_	-		
USG 3592(RT)	84	+	57.3	+	29	+	35	+	1		0		
USG 3706(RT)	83	+	57.1	+	28	+	30	-	2	-	0		
PIONEER 26R15(D)	83	+	54.6	-	28	+	33		2	-	0		
SS 560(R)	83	+	57.3	+	29	+	32		2	-	0		
VAN98W-342	81		55.1	-	27		29	-	3		0		
VA00W-38	81		54.8	-	27		32		1		0		
VA01W-21	81		57.4	+	26	-	31		2	-	0		
SS 8302(R)	80		56.9		29	+	33		2	-	0		
SISSON	80		56.7		26	-	31		3		0		
SS 8308(R)	79		57.0	+	27		32		2	-	0		
SS 550(B)	79		56.2		27		33		3		0		
VA97W-375RS	79		56.8		26	-	30	-	4	+	0		
McCORMICK	79		57.4	+	27	П	32		2	-	0		
VA02W-555	79		55.6	-	27	П	30	-	2	-	0		
PIONEER 26R58(D)	78		54.7	-	27	П	31		3		0		
VA02W-124	78		56.5		28	+	34	+	1		0		
COKER 9312(D)	77		57.3	+	26	-	32		3		0		
PIONEER 26R24(D)	77		56.3		26	-	34	+	2	-	0		
TRIBUTE	77		57.9	+	27	Ħ	30	- 1	3		0		
VA00W-366	77		56.7	-	26	-	30	-	2	-	0		
VA02W-683	77		54.5	-	26	-	31		2	-	0		
VA99W-28	76		55.5	- 1	29	+	32		2	-	0		
VA02W-553	76		56.9	+	26	-	34	+	3		1	+	
CHOPTANK	75		56.7	-	26	-	29	-	3		0	+	
VA01W-112	75		55.5	-	27	$\square$	30	-	1		0		
PIONEER XW02M(D)	75		56.4	-	26	-	30	-	3		0	+	
RENWOOD 3260	75		58.2	+	26		33	$\vdash$	1		0		
MD71-5	75		55.1	-	27		29	-	4	+	0	+	
GA931233E17(D)	75		57.8	+	28	+	34	+	3	-	0		
VA02W-567	75		58.1	+	26	H	31	-	2	-	0		
VA02W-307	73		56.5	<u> </u>	20	+	31		2	-	0		
NC99-13022(R)	74		56.4	-	20 29	+	31		2	-	0		
VA97W-375WS	74		55.5		29	<u> </u>	28		3	-	0		
VA97VV-375VVS VA98W-627WS	74		55.5 54.6	-	27	$\square$	28 32	-	4	+	0		
				-		$\square$		$\square$		-			
VA01W-310	74		57.4	+	27	$\square$	31		1		0		
VA02W-513	74		57.9	+	27		29	-	1	<u> </u>	0		
VA98W-335	73		56.5	_	28	+	29	-	4	+	0		
VAN98W-170WS	73		55.2	-	26	-	32		2	-	0		
VA01W-99	73 73		57.2 56.9	+	26 29	1-1	32		2 2	- 1	0		

Tech Wheat Test, East	ciii viigi		ς,	- Tai 30	,	v <i>r</i> ., 2				1471	
			-					Barley Yellov		Whea	
		Test		Date			$\vdash$	Dwar		Spindl Streak	
	Yield	Weight		Heade	-	Heigh	nt	Virus		Virus	
Line	(Bu/a)	(Lb/bu)		(Mar31	-	(In)		VII US	, (0-		,
H-84(D)	(Bu/a) 73	(LD/DU) 56.9	_	(1viai 3 1 27	Ŧ)	32	_	4	(0-	. <del>9)</del> 0	
			-		-	-		•		-	_
MV27-0187 VA98W-627RS	73 73	56.2 56.6	-	26 26	-	31 32		5 3	+	0	_
VA90VV-027R3	73	55.6	-	20	_	32		3		-	_
USG 3650(RT)	73	56.3	-	20 29	-+	33		3	+	0	_
VA00W-286	72	56.3	+-	29	+	31	-	2	_	0	_
VA0000-200 VA01W-205	72	56.2	-	20 27	+	30	-	2	-	1	_
VA01W-203	72	55.1	-	27	-	30	-	2	-	0	_
COKER 9184(D)	72	59.4	+	27	+	30	-	2	-	0	
V9412(D)	72	57.3	+	26	÷	32		4	+	0	_
WV5-46	72	57.3	+	20		32		4	-	0	_
VA02W-267	72	55.6	÷	20	-	31		2	-	0	
FEATHERSTONE 520(RT)	72	57.0	+	20	-	32		3		0	
CRAWFORD	71	55.9	-	25	-	32		2	-	0	_
VA02W-596	71	56.3	-	29	+	33		3		0	-
MASSEY	70	56.5	+	28	+	40	+	4	+	0	
MV6-82	70	56.6	-	26	-	31		2	-	0	_
VA01W-154	70	58.0	+	29	+	34	+	2	-	0	_
COKER 9295(D)	69	56.2	÷	27		33	· ·	4	+	1	-
VA98W-631	69	54.0	-	29	+	31		3		0	-
VA00W-526	69	57.8	+	28	+	30	-	2	-	0	_
VA01W-145	69	57.5	+	28	+	31		2	-	0	-
MV8-29	69	57.5	+	26	-	31		2	-	0	
SS 520(R)	69	55.8	1-	26	-	33		2	-	0	-
VA02W-370	69	58.0	+	26	-	30	-	1		0	-
NC00-15332(R)	68	56.4	-	30	+	34	+	4	+	0	-
VA02W-519	68	55.1	-	26	-	30	-	3		0	
PAT(R)	67	57.1	+	34	+	33		3		0	
SS 8309(R)	67	56.4	-	29	+	35	+	4	+	0	
NEUSE(R)	66 -	59.0	+	29	+	33		3		0	
NC00-15389(R)	66 -	57.5	+	25	-	30	-	4	+	0	
COKER B970051(D)	66 -	55.2	-	31	+	29	-	2	-	0	
PIONEER 26R12(D)	66 -	58.3	+	28	+	31		3		0	
V9212(D)	66 -	54.8	-	28	+	33		4	+	1	
RENWOOD 3706	65 -	56.9		27		30	-	5	+	0	
RACHEL	64 -	54.8	-	26	-	32		5	+	1	
COKER 9375	63 -	54.8	-	30	+	35	+	3		0	
Average	74	56.5		27		32		3		0	
LSD (0.05)	8	0.5		1		2		1		0	
C.V.	6	0.6		2		4		31		569	
Released cultivars are shown in											
Varieties are ordered by descer				or minu	us s	ign indic	ates	ва			
performance significantly above		-									
The 0-9 ratings indicate a genot	vne's respon	ee to dises	SA.	where (	) = b	niahlv re	teie	ant and			

# Table 18. Summary of performance of entries in the Virginia Tech Wheat Test, Tidewater AREC, Holland, VA, 2004 harvest.

Tidewater AREC, Ho	lland, VA, 200	4 harves	st.				
		Test					
	Yield	Weigh		Lodgin			
Line	(Bu/a)	(Lb/bu	)	(0.2-10	))		
VA02W-596	90 +	55.1		0.2	_		
VA01W-21	88 +	57.4	+	0.2	-		
VA01W-353	86 +	55.1	-	1.1			
VA01W-145	80 +	55.8		1.1			
VA99W-145	80 +	55.4		1.5			
USG 3209(RT)	76	55.0	-	0.5	_		
VA01W-112	75	55.8	_	0.3	-		
VA02W-513	75	58.1	+	0.2	-		
MV5-46	73	57.1	+	1.7			
VA02W-398	73	54.2	-	0.2	-		
VA01W-18	72	56.4		0.9	-		
MV6-82	72	56.4		0.2	-		
V9412(D)	72	57.1	+	0.5	-		
VAN98W-342	70	56.0		0.2	-		
RACHEL	69	55.0		0.5	-		
VA98W-335	68	55.1		1.9	_		
VA98W-631	68	53.0	-	0.5	-		
PIONEER XW02M(D)	68	56.3		1.9			
VA97W-375WS	68	55.1		1.1			
CRAWFORD	68	56.7		0.3	-		
COKER 9184(D)	67	58.0	+	0.2	-		
PIONEER 26R24(D)	67	56.1		3.3			
PIONEER 26R58(D)	67	54.3	-	2.1			
VA00W-286	66	55.5		0.2	-		
PIONEER 26R15(D)	66	54.1	-	2.2			
VA98W-627WS	66	56.2		1.3			
VA00W-526	65	56.2		1.0			
USG 3706(RT)	65	57.0	+	2.5			
McCORMICK	65	56.6		4.7	+		
TRIBUTE	65	58.2	+	0.5	-		
VA02W-553	65	55.8		1.5		-	
VA02W-683	65	53.1	-	6.5	+		
VA99W-28	64	53.2	-	3.7			
SS 8309(R)	64	54.6		0.2	-		
VA02W-124	64	56.2		4.1			
COKER 9295(D)	63	54.2	-	0.2	-		
VA01W-148	63	55.2		0.2	-		
SS 8302(R)	63	55.8		0.2	-		
VA97W-24	63	56.1		2.5			
VA98W-627RS	63	56.1		1.2			
VA02W-567	63	57.2	+	0.4	-		
USG 3650(RT)	62	54.2	-	0.7	-		
VA01W-99	62	55.9		0.2	-		
VA01W-205	62	55.6		1.1			

Table 18, continued. Summary of performance of entries in the Virginia Tech Wheat Test, Tidewater AREC, Holland, VA, 2004 harvest.

Wheat Test, Tidewater A	AREC, HOIR		200	4 11 di V	esi.		
	Yield	Test Weight		Lodgin	a		
ine				(0.2-10	-		
	(Bu/a)	(Lb/bu)	_	`	,		
NC00-15389(R)	62	57.5	+	0.4	-		
MV27-0187	62	56.0		3.7			
VA97W-375RS	62	55.6		1.5			
VA01W-310	62	56.8		1.8			
VA02W-555	62	54.5		0.2	-		
RENWOOD 3260	61	57.6	+	0.9	-		
SS 8308(R)	61	56.2		0.2	-		
VA00W-366	61	56.0		0.2	-		
VA02W-519	61	53.6	-	1.3			
USG 3592(RT)	60	55.9		4.9	+		
MV8-29	60	57.1	+	2.1			
SS 550(B)	60	55.1		1.7			
SS 520(R)	60	56.0		2.5			
RENWOOD 3706	60	56.2		0.2	-		
COKER 9375	60	53.4	-	4.6	+		
VA02W-370	60	56.7		1.4			
FEATHERSTONE 520(RT)	59	55.9		1.5			
COKER B970051(D)	59	52.7	-	1.9			
GA931233E17(D)	59	57.0	+	7.7	+		
PIONEER 26R12(D)	58	56.9		1.5			
MD71-5	58	54.9	-	0.2	-		
CHOPTANK	57	56.5		0.2	-		
COKER 9312(D)	57	56.9		2.0			
SS 560(R)	57	55.1		4.0			
SISSON	56	55.6		2.7			
VA01W-154	56	56.1		0.2	-		
VA00W-38	55	54.0	-	2.8			
VA0000-50 VAN98W-170WS	55	56.2	-	0.7	_		
MASSEY	55	55.3		0.9	-		
VA02W-267	54	54.7		0.9 2.4	-		
			-		_		
PAT(R) NC99-13022(R)	53 52	55.0 54.6		0.2 4.5	-+		
					- T		
V9212(D)	52	53.3	-	0.7	-		
NEUSE(R)	51	56.8		2.3			
H-84(D)	49 -	55.8		1.5			
NC00-15332(R)	45 -	54.7	_	3.0			
Average	64	55.7		1.6			
LSD (0.05)	15	1.3		2.7			
C.V.	15	1.4		107			
Released cultivars are shown in t Data are based on 3 replications Varieties are ordered by descend	oold print. at this site. ling yield average	es. A plus c	or mii		indica	ates a	
performance significantly above o	below the test	average.					

Test, Northern Piedn	IONLAR	<u>-</u> C,	Orang	je,	, VA, 2	004	narv	est	-			
			Teet		Dete				Lada	Derley Velley		
	Yield		Test Weight	ŀ	Date Heade		Height		Lodg- ing	Barley Yellow Dwarf Virus		
Line	(Bu/a		(Lb/bu)		(Mar31-		(In)		(0.2-10)	(0-9)		
	(bu/a	)		)	(IVIAI ST	-)	(11)	_	(0.2-10)	(0-9)		
SS 8308(R)	88	+	57.8	+	31	_	40	-	0.5	0	_	
USG 3706(RT)	87	+	55.8	-	31		38		1.2	0		
CRAWFORD	87	+	56.4		30	-	41	+	0.6	0		
USG 3209(RT)	86	+	56.4	-	31		38		0.7	0		
VA01W-21	86	+	57.5	+	30	-	39		0.7	0		
VA99W-176	85	+	55.8		30	-	43	+	0.5	0	_	
USG 3592(RT)	84	+	56.5		32	+	43	+	0.8	0		
VA02W-555	82	+	55.5	t	31		35	-	0.7	0		
VA01W-18	81		56.8	F	32	+	40		0.7	1		
V9412(D)	81		58.3	+	31		41	+	0.2	0		
SS 550(B)	81		56.0	1	31		40	1	0.8	0		-
VA97W-24	81		57.1	t	32	+	44	+	0.8	0		
COKER B970051(D)	80		55.2		34	+	38	1	0.3	2	+	
RENWOOD 3260	80		57.8	+	31		41	+	0.5	0		
SISSON	80		55.7	F	30	-	39		0.4	0		
MV5-46	79		57.4	+	31		40	1	0.6	0		
VA02W-124	79		56.9		32	+	42	+	0.3	0		
VA02W-683	79		54.4	-	31		37	-	1.2	1		
VA01W-112	78		55.5		31		37	-	0.4	2	+	
VA01W-205	78		55.8		31		36	-	0.5	4	+	
NC00-15332(R)	78		55.8		32	+	43	+	0.5	0		
SS 520(R)	78		54.0	-	30	-	41	+	1.4	0		
SS 560(R)	78		57.0		32	+	39		0.2	0		
VA02W-267	78		55.8		30	-	38		0.3	1		
VA99W-28	77		54.4	-	31		41	+	0.2	0		
VA01W-99	77		57.8	+	30	-	40		0.6	0		
TRIBUTE	77		58.8	+	31		36	-	0.6	0		
VA01W-310	77		57.7	+	32	+	40		0.3	4	+	
VA02W-513	77		56.9		31		35	-	0.5	2	+	
VA02W-596	77		56.6		33	+	38		0.3	2	+	
VA01W-353	76		53.9	-	30	-	37	-	0.6	0		
MV8-29	76		58.0	+	32	+	39		0.7	0		
RACHEL	76		56.0		30	-	41	+	0.3	0		
VA02W-370	76		56.7		30	-	37	-	0.2	0		
VA02W-398	76		54.7	-	31		39		0.5	0		
VA01W-145	75		57.1		32	+	37	-	0.6	2	+	
PIONEER 26R12(D)	75		58.0	+	32	+	40		0.2	0		
SS 8302(R)	75		57.4	+	32	+	41	+	0.2	1		
VA97W-375RS	75		55.1	-	31		38		0.5	0		
PIONEER 26R24(D)	75		56.1		30	-	40		1.0	0		
COKER 9375	75		54.5	-	33	+	45	+	0.5	0		
PIONEER 26R58(D)	75		53.8	-	31		39		0.2	2	+	
VA02W-567	75		57.2		31		39		0.8	1		

Tech Wheat Test, No	orthern P	ied	mont	AR	EC, C	ra	nge, V	/Α,	2004 h	ar	vest.	
			Test		Date	)			Lodg-		Barley Yellow	1
	Yield		Weigh	t	Heade	d	Heigh	ıt	ing		Dwarf Virus	
Line	(Bu/a	)	(Lb/bu	)	(Mar31	+)	(In)		(0.2-10	))	(0-9)	
VAN98W-342	74		53.9	-	30	-	36	-	0.2		0	Γ
VA00W-38	74		54.5	-	31		41	+	1.8	+	0	t
VA00W-286	74		55.8		33	+	37	-	0.2	T	2	ŀ
MV6-82	74		56.6		30	-	38		0.2		0	t
PIONEER 26R15(D)	74		55.4		31		39	T	0.2	T	0	t
McCORMICK	74		57.9	+	31		36	-	0.2		0	-
MD71-5	74		54.8	-	31		36	1-1	0.6	T	0	t
VA00W-366	74		57.0		31		35	-	0.2		0	t
USG 3650(RT)	73		56.1		32	+	42	+	0.3	t	0	t
NC99-13022(R)	73		55.7		31		38	+	0.2		0	t
COKER 9312(D)	73		56.7	1	31	-	38	1	0.2		2	-
PAT(R)	72		57.3	+	35	+	42	+	0.2		0	t
PIONEER XW02M(D)	72		55.1	-	31	-	35	-	0.2	t	2	•
RENWOOD 3706	72		55.8		30	-	37	-	0.2	$\vdash$	0	ł
V9212(D)	72		56.9	$\vdash$	31	-	44	+	0.8	⊢	0	t
VA00W-526	71		56.4	-	32	+	35	-	0.2	-	1	╞
H-84(D)	71		56.4	-	31	-	41	+	0.3	⊢	0	t
MV27-0187	71		55.8	-	31		36	-	0.2	-	0	ł
VA98W-627RS	71		55.2		32	+	39	-	0.6	t	0	t
VA98W-627WS	71		54.2	-	31		39	+	0.6	⊢	0	ł
VA97W-375WS	70		54.8	-	31	-	37	1-1	0.6		0	t
CHOPTANK	69		54.9	-	30	-	36	-	0.2		0	ł
VAN98W-170WS	69		57.0	-	30	-	40	+	0.5	t	0	t
MASSEY	68	-	56.8		31	-	46	+	2.7	+	0	ł
NC00-15389(R)	68	-	56.8	-	30	-	39	+	0.5	t	2	ŀ
SS 8309(R)	68	-	56.9	-	32	+	42	+	0.2		0	-
VA01W-148	67	-	56.3	-	32	+	33	-	0.2	t	2	ŀ
GA931233E17(D)	67	-	56.1	-	31		42	+	2.2	+	0	ł
VA02W-519	67	-	54.5	-	31	-	36	-	0.5	t	2	ŀ
COKER 9295(D)	66	-	54.9	-	34	+	40	+	0.5	⊢	0	ł
VA98W-335	66	-	56.3	1	32	+	34	-	0.2	t	0	-
NEUSE(R)	66	-	58.7	+	33	+	39	-	0.8		0	t
VA01W-154	66	-	56.7	-	32	+	40	+	0.6	t	0	t
COKER 9184(D)	65	-	58.6	+	34	+	38	+	0.2	⊢	2	•
VA02W-553	65	-	56.2	-	31	-	39	+	1.2	t	0	t
VA98W-631	64	-	53.5	-	31		36	-	0.2		0	ł
Average	75		56.2	1	31	-	39	1	0.5	t	0	-
LSD (0.05)	7		1.1	-	1	+	2	+	1.0	⊢	2	ł
C.V.	7		1.3	-	2	-	4	-	144	⊢	327	t
Released cultivars are showr					_	-	•	-		$\vdash$		+
Varieties are ordered by des	•		rades A	nlu	s or mir	20	sian indi	cate	s a	_		ł
performance significantly abo			-	-		103			~ u	-		╞
Belgian Lodging Scale=Area				-	where	1 ic	wheat	unaf	fected ar	nd 1	0 is	Ļ
entire plot affected and Inten	-											
The 0-9 ratings indicate a ge	-				-					-		_

Southern Piedmont ARE		une,	VA, 201	אין 10 אין	iarvest.	 
			Test			 
	Yield		Weight			 
line			-			 
Line	(Bu/a	)	(Lb/bu)	)		 
USG 3209(RT)	77	+	56.7	-		 
USG 3592(RT)	74	+	58.3	+		 
VA02W-555	74	+	57.1			 
VA01W-205	71	+	57.6	_		 
SISSON	70	•	56.8	-		 
MV5-46	70		58.9	+		 
VA01W-21	70		58.5	+		 
VA01W-21 VA02W-683	70		55.8	-		 
PIONEER 26R12(D)	69		59.0	-+		 
. ,				_		 
RENWOOD 3260 VA98W-335	68 67		59.1 57.8	+		 
				<u></u>		 
VA02W-513	67		58.4	+		 
VA01W-18	66		57.3	<u> </u>		 
MV8-29	66		58.6	+		 
SS 560(R)	66		57.8			 
GA931233E17(D)	66		58.5	+		
VAN98W-342	65		56.9			
VA01W-353	65		56.1	-		 
COKER 9184(D)	65		60.3	+		 
COKER 9312(D)	65		58.2			
VA02W-370	65		58.1			
VA01W-112	64		57.0			
MV6-82	64		57.8			
VA97W-375WS	64		58.1			
VA02W-398	64		56.7	-		
VA02W-567	64		59.0	+		
VA02W-596	64		57.3			
VAN98W-170WS	63		57.9			
VA01W-148	63		57.1			
PAT(R)	63		58.4	+		
VA97W-375RS	63		57.4			
PIONEER 26R24(D)	63		57.5			
PIONEER 26R58(D)	63		56.8			
VA00W-366	63		57.8			
FEATHERSTONE 520(RT)	62		59.0	+		
NC00-15389(R)	62		58.6	+		
SS 550(B)	62		57.5			
CRAWFORD	62		57.6			
VA02W-519	62		56.6	-		
NC00-15332(R)	61		58.8	+		
COKER B970051(D)	61		56.6	-		
PIONEER XW02M(D)	61		56.8	+		
V9412(D)	61		58.2			 

		55												
ble 20, continued. Summary of performance of entries in the Virginia Tech														
heat Test, Southern Piedmont AREC, Blackstone, VA, 2004 harvest.														
		Test												
	Yield	Weight												
ie	(Bu/a)	(Lb/bu)												
\97W-24	61	58.3	+											
CORMICK	61	58.6	+											
10810/ 62710/5	61	56.8												

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# Tal Wr

Line	(Bu/a)	(Lb/bu)	)			
VA97W-24	61	58.3	+			
McCORMICK	61	58.6	+			
VA98W-627WS	61	56.8				
VA01W-310	61	58.5	+			
VA02W-124	61	57.1				
VA02W-553	61	57.7				
VA01W-99	60	58.1			_	
VA01W-145	60	57.7				
SS 8308(R)	60	58.3	+			
VA00W-286	59	57.0	-			
NEUSE(R)	59	59.6	+			
USG 3706(RT)	59	57.2	-			
NC99-13022(R)	59	58.3	+			
PIONEER 26R15(D)	59	55.5	- <u>-</u> -			
MD71-5	59	56.4	-			
VA98W-627RS	59	57.3				
VA01W-154	59	58.0				
CHOPTANK	58	57.1				
VA99W-28	58	56.1	_			
H-84(D)	58	56.9				
MV27-0187	58	57.6	-			
VA99W-176	58	57.0	_			
			_			
VA02W-267 MASSEY	58 57	57.0 57.9	_			
			_			
SS 8309(R) SS 520(R)	57 57	57.1 56.1				
			-			
	56	59.7	+			
VA98W-631	55	55.5	-			
VA00W-38	55	56.1	-			
COKER 9375	55	56.2	-			
COKER 9295(D)	54	56.0	-			
VA00W-526	53 -	57.8				
V9212(D)	53 -	56.3	-			
USG 3650(RT)	52 -	57.0				
RACHEL	52 -	56.3	-			
RENWOOD 3706	52 -	56.8	_			
Average	62	57.5				
LSD (0.05)	9	0.8				
C.V.	10	1.0				
Released cultivars are shown in t	oold print.		_			
Varieties are ordered by descend		plus or min	us si	an indicates a		
performance significantly above o			33 31			
perioritiance significantly above o	י הכוסא נווכ נכסו מאכומנ	<i>.</i>		1 1		

Test, Hockman Farms,							
			Test		Lodg-		
	Yield		Weight		ing		
ine	(Bu/a)		(Lb/bu)		(0.2-10)		
	(Dura)				(0.2-10)		
ISG 3209(RT)	77	+	59.3		3.0	+	
SS 8302(R)	77	+	60.5	+	0.2		
OKER 9375	75	+	58.1	-	0.7		
/A00W-38	74	+	59.1		0.8		
PIONEER 26R15(D)	74	+	58.7		0.2		
/9412(D)	74	+	60.2	+	0.5		
SS 8308(R)	74	+	59.7		0.4		
SISSON	74	+	59.3		1.0		
S 8309(R)	73		60.3	+	0.4		
/IV5-46	72		60.3	+	0.7		
/A01W-21	72		59.0		0.9		
JSG 3706(RT)	71		59.3		1.1		
ACHEL	71		59.2		0.3		
PIONEER 26R24(D)	71		58.8		2.3		
PIONEER 26R58(D)	71		58.9		0.2		
A02W-398	71		57.4	-	1.6		
A98W-335	70		59.2		1.1		
A97W-24	70		58.7		0.7		
RAWFORD	70		59.4		3.4	+	
A98W-627RS	70		58.6		2.8	+	
A99W-28	69		58.3	-	1.4		
A01W-18	69		58.8		0.8		
OKER 9184(D)	69		61.2	+	0.3		
ENWOOD 3260	69		59.2		2.1		
S 550(B)	69		59.2		0.7		
ENWOOD 3706	69		59.6		0.8		
A931233E17(D)	69		59.3		2.8	+	
/A98W-627WS	69		58.3	-	2.0		
/A02W-555	69		58.4		0.4		
/AN98W-342	68		58.2	_	0.6		
/A01W-112	68		58.2	-	1.4		
/A01W-145	68		59.1		1.7		
NC00-15332(R)	68		57.1	-	0.7		
COKER 9312(D)	68		59.4		3.8	+	
OKER B970051(D)	68		59.4 58.2	_	3.8 2.5	F	
AV27-0187	68		60.2	+	1.1		
PIONEER 26R12(D)	68		59.8	<b>–</b>	1.1		
A97W-375WS	68		58.7		0.4		
6S 520(R)	68		58.7		1.2		
RIBUTE							
A99W-176	68 68		61.5 59.1	+	0.6		
/A02W-370	68		59.6		0.3		
/A02W-513 /A02W-596	68		59.9	+	0.3		

Table ~4 ...
Tech Wheat Test, Hockm	an Farms, Stras	sburg, VA, 2	2004	4 harvest.		
		Test		Lodg-		
	Yield	Weight		ing		
Line	(Bu/a)	(Lb/bu)		(0.2-10)		
COKER 9295(D)	67	59.2		0.5		
VA00W-286	67	58.7		0.5		
VA01W-353	67	57.2	-	0.3		
MV6-82	67	60.3	+	2.3		
MV8-29	67	59.8		0.7		
VA97W-375RS	67	58.5		1.7		
MD71-5	67	58.4		0.3		
VA02W-567	67	60.0	+	2.6	+	
VA02W-683	67	56.7	-	1.2		
USG 3650(RT)	66	59.7		0.4		
PAT(R)	66	59.4		0.2		
PIONEER XW02M(D)	66	58.5		0.2		
SS 560(R)	66	58.1	-	0.8		
VA02W-519	66	59.2		1.6		
MASSEY	65	59.6		4.7	+	
VA00W-526	65	59.4		1.2		
VA01W-205	65	58.7		2.1		
H-84(D)	65	59.4		1.4		
V9212(D)	65	59.2		1.4		
VA01W-154	65	60.6	+	0.8		
VA01W-310	65	59.8		1.1		
VA02W-124	65	58.6		1.8		
VA98W-631	64	57.8	-	0.2		
VAN98W-170WS	64	59.2		0.8		
VA01W-148	64	60.1	+	0.2		
FEATHERSTONE 520(RT)	63	59.9	+	1.6		
USG 3592(RT)	63	58.0	-	4.6	+	
VA02W-267	63	57.9	-	0.3		
CHOPTANK	62	59.1		0.5		
NEUSE(R)	62	60.8	+	1.1		
McCORMICK	62	60.7	+	1.8		
VA02W-553	62	59.6		1.2		
VA00W-366	61	59.0		0.7		
VA01W-99	60 -	60.1	+	0.4		
NC00-15389(R)	59 -	59.2		1.5		
NC99-13022(R)	- 56	58.3	-	0.3		
Average	67	59.1		1.2		
LSD (0.05)	7	0.8		1.4		
			_			

## Table 21, continued. Summary of performance of entries in the Virginia Tech Wheat Test, Hockman Farms, Strasburg, VA, 2004 harvest,

Varieties are ordered by descending yield averages. A plus or minus sign indicates a

performance significantly above or below the test average.

Belgian Lodging Scale=Area X Intensity X 0.2. Area=1-10, where 1 is wheat unaffected and 10 is

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1.0

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entire plot affected and Intensity = 1-5, where 1 is wheat standing upright and 5 is wheat totally flat.

There was no significant disease pressure at this site.

Released cultivars are shown in bold print.

C.V.

Kentland farm, Blacksbu	rg, VA, 20	)04	harves	st.								
			Test		Date				Lea		Barley Yello	
	Yield		Weigh		Heade	ed	Height	t	Rus	t	Dwarf Viru	IS
Line	(Bu/a)	)	(Lb/bu	)	(Mar31	+)	(In)				(0-9)	
SS 8308(R)	84	+	61.0	+	36	-	31		3	+	2	
VA99W-176	84	+	57.0	-	36	-	32	+	3	+	3	
VA97W-24	83	+	56.3	-	39	+	32	+	2		2	
VA02W-267	83	+	57.8		37		31	П	2		3	
VA01W-353	82	+	56.7	-	37		29	П	1	-	2	
MV8-29	81	+	59.7	+	37		31		4	+	3	
COKER B970051(D)	80	+	56.2	-	39	+	29	П	1	-	3	
JSG 3209(RT)	79	+	58.0		37		29	П	4	+	3	
VA02W-398	79	+	55.6	-	37		29	H	0	-	3	
MV27-0187	78	$\square$	58.3		37	+	30	$\square$	1	-	3	
PIONEER 26R12(D)	78	$\square$	59.8	+	38	+	32	+	1	-	3	
V9412(D)	78	$\square$	59.4	+	37		31	$\square$	4	+	2	
SS 550(B)	78	$\square$	58.3	-	37		30	$\square$	5	+	3	
/A01W-21	78	$\square$	60.0	+	36	-	29	$\square$	3	+	2	
JSG 3592(RT)	77	$\square$	58.8	+	38	+	34	+	1	-	2	
MV5-46	77	+	59.7	+	37		30		3	+	2	
CRAWFORD	76	$\square$	58.6	+	36	-	32	+	1	-	3	
COKER 9375	76	$\vdash$	56.3	-	38	+	35	+	3	+	3	
/A02W-124	76		57.7		38	+	32	+	1	-	2	
EATHERSTONE 520(RT)	75		58.7	+	37		30	H	3	+	3	
/A99W-28	75		56.9	-	38	+	32	+	2	-	2	
VA01W-18	75	$\vdash$	58.1	-	38	+	30	H	2		2	
NC99-13022(R)	75		57.4		38	+	31	$\square$	1	-	3	
COKER 9312(D)	75	$\square$	58.1	-	36	-	30	H	1	-	2	
PIONEER 26R24(D)	75	$\square$	57.8	-	37		33	+	2	_	2	
/A00W-366	75	+	58.7	+	37	+	28	-	1	-	3	
/A02W-555	75	$\square$	56.9	-	37		28	E	2	-	2	
/A01W-112	74	$\square$	56.5	-	37		29	H	4	+	2	
/A01W-112	74	$\square$	58.5	-	37		29		1	-	2	
USG 3706(RT)	74	$\square$	57.4	_	37		30	-	2	-	3	_
H-84(D)	74		58.2	_	37	_	31		3	+	3	
PIONEER 26R15(D)	74	$\vdash$	56.8	_	38	+	32	+	1		2	_
SS 560(R)	74	$\square$	57.9	-	38	+	30	т	2	-	2	
	74	$\square$	59.0	+		-	29	н			2	_
VA02W-596	74		59.0 56.4	+	37 40	+	29 31	$\square$	0 1	-	3	
				-	-					-		
PAT(R) RENWOOD 3260	73 73	$\square$	58.4 58.7	+	42 37	+	33 32	++	3 1	+	23	
		$\square$		+		+				-		_
SS 8302(R)	73 73	$\square$	57.6 58.5		38 38	+	32 34	++	2 2		2 3	
GA931233E17(D)		$\square$										
VA98W-627RS	73	$\square$	57.8	-	37	$\parallel$	30	$\square$	1	-	3	
VA00W-38	72	$\square$	56.3	-	37	$\square$	31	$\square$	1	-	2	_
VA02W-513	72	$\square$	59.5	+	37	<u> </u>	28	-	1	-	2	
VA00W-526	71	$\square$	57.7		38	+	29	$\square$	2		3	
MV6-82 McCORMICK	71		59.1 60.4	++	37 37		31 30		3 1	+	3	

			Test		Date	;		П	Lea	f	Barley Yello	w
	Yield		Weight		Heade	d	Heigh	ť	Rus	t	Dwarf Viru	IS
Line	(Bu/a)		(Lb/bu)		(Mar31	+)	(In)				(0-9)	
MD71-5	71		57.9		37		28	-	1	-	3	
V9212(D)	71		57.4		37		33	+	3	+	3	
VA02W-683	71		56.3	-	36	-	28		2		2	
PIONEER XW02M(D)	70		57.4		38	+	28	-1	1	-	3	
SISSON	70		58.3		36	-	29	П	6	+	3	_
PIONEER 26R58(D)	70	П	56.5	-	37		28	1-1	3	+	3	
VA02W-519	70		56.6	-	37		28	-	1	-	3	
VA00W-286	69		58.0		38	+	29	Ħ	1	-	2	
VA01W-99	69		58.9	+	37		30	П	3	+	3	
COKER 9184(D)	69		58.9	+	39	+	31	П	1	-	3	
SS 8309(R)	69	$\square$	57.6		39	+	31	$\uparrow \uparrow$	2		3	
SS 520(R)	69		56.6	-	37	$\top$	31	$\uparrow \uparrow$	2		3	
/A02W-370	69		59.2	+	36	-	28	-	1	-	2	_
VA02W-553	69		58.2		38	+	31	П	1	-	3	
NC00-15332(R)	68		56.8	-	39	+	30	П	1	-	3	_
NC00-15389(R)	68		58.3		36	-	28	1-1	1	-	3	
/A98W-627WS	68		56.8	-	37		31	$\square$	1	-	3	_
VAN98W-342	67		57.9		37		26	1-1	1	-	2	
NEUSE(R)	67		59.8	+	39	+	32	+	0	-	3	
VA01W-310	67		58.7	+	38	+	30	П	1	-	3	
VA02W-567	67		58.7	+	37		30		0	-	3	
MASSEY	66		57.6		38	+	36	+	8	+	3	
VA98W-631	66		56.2	-	38	+	31	П	1	-	3	
USG 3650(RT)	66		57.1		38	+	31	П	1	-	3	
VAN98W-170WS	66		58.2		37		32	+	2		2	
VA01W-145	66		58.0		38	+	28	-	1	-	3	
VA97W-375RS	66		57.3		37		28	-	1	-	3	
VA98W-335	65	-	58.0		38	+	27	-	0	-	3	
VA97W-375WS	65	-	56.2	-	37		28	-	1	-	3	
CHOPTANK	64	-	57.4		37		27	-	1	-	3	
VA01W-148	64	-	56.4	-	39	+	26	-	0	-	2	
RENWOOD 3706	64	-	57.1		37		29	П	2		4	
VA01W-154	64	-	58.0		38	+	30		2		3	
COKER 9295(D)	63	-	55.9	-	41	+	32	+	0	-	3	
RACHEL	61	-	57.3		37		28	-	5	+	4	
Average	72		57.8		37		30		2		3	
_SD (0.05)	7		0.8		1		2		1		1	
C.V.	7		0.9		1		5		50		19	
Released cultivars are shown in	bold print.	Н				+		Η				_
/arieties are ordered by descen		es.	A plus or	mi	nus sign	indic	cates a					
performance significantly above of	or below the test	aver	ade.									

harvest.				Г													
	-			-				-			Pov	V-			Barle	<u>v</u>	Wheat
				⊢				-			der				Yello	-	Spindle
			Test	-	Date	<u> </u>		-	Lodg	L	Mi	,	Lea	əf	Dwa		Streak
	Yie	d	Weight	ŀ	Head	-	Heig	ht	ing	•	dev		Rus		Viru		Virus
Line	(Bu/		(Lb/bu		(Mar3		(In		(0.2-1	0)				(0-	-	-	1.1.0.0
	(20.	,	(10/00	/	(3)	. ,	(3	, 	(0.2	,	(1)		(1	•	(3)		(1)
USG 3209(RT)	78	/	56.9		32		32	/	1.4		1	/	4	) +	(0)	-	0
VA01W-21	76	+	58.1	+	31	_	33	-	1.2	-	1		3	•	1	-	0
VA01W-21	70	+	57.2	ŀ	34	+	37	+	1.2		1	_	2	·	2	-	0
VA99W-176	74	+	56.6	-	31		36	+	1.2	-	1		3	+	2	-	0
VA01W-353	73	+	55.5	-	32		32	<u> </u>	0.6		1		1	-	1	-	0
USG 3706(RT)	72	+	57.2	┝	32	_	33	-	1.4	-	1	-	2		2	+	0
SS 8308(R)	72	+	58.0	+	32		35	+	0.4		1		3	+	1	-	0
VA02W-596	72	+	56.4	÷	34	+	34	÷	0.6	-	1		1		3	+	0
VA02VV-390 VA01W-18	72	+	57.3	Ē	33	+	34	-	0.0	-	1	-	2	-	1	-	0
USG 3592(RT)	71	+	57.3	⊢	33	+	38	+	3.1	+	1		2		1	-	0
V9412(D)	71	+	57.3	+	33	-	35	++	0.4	Ť-	2	+	4	-+	2		0
MV5-46	71	+	58.1	-	32		34	÷.	1.0	-	2 1		4	+	2 1	-	
WV5-46 VA02W-398	71	++	55.5	+	32		34 33	-	0.8	-	1	-	3 0	+	2	-	0
	71		56.3	F	32		33 31	-	0.8	-				-	2	-	
VA02W-555 VA01W-112	71	+	56.3 56.4	-	32		31 32	-	0.4	-	1		2 4	+	1	-	0
				-						-			•	+		-	
PIONEER 26R15(D) PIONEER 26R24(D)	70 70		55.8 56.9	-	33 31	+	35 36	++	0.7 1.9	-	2	+	1 2	-	1	-	0
• •	70	_		-		-		-		-	2 1	т	2			-	
CRAWFORD VA02W-683	70		57.2 55.2	-	31 32	-	35 32	+	1.4 2.6	+	1		2	-	2	-	0
				-				-		-		-				-	
VA99W-28 VA01W-205	69 69	_	55.6 56.9	-	33 32	+	35 31	+	1.8 1.1	-	1	+	2	_	1	-	0
				ŀ.				-		-		т	-			-	
	69 69		58.4 56.7	+	32 32		34 31	-	1.0 0.9	-	1		4	+	2	-	0
PIONEER XW02M(D) RENWOOD 3260				-			-	-		-	-		-	-		-	
	69 69		58.3 57.7	++	32 34	+	36 36	++	1.1 0.2		1 2	+	1 2	-	1 2	-	0
SS 8302(R)				+				+		-		+				-	
SS 560(R) PIONEER 26R58(D)	69 69		57.1		33 32	+	34 33	_	1.4		1		2 3		1 3	-	0
			55.6	-				-	0.7	-		+	-	+	-	+	
VA02W-124	69		57.0		33	+	36	+	1.7		1		1	-	1	-	0
VA02W-513	69	_	58.3	+	32		31	-	0.3	_	1	_	1	-	2	-	0
VAN98W-342	68	_	56.2	-	32	_	30	-	0.3	-	1		1	-	2	-	0
COKER 9312(D)	68		57.7	+	31	-	33	-	1.9		2	+	1	-	2	_	0
PIONEER 26R12(D)	68		58.5	+	33	+	34		1.3		2	+	1	-	2		0
SS 550(B)	68		56.8	-	32		34	_	0.9		1		5	+	2	_	0
SISSON	68		56.9		31	-	33	-	1.2		1		6	+	2		0
	68		59.0	+	32		32	-	0.5		2	+	0	-	2		0
VA01W-145	67		57.3		33	+	32	-	1.1		1		1	-	2	_	0
COKER B970051(D)	67		55.5	-	35	+	32	-	1.4		1		1	-	2	_	0
MV27-0187	67		57.1		32		33	-	1.4		1	_	1	-	2		0
MV6-82	67		57.7	+	31	-	33	-	0.9		1		3	+	1	-	0
VA97W-375RS	67		56.7	-	32		32	-	1.1		1		1	-	2		0
McCORMICK	67		58.3	+	32		33	-	1.9		1		1	-	1	-	0
GA931233E17(D)	67		57.8	+	33	+	37	+	3.9	+	2	+	2		2		0
VA98W-627RS	67		56.7	-	32		34		1.4		1		1	-	2		0
VA98W-627WS	67		56.0	-	32		34		1.2		1		1	-	2		0

Test, 2004 harvest.																		
											Pov	N-			Barle	y	Whe	
											der	у			Yello	N	Spin	
			Test		Date	Э			Lodg	-	Mi	-	Lea	af	Dwar	ſ	Strea	зk
	Yiel	d	Weight		Heade	ed	Heigh	nt	ing		dev	N	Rus	st	Virus	s	Viru	JS
Line	(Bu/	a)	(Lb/bu	)	(Mar31	1+)	(In)	)	(0.2-1	0)				(0-	9)			
	(7)	)	(7)		(3)		(3)	)	(3)		(1)	)	(1	)	(3)		(1	)
VA02W-370	67		57.7	+	31	-	32	-	0.5		1		1	-	1	-	0	Τ
VA98W-335	66		57.0		33	+	30	-	0.9		1		0	-	2		0	T
VA00W-38	66		55.7	-	32		35	+	1.6		1		1	-	1	-	0	t
VA00W-286	66		56.8	-	33	+	33	-	0.3		1		1	-	2		0	T
COKER 9184(D)	66		59.3	+	34	+	34		0.2		2	+	1	-	2		0	t
VA97W-375WS	66		56.2	-	32		31	-	0.6		1		1	-	2		0	t
MD71-5	66	_	56.2	-	32	-	31	-	0.4		1		1	-	2		0	t
VA00W-366	66		57.3		32		31	-	0.4		2	+	1	-	2		0	t
/A02W-553	66		57.4	+	32	-	35	+	1.3		1		1	-	2		1	ŀ
VA02W-567	66		58.2	+	32	-	33	-	1.2		1		0	-	2	t	0	t
FEATHERSTONE 520(RT)	65	-	57.9	+	32		35	+	1.3		1		3	+	2	1	0	+
/A01W-99	65	-	57.9	+	32	-	34	$\vdash$	0.4		1		3	+	1	-	0	t
VA01W-148	65	-	56.9		33	+	29	-	0.2		1		0	-	2		0	t
NC99-13022(R)	65	-	56.8	-	33	+	33	-	1.3		1		1	-	2	-	0	t
SS 8309(R)	65	-	56.9	-	33	+	36	+	0.3		1	-	2		2		0	ł
COKER 9375	65	-	55.3	-	34	+	38	+	1.5		1		3	+	2	-	0	÷
VA02W-267	65	-	56.3	-	31	-	34	-	0.8		1		2		2		0	ł
VA02W-519	65	-	55.9	-	32	-	32	-	1.0		1		-	-	3	+	0	ł
VA00W-526	64	-	57.5	+	33	+	32	-	0.7	-	1		2		2	· ·	0	ł
USG 3650(RT)	64	-	56.8	÷	33	+	36	+	0.4		2	+	1	-	2	-	0	+
RACHEL	64	-	56.5	-	31	-	34	÷	0.4		1	<u> </u>	5	+	3	+	1	╞
SS 520(R)	64	-	55.9	-	31	-	35	+	1.6		2	+	2		2	-	0	┢
CHOPTANK	63	-	56.9	-	32	-	31	÷	0.3		1	· ·	1	_	2		0	╀
COKER 9295(D)	63	_	56.0	-	34	+	35	+	0.6		1		0	-	2	-	1	t
VA98W-631	63	-	54.9	-	33	+	32	-	0.0		2	+	1	-	2		0	╀
VAN98W-170WS	63	-	57.2	-	32	+-	35	+	0.4		1	· ·	2		1	-	0	÷
PAT(R)	63	-	57.6	+	37	+	36	+	0.0		2	+	3	+	2	-	0	╀
NC00-15332(R)	63	-	56.6	Ŀ	34	+	36	+	1.1		1		1	-	2	-	0	┝
NC00-15389(R)	63	_	57.8	+	31	-	33	-	0.8		1		1		3	+	0	╀
H-84(D)	63	_	57.2	Ŀ	32	-	35	+	1.1		3	+	3	+	2	Ľ.	0	┝
MASSEY	62	-	57.2	-	33	+	41	+	2.7	+	1	-	8	+	2	-	0	╋
NEUSE(R)	62	_	59.1	+	34	+	35	+	1.2	<u> </u>	1		0		2	-	0	┝
RENWOOD 3706	62	-	56.8	Т	32	т	32	-	0.4		2	+	2	-	2	+	0	╀
V9212(D)	62	_	56.1	F	32	-	37	+	0.4		1	· ·	3	+	2	÷	1	t
VA01W-154	62	-	57.9	+	33	+	35	+	0.9		1	_	2	т	2	-	0	ł
Average	68	-		Ľ	32		33	<u> '</u>	1.0				2		2	-		╇
LSD (0.05)	3		57.1 0.3	-	32		- 34 - 1	-	1.0		1		2 1	+	2	-	0	╀
C.V.	8		1.1	-	2	-	4	-	110		39		50		60	-	569	╋
2. v . Released cultivars are shown ir		nrint		-	2	-	4	-	110		79		50	+	00	-	209	╀
					A plup	or -	ninun	- 	indicat					+		-		╇
/arieties are ordered by desce			-		-			-			, hole		lumn					╀
performance significantly above					-			r Iri	parentr	leses	s Delo	w co	umn			_		÷
neadings indicates the number								1 :-	wheet			on d	10 :-					+
Belgian Lodging Scale = Area																		Ļ
entire plot affected and Intensit The 0-9 ratings indicate a geno							• •	-				-						1

Table 24. Two year a	verag	je	sum	ma	ary of	ре	erfor	ma	ance	of	all e	ent	rie	s i	in th	e١	Virgin	ia		
Tech Wheat Tests, 20	03 an	d	2004	ha	arvest	s.														
											Pơ	W-			Barle	зy	Whea	-		
											de	ry			Yello	N	Spindl	е		
		Г	Test		Date	;			Lodg	ŀ-	M	il-	Lea	af	Dwa	rf	Strea		Glur	
	Yield	d	Weigh	nt	Heade	d	Heig	ht	ing		de	w	Rus	st	Viru	S	Virus	6	Blot	ch
Line	(Bu/a	a)	(Lb/b	u)	(Mar31	+)	(In	)	(0.2-1	0)					(	0-9)	)			
	(12	)	(12)	)	(6)		(6	i)	(6)	_	(5	5)	(3	)	(3)		(1)		(2	)
VA99W-176	73	+	56.1	ŀ	34	-	37	+	1.6	H	0	-	2		2		0		2	_
VA97W-24	72	+	56.1		37	+	39	+	1.9	+	2	+	3	+	2		0		2	T
MV5-46	71	+	57.8	+	34	-	35		1.1		0	-	4	+	1	-	0		1	-
USG 3209(RT)	70	+	55.4	-	35		34	-	1.7		1		5	+	1	-	0		3	+
VA01W-353	70	+	54.7	- 1	34	-	33	-	0.4	-	0	-	2		1	-	0		2	1
VAN98W-342	69	+	56.0	Í	34	-	32	-	0.4	ŀ-	0	-	2	Π	2		0		2	Ť
VA01W-18	69	+	56.4		36	+	34	-	0.8		0	-	2		1	-	0		2	+
SS 520(R)	69	+	56.0	t	34	-	37	+	1.4	t	1		2	Ħ	2		0		1	-
TRIBUTE	69	+	58.4	+	35		34	-	1.0	1	0	-	1	-	2		0	$\square$	1	-
VA01W-205	68	t	56.5		35		32	-	1.1		1		0	-	2		1	+	3	+
SISSON	68		56.4		34	-	34	-	1.7		1		6	+	2		0		2	+
VA97W-375RS	68	t	56.3		35		33	-	1.4		0	-	1	-	2		0		2	-
CRAWFORD	68		56.6	+	34	-	36	+	1.5		1		0	-	2		0		2	+-
VA97W-375WS	68	t	55.9		35		33	-	1.0		0	-	0	-	2	-	0		2	-
SS 560(R)	68	F	55.9		36	+	34	-	0.9		1		4	+	1	-	0		2	-
PIONEER 26R24(D)	68		55.8	-	34	-	37	+	1.8		1		2		1	-	0		2	_
SS 550(B)	68	F	55.9		35		35		1.6		1		5	+	2		0		1	-
VA99W-28	68	T	54.7	-	36	+	36	+	1.9	+	2	+	2	T	1	-	0		1	-
PIONEER 26R58(D)	67	E	54.9	-	35		34	-	0.4	-	2	+	4	+	3	+	0		4	+
VA01W-112	67	Ē	54.9	-	35		34	-	1.1		0	-	5	+	2		0		2	
MD71-5	67		56.0		35		32	-	0.3	1-	0	-	1	-	2		0		2	-
McCORMICK	67	T	57.9	+	35		33	-	1.1		0	-	0	-	1	-	0		1	-
GA931233E17(D)	66		56.9	+	35		38	+	3.4	+	1		1	-	2		0		2	1
VA98W-631	66		54.1	-	36	+	34	-	0.3	-	1		1	-	2		0		2	T
VA01W-145	66		56.1		36	+	33	-	1.0		0	-	1	-	2		0		2	
CHOPTANK	66		56.5		34	-	32	-	0.5	-	0	-	1	-	2		0		2	
VA00W-38	66		55.1	-	35		36	+	1.2		0	-	1	-	1	-	0		2	
VA98W-335	65	Г	56.2		36	+	31	-	0.8		1		0	-	2		0		3	+
FEATHERSTONE 520(RT)	65		56.9	+	35		36	+	2.3	+	2	+	4	+	2		0		2	
VA00W-286	65		55.8	-	36	+	34	-	0.8		1		1	-	2		0		1	-
V9212(D)	64		55.7	-	34	-	39	+	1.2		3	+	3	+	2		1	+	3	+
RENWOOD 3706	64		56.4		35		33	-	0.5	-	1		1	-	3	+	0		3	+
VA01W-148	64		56.1		36	+	30	-	0.2	-	1		0	-	2		0		2	
VA01W-99	64		56.8	+	34	-	35		0.6		1		3		1	-	0		2	
COKER 9375	64		54.5	-	36	+	39	+	1.8		2	+	5	+	2		0		1	-
VAN98W-170WS	64		56.9	+	34	-	36	+	1.1		1		1	-	1	-	0		1	-
COKER 9184(D)	63	-	58.0	+	37	+	34	-	0.3	-	2	+	1	-	2		0		2	
VA00W-526	63	-	56.4		36	+	32	-	1.1		0	-	1	-	2		0		2	Τ
USG 3650(RT)	62	-	55.6	-	35		37	+	0.5	-	2	+	1	-	2		0		3	+
COKER 9295(D)	61	-	54.8	-	35		36	+	0.8		2	+	0	-	2		1	+	2	

Table 24, continu		-							-	•							
entries in the Virg	ginia Teo	:h	Whe	at	Test	s, 2	200	3 a	and 2	00	)4 h	ar	ve	st	s.		
				_						-	Po				Barley	Wheat	
										-	de				Yellow	Spindle	
			Tes	t	Date	;			Lodo	<b>)</b> -	М		Le	af		Streak	Glum
	Yiel	d	Weig	ht	Head	ed	Heig	ght	ing		de	w	Ru	st	Virus	Virus	Blotc
Line	(Bu/a	a)	(Lb/b	u)	(Mar3 <sup>2</sup>	1+)	(In	)	(0.2-1	0)					(0-9	9)	
	(12	)	(12)	)	(6)		(6	)	(6)		(5	5)	(3	5)	(3)	(1)	(2)
	60		58.4	+	37		35		1.7	_	0		0		2	0	2
NEUSE(R)		-		+	÷.	+					-	- +	-	- +	2	-	
MASSEY	59	-	56.3	-	36	+	41	+	3.3	+	2	+	8	+	2	0	2
Average	66		56.2		35	-	35		1.2	-	1		2		2	0	2
LSD (0.05)	3		0.4		1		1		0.7		0.4		1		1	0.4	1
C.V.	9		1.7		6		3		96		61		44		56	533	33
Released cultivars are	shown in h		d print			-				-	-	-		-			
Varieties are ordered b			•		de vielo	1 av	verad	es	A pli	IS	or m	inu	IS S	iar	n indicat	es a	
performance significant	•		-				-		-					-			
statistically analyzed s																	
The number in parenth			olumn	he	adings	in	dicat	es	the nu	mt	ber o	of Ic	cat	ior	n-years	on which	data
are based.																	
Belgian Lodging Scale	= Area XI	nte	ensity	X	).2. Ar	ea	= 1-1	0,	where	1	is wl	hea	at ui	hat	ffected a	and 10 is	
entire plot affected and			-														
The 0-9 ratings indicate	•															•	
susceptible.																	

Tech Wheat Tests, 20	02, 2	00	3, ano	d 2	004 h	arv	/est	S.														
											Pov				Barl	-	Whea					ļ
	_										der	·			Yelle		Spind		-			
		Ļ	Tes		Dat	-			Lod	•	Mil		Lea	-	Dw		Strea		Glur		Ear	-
	Yiel	-	Weig		Heade		Heię	-	ing	-	dev	V	Ru	st	Viru		Virus	5	Bloto	ch	Heig	
Line	(Bu/	a)	(Lb/b	u)	(Mar3 <sup>2</sup>	1+)	(Ir	ר)	(0.2-	10)				_	(	(0-9	)	_		_	(In)	)
	(18	)	(18)	)	(10	)	(9	))	(9	)	(8)	)	(5	5)	(5	5)	(1)		(2	)	(1)	1
VA97W-24	77	+	56.7		33	+	38	+	1.4		2	+	3	+	2		0		2		6.7	Ī
VA99W-176	75	+	56.3	_	30	÷	36	+	1.5		0	-	3	+	2		0	-	2	-	6.8	-
VA97W-375RS	75	+	56.8	-	31	-	33	-	1.0		0	-	1	-	2		0	-	2	-	6.5	
TRIBUTE	75	+	59.1	+	31	-	33	-	0.9		0	-	0	-	2		0	-	1	-	5.0	-
SS 520(R)	74	+	56.4	-	30	-	36	+	1.3		1	+	3	+	2		0		1	-	8.7	
USG 3209(RT)	74	+	56.0	_	31	-	33	_		+	1	• +	5	+	2		0		3	+	8.0	ł
SISSON	74	+	56.9	-	30	-	33	-		+	1	+	5	+	2	-	0		2	Ľ	7.3	-
SS 550(R)	74	+	56.5	-	31	-	35	+	1.5		1	• +	4	+	2		0	-	1	-	7.0	-
VA97W-375WS	74	+	56.5	-	31	-	32	-	0.8		0	-	- 0	-	2		0		2	E	6.5	+
McCORMICK	74	+	58.5	+	31	-	33	_	0.9		0	-	0	-	2		0	-	-	-	5.5	1
VAN98W-342	73	+	56.6	· ·	31	-	31	_		-	0	-	1	-	2		0		2	E	6.3	
SS 560(R)	73	+	56.7		33	+	34		0.7		2	+	3	+	2		0	-	2	-	6.0	1
CHOPTANK	72	ŀ	57.0		31	Ŀ	31	-	0.4	-	0	-	1	-	2		0	-	2	-	7.5	ł
VA00W-526	72	⊢	57.2	+	32	+	32	_	1.0		0	-		-	2		0		2	-	7.2	1
PIONEER 26R24(B)	72	-	56.6		31	÷.	36	+	1.5		1	+	3	+	1	_	0	-	2	-	6.3	ł
VA98W-335	71	⊢	57.0		33	+	31	-		-	1	+	0	-	2		0		3	+	6.3	ł
VA98W-631	70	-	54.8	-	32	+	34		0.3	-	2	+	1	-	2		0		2	Ľ.	6.2	1
RENWOOD 3706	70	-	57.2	+	31	-	33	-	0.4	-	1	+	1	-	3	+	0		3	+	5.5	1
VA00W-38	69	-	55.6	-	31	-	35	+	1.5		1	+	1	-	1	-	0		2		9.5	ł
FEATHERSTONE 520(RT)	68	-	57.5	+	32	+	35	+	2.0	+	2	+	3	+	2		0		2	-	8.7	t
USG 3650 (RT)	68	-	56.4	-	32	+	36	+	0.7		2	+	1	-	2		0		3	+	6.7	ł
COKER 9184(D)	67	-	58.4	+	34	+	34		0.4	-	2	+	1	-	3	+	0		2		6.2	t
NEUSE(R)	66	-	58.5	+	34	+	35	+	1.3		0	-	0	-	2		0		2		6.0	t
COKER 9295(D)	65	-	55.4	-	32	+	36	+	0.7		2	+	0	-	3	+	1	+	2		9.0	İ
MASSEY	61	-	56.5	-	32	+	40	+	3.2	+	2	+	7	+	2		0		2		8.7	ļ
Average	71		56.8		31		34		1.1		1		2		2		0		2		7.0	ł
LSD (0.05)	2		0.3		1	Г	1		0.5				1		1		0		1		1.3	I
C.V.	9		1.7		7		3		96		66		45		42		707		32		11.1	ļ
Released cultivars are shown		•																		$\vdash$		
Varieties are ordered by desce	•			-	-	-					-											
performance significantly above	e or be	low	the tes	st a	verage,	whe	ere hu	ulled	and	hulle	ess li	nes	s ha	ave	beer	n						1
statistically analyzed separate	-																					1
The number in parentheses be	elow co	olun	nn head	lings	indicat	es f	the n	umt	per of	loca	ation-	ye	ars	on	whie	ch c	lata					
are based.																						
The 0-9 ratings indicate a gen	otype's	re	sponse	to	disease	, wł	nere (	) =	highly	res	sistar	nt a	and	9	= hig	ghly						1
susceptible.																						1
Belgian Lodging Scale = Area	X Inter	nsit	v X 0 2	A	rea = 1	-10	whe	no 1	lie w	hoo	tuna	ffo	ntor	1 a	nd 1(	) is						1

### SECTION 3 - EVALUATION OF FUNGICIDE/VARIETY INTERACTIONS

Genetic yield potential is certainly one of the keys to variety success. In most cases the top yielding varieties/lines with fungicide and Gaucho® were also the top yielding lines without Gaucho® seed treatment and fungicide in the spring.

The treated tests are conducted at Warsaw and Painter to assure that each variety is given an opportunity to express its yield potential even if it is susceptible to foliar diseases that can be controlled by Baytan® and Tilt® and insect pressures that can be controlled by Gaucho® (Tables 26-34). Variety comparisons should not be made between treated and untreated plots since the experiments were located in different areas of the field.

Table 26. Summary	of perfo	rma	nce of	entri	es u	sing s	eed	treat	ment	
(Baytan® and Gauc	ho®) an	d fo	liar fun	gicio	de (T	ilt®) in	l the	Virgi	inia Te	ech
Wheat Test at Wars	-									
			Те	st	1	Date			Barley	/ Yellow
	Yie	eld	Wei	ght	He	eaded	Н	eight	Dwar	f Virus
Line	(Bu	/a)	(Lb/	bu)	(M	ar31+)		(In)	(0	)-9)
VA02W-398	98	+	55.3	-	26	-	33		0	
VA97W-24	97	+	56.8		29	+	35	+	1	+
PIONEER 26R15(D)	96	+	54.5	-	29	+	33		1	+
H-84(D)	95	+	56.9		28	+	33		1	+
RACHEL	95	+	56.1		26	-	34	+	0	
VA99W-176	95	+	55.5	-	26	-	33		1	+
MD71-5	94	+	55.4	-	27		30	-	1	+
PIONEER 26R58(D)	93		55.2	-	27		32		0	
SISSON	93		56.7		26	-	32		0	
USG 3209(RT)	93		56.1		27		31		0	
VA02W-555	93		56.0		26	-	30	-	0	
SS 560(R)	92		57.3	+	29	+	33		0	
SS 8302(R)	92		56.5		30	+	34	+	1	+
SS 8308(R)	92		56.8		27		32		0	
VAN98W-342	92		55.3	-	27		30	-	1	+
GA931233E17(D)	91		57.5	+	28	+	38	+	0	
TRIBUTE	91		57.9	+	27		32		0	
VA01W-353	91		55.5	-	26	-	31		1	+
VA02W-519	91		55.0	-	26	-	32		0	
VA97W-375RS	91		56.4		27		32		1	+
PIONEER 26R24(D)	90		56.5		27		34	+	0	
RENWOOD 3706	90		56.9		27		30	-	0	
SS 520(R)	90		55.2	-	26	-	35	+	0	
MV27-0187	89		56.0		26	-	32		1	+
VA00W-286	89		56.4		28	+	32		0	
VA02W-513	89		58.1	+	28	+	31		0	
SS 550(B)	88		56.5		26	-	32		0	
VA01W-148	88		56.9		28	+	29	-	0	
PIONEER XW02M(D)	87		56.2		26	-	29	-	0	
USG 3592(RT)	87		57.3	+	28	+	35	+	0	

treatment (Baytan® and	d Gaucho®	୬) and f	foliar	fung	icide	(Til <b>t</b> @	છ) in 1	he	
Virginia Tech Wheat Te				-			-		
		Te			- Date			Barley	Yellow
	Yield	Wei	ght	Н	eaded	Н	eight	Dwar	f Virus
Line	(Bu/a)	(Lb/	-	(M	ar31+)		(ln)		D-9)
VA01W-112	87	55.4	-	27	,	31		0	,
VA01W-154	87	58.5	+	28	+	33		0	
VA98W-335	87	56.4		28	+	30	_	0	
CHOPTANK	86	56.5	-	27		29	_	0	
COKER 9312(D)	86	57.4	+	27		32		0	
VA00W-366	86	56.8	-	27		30	-	0	
VA00W-38	86	54.9	-	27		33		0	
VA01W-18	86	57.1	+	30	+	33		0	
VA01W-18	86	57.4	+	26	-	32		0	
VA02W-553	86	57.2	+	26	-	34	+	0	
FEATHERSTONE 520(RT)	85	57.8	+	20	-	34	+	0	_
MV5-46	85	57.6	+	26	-	34	•	0	
MV5-46 MV8-29	85 85	57.6	++	26	-	32		0	
SS 8309(R)	85	55.9	-	20		35	+	1	
VA98W-631	85	55.9	-	29	+ +	33	+	1	+ +
VA99W-031									-
	85 84	55.2	-	29 27	+	34	+	0	
	-	56.9	_	_		31			
NC99-13022(R) VA00W-526	84 84	56.6 58.0		28 28	+	32 30		0	+
	-		+		+		-		+
VA01W-205	84	56.5		28	+	29	-	0	
VA02W-567	84	58.2	+	26	-	31		0	
VA97W-375WS	84	55.3	-	28	+	31		0	
VA98W-627RS	84	56.7		26	-	32		0	
	83	55.6	-	30	+	34	+	0	
COKER B970051(D)	83	55.9	-	31	+	31		0	
MASSEY	83	56.9		28	+	39	+	0	
PAT(R)	83	57.2	+	34	+	36	+	0	
USG 3706(RT)	83	56.6		27		30	-	0	
V9212(D)	83	55.1	-	28	+	37	+	1	+
VA02W-124	83	56.6		28	+	33		0	
VA02W-683	83	55.3	-	27		31		0	
NC00-15332(R)	82	56.4		29	+	35	+	0	
PIONEER 26R12(D)	82	58.0	+	28	+	33		0	
VA02W-267	82	55.8	-	26	-	30	-	0	
COKER 9375	81	54.3	-	29	+	37	+	0	
MV6-82	81	56.8		25	-	32		0	
NC00-15389(R)	81	57.6	+	25	-	31		1	+
USG 3650(RT)	81	56.3		29	+	34	+	2	+
VA01W-310	81	57.5	+	27		33		0	
VA02W-370	81	57.4	+	26	-	30	-	0	
VA02W-596	81	55.9	-	30	+	33	1	0	
VAN98W-170WS	81	55.7	-	27		34	+	0	
COKER 9184(D)	80	59.4	+	30	+	33		0	
NEUSE(R)	80	59.3	+	30	+	34	+	0	

Virginia Tech Wheat	and G Test a			aw.		4 h	arve	-		•	,			1				
	Т				est			ate				Ī	Barle	y ۱	ellow/			
	Y	′ield		W	eight		He	ade	d	He	eight				Virus			
Line	(E	3u/a	)	(Ll	b/bu)		(Ma	r31	+)	(	(In)			(0-9	9)			
VA98W-627WS	80			54.1	-		27			33			1	ŀ	+			
CRAWFORD	79			56.4			25	-		32			0					
V9412(D)	79			56.8	;		27		;	34	+		1	ŀ	+			
RENWOOD 3260	78	-		58.3	; +		26	-	;	34	+		1	·	+			
VA01W-99	76	-		56.8	5		26	-		32			0					
Average	86			56.5	5		27			32			0					
LSD (0.05)	8			0.6			1			2			1					
C.V.	6			0.6			3			3			148	_				
Released cultivars are show																		
A plus or minus sign indica	•													•				
Fungicide-treated plots rec															ling.			
The 0-9 ratings indicate a g			e's response no significa							• •	y res	ista	nt ar	nd				
9 = highly susceptible. The																		_
Table 27. Two year s	umma	ary	of pe	erfo	rmar	ICE	e of e	ent	tries	us	sing	Se	ed	tre	eatme	ent		
(Baytan® and Gauch	io®) a	nd	folia	r fu	ngici	de	(Til	t®	) in t	he	Viro	ain	ia T	ec	h Wł	nea	t	
, Test at Warsaw, 2003	-				-		L.											
	T	200			51.	-					Po			-	Barl	01/		_
						-		-			der			-	Yell			
			Tes	•+	Dat			-	Lod	2	Mi	-	Le	of	Dwa		Glu	n
	Yie	Id	Weig		Head		Heig	ht.	ing	-	dev		Ru		Viru		Blot	
Line	(Bu/		(Lb/b	-	(Mar3				(0.2-	-	ue	vv	ιςα		0-9)	15	ы	l
Lille	(2)	,	(2)	,	`		(1	,	(0.2-	- 1	(1	\	(1		(1	、 、	(1	
	(2)	)	(2)	/	(2)		(2	)	(1)	,	(1	)	(1	)	<u> </u>	<u> </u>	(1	<u> </u>
VA97W-24	91	+	57.1		34	+	36	+	0.2		1		1	-	1		2	-
SS 520(R)	91	+	56.6	-	30	-	36	+	0.2		1	-	0	-	0	-	1	+
SISSON	90	+	57.6		30	-	32	-	0.2		0	-	3	+	0	-	3	╡
GA931233E17(D)	90	+	58.6	+	32	-	37	+	1.8	+	3	+	0	-	0	-	2	
	90	+	59.4		31	-	33	-	0.3		0	-	0	-	0	-	1	
TRIBUTE			57.9	_		1.	30	-	0.2		0	-	0	-	0	-	3	1
	89		01.9	+	33	+		-	0.2		0	-	0	-	1	1	1	
VA01W-148	89 89		56.7	_	33	+	33					-		-	1		3	٦
VA01W-148 <b>VA99W-176</b>				_		+	33 30	-	0.2		0	-	0	-			2	-
VA01W-148 <b>VA99W-176</b> MD71-5	89		56.7	_	30	-		-	0.2 0.2		0 2	- +	0 2	- +	0	-	Z	
VA01W-148 VA99W-176 MD71-5 SS 560(R)	89 88		56.7 57.3	_	30 31	-	30	-+					-	-		-	2 1	-
VA01W-148 VA99W-176 MD71-5 SS 560(R) PIONEER 26R24(D)	89 88 88		56.7 57.3 57.5	-	30 31 33	-	30 33	- + -	0.2		2	+	2	+	0			
VA01W-148 VA99W-176 MD71-5 SS 560(R) PIONEER 26R24(D) CHOPTANK	89 88 88 88 88		56.7 57.3 57.5 57.5	-	30 31 33 31	- - + -	30 33 35	- + -	0.2 0.2		2 2	+	2 2	+	0		1	_
VA01W-148 VA99W-176 MD71-5 SS 560(R) PIONEER 26R24(D) CHOPTANK VA97W-375RS	89 88 88 88 88 87		56.7 57.3 57.5 57.5 58.0	-	30 31 33 31 31	- - + -	30 33 35 30	- + - -	0.2 0.2 0.5		2 2 0	+	2 2 0	+	0 0 0		1 3	
VA01W-148 VA99W-176 MD71-5 SS 560(R) PIONEER 26R24(D) CHOPTANK VA97W-375RS VAN98W-342	89 88 88 88 88 87 87 87		56.7 57.3 57.5 57.5 58.0 57.7	- + +	30 31 33 31 31 31	- - + -	30 33 35 30 32	- + - -	0.2 0.2 0.5 0.5		2 2 0 0	+	2 2 0 0	+	0 0 0 1		1 3 2	
VA01W-148 VA99W-176 MD71-5 SS 560(R) PIONEER 26R24(D) CHOPTANK VA97W-375RS VAN98W-342 USG 3209(RT)	89 88 88 88 88 87 87 87 87		56.7 57.3 57.5 57.5 58.0 57.7 57.1	- + +	30 31 33 31 31 31 31 31	- - + -	30 33 35 30 32 30	- + - -	0.2 0.2 0.5 0.5 0.2		2 2 0 0 0	+	2 2 0 0 0	+ + - -	0 0 0 1		1 3 2 2	
VA01W-148 VA99W-176 MD71-5 SS 560(R) PIONEER 26R24(D) CHOPTANK VA97W-375RS VAN98W-342 USG 3209(RT) MV5-46	89 88 88 88 87 87 87 87 87 87		56.7 57.3 57.5 57.5 58.0 57.7 57.1 56.6	- + + - +	30 31 33 31 31 31 31 31 31	- - + -	30 33 35 30 32 30 32	- + - - -	0.2 0.2 0.5 0.5 0.2 0.4		2 2 0 0 0 0	+	2 2 0 0 0 3	+ + - -	0 0 1 1 0		1 3 2 2 2 2	
VA01W-148 VA99W-176 MD71-5 SS 560(R) PIONEER 26R24(D) CHOPTANK VA97W-375RS VAN98W-342 USG 3209(RT) MV5-46 VA01W-353	89 88 88 88 87 87 87 87 87 87 87		56.7 57.3 57.5 57.5 58.0 57.7 57.1 56.6 58.9	- + + - +	30 31 33 31 31 31 31 31 31 31	- + - - - - - -	30 33 35 30 32 30 32 33	- - - - -	0.2 0.2 0.5 0.5 0.2 0.4 0.3		2 2 0 0 0 0 0 0	+	2 2 0 0 0 3 1	+ + - -	0 0 1 1 0 0		1 3 2 2 2 2 2	
VA01W-148 VA99W-176 MD71-5 SS 560(R) PIONEER 26R24(D) CHOPTANK VA97W-375RS VAN98W-375RS VAN98W-342 USG 3209(RT) MV5-46 VA01W-353 RENWOOD 3706	89           88           88           87           87           87           87           87           87           87           87           87           87           87           87           87           87           87           87           87		56.7 57.3 57.5 57.5 58.0 57.7 57.1 56.6 58.9 55.9 58.0	- + + - +	30 31 33 31 31 31 31 31 31 31 31	- + - - - - - -	30 33 35 30 32 30 32 33 32 31	- - - - - -	0.2 0.2 0.5 0.5 0.2 0.4 0.3 0.2		2 2 0 0 0 0 0 0 0	+	2 2 0 0 0 3 1 1	+ + - -	0 0 1 1 0 0 0		1 3 2 2 2 2 2 3	
TRIBUTE         VA01W-148         VA99W-176         MD71-5         SS 560(R)         PIONEER 26R24(D)         CHOPTANK         VA97W-375RS         VAN98W-342         USG 3209(RT)         MV5-46         VA01W-353         RENWOOD 3706         SS 550(B)         VA99W-28	89           88           88           87           87           87           87           87           87           87           87           87           87           87           87           87           86           86		56.7 57.3 57.5 57.5 58.0 57.7 57.1 56.6 58.9 55.9	- + + - +	30 31 33 31 31 31 31 31 31 31 31 31	- + - - - - - -	30 33 35 30 32 30 32 32 33 32	- + - - - - -	0.2 0.5 0.5 0.2 0.4 0.3 0.2 0.2		2 2 0 0 0 0 0 0 0 0	+	2 2 0 0 3 1 1 0	+ - - +	0 0 1 1 0 0 1 0		1 3 2 2 2 2 2 3 3 3	

Wheat Test at Warsaw	<u>, 2003</u>	an	<u>a 200</u>	<u>4</u> h	arves	st.												
											Pov	V-			Barle	y		
											der	У			Yello	w		
			Tes	t	Dat	е			Lode	9-	Mi	-	Lea	af	Dwa	rf	Glur	n
	Yield	b	Weig		Heade		Heig	ht	ing		dev	v	Ru		Virus	S	Blot	С
Line	(Bu/	a)	(Lb/b	ou)	(Mar3	1+)	(In	,	(0.2-1	10)				(0	)-9)			
	(2)	)	(2)	)	(2)	)	(2)	)	(1)	)	(1)	)	(1	)	(1)		(1	)
PIONEER 26R58(D)	85		55.6	_	32		32	_	0.2		1		1	$\square$	0	-	3	-
VA98W-335	85	-	57.5		33	+	30	-	0.2		0	-	0	-	0	-	3	-
VA00W-526	85	-	58.4	+	32		31	-	0.2		0	-	0	-	1	-	2	
FEATHERSTONE 520(RT)	85	-	58.5	+	31	-	34	+	1.3	+	2	+	1	Η	0	-	2	-
VA00W-38	85		55.8	-	31	-	34	+	0.2		2	+	1	$\square$	0	-	2	
VA00W-286	85		56.8	-	32		32	-	0.2		0	-	1	Π	0	-	1	1
VA01W-112	84		56.3	-	31	-	32	-	0.2		0	-	1		0	-	2	
VA97W-375WS	84		57.1		32		32	-	0.3		0	-	0	-	0	-	2	1
VA01W-205	84		57.6		32		31	-	0.2		2	+	0	-	0	-	1	
VA01W-18	83		57.5		33	+	33		0.2		0	-	0	-	0	-	1	
VA98W-631	82		55.2	-	33	+	32	-	0.2		3	+	0	-	1		2	
VA01W-145	82		57.9	+	32		32	-	0.2		0	-	0	-	0	-	2	
COKER 9295(D)	81	_	56.2	-	34	+	34	+	0.2		2	+	0	-	0	-	2	4
VA01W-99 McCORMICK	81 81	_	58.0 58.4	++	31 32	-	34 31	+	0.2		1	_	2	+	0	-	1	4
MASSEY	79	_	57.7	+	32		39	-+	0.2		2	+	5	+	0	-	2	
CRAWFORD	79	E	58.1	+	30	-	34	+	0.3		0	-	0	H	0	-	2	+
COKER 9375	79	-	55.0	-	33	+	38	+	0.2		2	+	1	Н	0	-	-	ł
COKER 9184(D)	79	-	59.6	+	34	+	33		0.2		3	+	0	-	0	-	1	1
NEUSE(R)	79	-	59.3	+	34	+	33		0.3		0	-	0	- 1	0	-	1	1
VAN98W-170WS	78	-	56.9	-	30	-	35	+	0.2		1		0	-	0	-	2	Ť
USG 3650(RT)	76	-	56.5	-	34	+	34	+	0.2		1		0	Ē	2	+	2	
Average	85	-	57.3		32		33	$\vdash$	0.3		1		1	H	0.3	+	2	+
LSD (0.05)	5		0.4		1		1		0.7		1		1	Ħ	0.8		1	
C.V.	6		0.7		2		3		135		62		121	$\square$	149		35	1
Released cultivars are shown ir	n bold pri	nt.	Varietie	es ai	re order	ed b	y des	cen	ding ti	reate	ed yie	lds.				┝		-
The number in parentheses bel	ow colur	nn h	neadings	ind	icates t	he n	umbe	r of	years	on	which	dat	a are	bas	sed.		-	
A plus or minus sign indicates Fungicide-treated plots received			0								•	dina						]
Belgian Lodging Scale = Area 2	-											-		\$		-		-
entire plot affected and Intensity					-									•				-
The 0-9 ratings indicate a geno						-						-		,				-

(Baytan® and Gauch	-				-		-	me	<i>,</i> ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			. 9	ma	1001				_	-
Test at Warsaw, 2002,	200	3, á	and 2	00	4 harv	/es	<u>t.</u>												
											Pow	-		Barle	,				
											dery			Yello					
			Test		Date				Lodg-		Mil-		Leaf	Dwa		Glur		Ear	`
	Yie		Weigh		Heade		Heig		ing		dew	'	Rust	Virus	5	Blote	ch	Heig	ht
Line	(Bu/	a)	(Lb/bu	l)	(Mar31	+)	(In	)	(0.2-10	))				(0-9)				(Ir	ı)
	(3	)	(3)		(3)		(3	)	(2)		(2)		(2)	(2)		(1	)	(1	)
SS 520(R)	101	+	56.1	-	26	-	35	+	0.7		1		1	3	+	1	-	8.8	
/A97W-24	101	+	56.6		29	+	35	+	1.2		1		2 +	-	+	2		7.3	
SISSON	99	+	56.9		26	-	31	-	1.2		0	-	4 +			3	+	8.7	
SS 560(R)	99	+	57.1		29	+	33	+	1.7		2	+	2 +	-	+	2		6.8	
	99	+	58.9	+	27	-	32		0.3		0	-	0 -	2		1	Ŀ	••••	-
/A99W-176	97		56.1	-	26	-	33	+	1.7		0	-	2 +	-	+	1	-	8.0	
SS 550(R)	97		56.5	-	27	-	33	+	1.2		0	-	3 +			2		7.8	
/A98W-335	97		57.1		29	+	30	-	0.6		0	-	0 -	3	+	3	+	7.0	
PIONEER 26R24(B)	97		57.0		27	-	35	+	0.3		2	+	2 +		-	1	-	6.7	
/A00W-526	96		57.7	+	28		31	-	0.3		0	-	1	3	+	2		8.7	
HOPTANK	96		57.1		27	-	29	-	0.4		0	-	1	2		3	+	7.7	
/AN98W-342	96		56.3	-	27	-	29	-	0.2		0	-	1	3	+	2		7.7	
JSG 3209(RT)	95		56.2	-	27	-	31	-	0.5		0	-	2 +	-	+	2		8.8	
/A97W-375WS	95		56.4	-	28		31	-	0.2		0	-	0 -	2		2		6.8	
/A97W-375RS	95		56.9		28		31	-	0.7		0	-	1	2		2		6.7	
/A98W-631	93		54.9	-	29	+	32		0.6		3	+	0 -	2		2		7.0	
RENWOOD 3706	93		57.6	+	27	-	31	-	1.2		0	-	1	3	+	3	+	6.2	-
	91	_	58.0	+	28		31	-	0.5		0	-	0 -	2		1	-	6.0	-
COKER 9295(D)	90		55.5	-	29	+	34	+	0.2		2	+	1	2		2		8.8	
/A00W-38	89	-	55.2	-	27	-	33	+	3.0		2	+	1	2		2		11.5	+
FEATHERSTONE 520(RT)	89	-	57.6	+	28		33	+	3.1	+	1		2 +	-	+	2		8.8	
COKER 9184(D)	87	-	58.7	+	31	+	32		0.6		3	+	1	1	-	1	-	7.0	_
	86	-	58.2	+	30	+	33	+	1.5		0	-	0 -	1	-	1	-	8.3	
JSG 3650 (RT)	86	-	56.5	-	30	+	34	+	0.5		1		1	3	+	2		7.7	
MASSEY	81	-	56.5	-	28		38	+	2.5		2	+	6 +	3	+	2	┝	10.7	+
Average	94		56.9		28		32		1.0		1		1	2		2		7.8	+
LSD (0.05)	5		0.4		1		1		1.6		1		1	1		1		1.6	
C.V.	6		0.7		3		3		140		65		70	36		37		12.5	

Released cultivars are shown in bold print. Varieties are ordered by descending treated yields. The number in parentheses below column headings indicates the number of years on which data are based.

A plus or minus sign indicates a performance significantly above or below the test average. Fungicide-treated plots received Baytan® and Gaucho® seed treatment, plus Tilt® at heading. Belgian Lodging Scale = Area X Intensity X 0.2. Area = 1-10, where 1 is wheat unaffected and 10 is entire plot affected and Intensity = 1-5, where 1 is wheat standing upright and 5 is wheat totally flat. The 0-9 ratings indicate a genotype's response to disease, where 0 = highly resistant and 9 = highly susceptible.

and Gaucho®) and fol	lar lungi		n ule virgina	rech wheat rest	al
Painter, 2004 harvest.					
		Test			
	Yield	Weight			
Line	(Bu/a)	(Lb/bu)			
PIONEER 26R15(D)	77 +	55.3 -			
VA97W-24	77 +	57.5 +			
VA01W-21	77 +	57.7 +			
PIONEER 26R24(D)	75 +	56.5			
COKER 9295(D)	74	56.4			
PIONEER 26R58(D)	74	55.2 -			
VA02W-398	74	55.5 -			
VA02W-683	74	55.3 -			
MV8-29	73	57.2			
V9412(D)	73	58.6 +			
VA02W-124	73	56.9			
VA00W-526	72	57.1			
VA01W-205	72	56.7			
VA01W-353	72	54.2 -			
NC00-15389(R)	72	57.9 +			
COKER 9312(D)	72	57.2			
PIONEER 26R12(D)	72	57.9 +			
SS 560(R)	72	57.1			
USG 3209(RT)	71	56.6			
CHOPTANK	71	56.7			
VAN98W-170WS	71	56.9			
VA01W-18	71	56.6			
VA01W-112	71	56.4			
COKER 9184(D)	71	59.2 +			
SS 8308(R)	71	55.6 -			
RACHEL	71	56.3			
MV5-46	71	57.1			
V9212(D)	71	55.5 -			
VA98W-627RS	71	56.1			
VA02W-513	71	57.7 +			
VA02W-555	71	56.1			
FEATHERSTONE 520(RT)	70	57.5 +			
VAN98W-342	70	55.4 -			
VA98W-631	70	53.9 -			
NC99-13022(R)	70	57.0			
PIONEER XW02M(D)	70	56.2			
McCORMICK	70	56.7			
MD71-5	70	55.5 -			
VA00W-366	70	57.0			
VA00W-38	69	55.5 -			
VA00W-286	69	56.6			
VA01W-148	69	57.0			
MV27-0187	69	56.2			
SS 8309(R)	69	56.4			
CRAWFORD	69	55.5 -			

## Table 29, continued. Summary of performance of entries using seed treatment (Baytan® and Gaucho®) and foliar fungicide (Tilt®) in the Virginia Tech Wheat Test at Painter. 2004 harvest

at Painter, 2004 harv		Test				
	Yield	Weig				
Line	(Bu/a)	(Lb/b				
VA02W-519	69	56.3	,			
/A02W-553	69	57.0				
/A01W-99	68	57.3 +				
VA01W-145	68	57.6 +				
RENWOOD 3260	68	58.2 +				
TRIBUTE	68	58.1 +				
COKER 9375	68	54.6 -				
VA98W-627WS	68	55.5 -				
VA01W-154	68	57.7 +				
VA02W-370	68	56.4				
VA99W-28	67	54.0 -				
USG 3592(RT)	67	56.7				
NC00-15332(R)	67	56.0				
VA02W-567	67	57.8 +				
VA98W-335	66	56.4				
VA97W-375WS	66	56.0				
RENWOOD 3706	66	56.4				
GA931233E17(D)	66	57.2				
VA02W-596	66	55.2 -				
MASSEY	65	57.7 +				
COKER B970051(D)	65	55.5 -				
VV6-82	65	56.7				
SS 8302(R)	65	57.3 +				
SS 550(B)	65	56.2				
/A97W-375RS	65	56.2				
SS 520(R)	65	54.9 -				
/A99W-176	65	56.0				
USG 3650(RT)	64	56.2				
PAT(R)	64	57.6 +	•			
NEUSE(R)	64	58.9 +				
JSG 3706(RT)	64	57.2				
SISSON	64	56.5				
VA02W-267	63 -	56.0				
H-84(D)	59 -	56.6				
η-04(D)	- 59	50.0				
Average	69	56.6				
LSD (0.05)	6	0.7				
C.V.	6	0.8				
Ο. ν.	U	0.0				
Delessed #1	a in hald in the		and an 11	la a a se all' de la		
Released cultivars are shown A plus or minus sign indicate	•		•	•	•	

There was no significant lodging at this location.

(Baytan® and Gaucho Test at Painter, 2003 an	-		-	Ì	
1 551 al Fairler, 2003 an	u 2004 l		SL. Test		
	Yield		Weight		
Line	(Bu/a		(Lb/bu)		
	(2)	)	(2)		_
	(2)	-	(2)		
VA97W-24	80	+	57.7	_	
VA01W-353	79		56.5	-	
VA01W-205	78		58.9	+	
MV5-46	78		58.7	+	+
VA00W-526	78		58.1		
PIONEER 26R24(D)	78		57.9		
MD71-5	78	+-	57.8		
SS 550(B)	78		57.7		
TRIBUTE	77	-	58.9	+	 + _
VAN98W-342	77	+	57.7		
VA01W-112	77		57.4		
V9212(D)	77	+	57.1	-	
FEATHERSTONE 520(RT)	76		58.9	+	
CHOPTANK	76		58.4	+	
VA97W-375RS	76	_	57.6		
/A99W-176	76	_	57.4	_	
COKER 9375	76	_	56.2	-	
COKER 9184(D)	70		59.6	+	
	75		58.5	+	
SISSON	75		58.0		
CRAWFORD	75	_	57.8	_	
/A00W-286	75	_	57.8		
SS 560(R)	75		57.6		
USG 3209(RT)	75	-	57.6	_	
SS 520(R)	75		56.9	-	
55 520(R) VA98W-631	75	_	55.5	-	
VA980V-831 VA01W-99	75		55.5	-+	
VA0100-99 VAN98W-170WS	74		58.3	+	
VAN9800-170003	74	-	57.5	-	
COKER 9295(D)	74	-	57.5 56.6	_	
VA99W-28	74	_	56.0		
RENWOOD 3706	74	-	58.1	-	
VA01W-148	73	$\rightarrow$	57.9		
VA01W-148 VA01W-18	73	-	57.9 57.5		
PIONEER 26R58(D)	73				
VA98W-335	73	_	56.5 58.3	-+	
		-		+	·
VA01W-145	72		57.8		
GA931233E17(D)	70	-	58.4	+	•
VA00W-38 NEUSE(R)	70 69	-	56.0 59.6	-+	

## Table 30, continued. Two year summary of performance of entries using seedtreatment (Baytan® and Gaucho®) and foliar fungicide (Tilt®) in the VirginiaTech Wheat Test at Painter, 2003 and 2004 harvest.

			Test					
	Yield		Weight					
Line	(Bu/a)		(Lb/bu)					
	(2)		(2)					
USG 3650(RT)	69 ·	-	57.6					
MASSEY	67 ·	-	58.1					
Average	75	75					_	
LSD (0.05)	5		0.5					
C.V.	6		0.7					
Released cultivars are sho	wn in bold prir	nt.	Varieties are	ore	dered by de	escending	treated yi	elds.
The number in parentheses	s below colum	n h	eadings indic	ate	es the num	ber of year	rs on whic	h data are
based. A plus or minus si	gn indicates a	і ре	erformance sig	nif	icantly abo	ve or belov	w the test	average.
Fungicide-treated plots rec	eived Baytan®	୬ a	nd Gaucho®	se	ed treatme	nt, plus Til	t® at head	ding.
There was no significant lo	dging at this lo	oca	ation.					

Table 31. Three year summary of performance o	fentries using seed treatment
(Baytan® and Gaucho®) and foliar fungicide (Ti	lt®) in the Virginia Tech Wheat
Test at Painter, 2002, 2003, and 2004 harvest.	

Test at Painter, 2002, 200	3, and	20	04 har	ves	st.					
			Test				Powder	-		
	Yield		Weigh		Lodgin	•	Mildew			
Line	(Bu/a	)	(Lb/bu	I)	(0.2-10	))	(0-9)			
	(3)	T	(3)	_	(1)		(3)			
VA97W-375RS	89	+	58.5	-	1.7	-	0	-		 
SISSON	88		58.9	-	2.5	-	1	$\square$		
VA97W-24	88	-	58.4	-	0.5	-	1	Н		 
TRIBUTE	88		60.2	+	1.1		0	-		
SS 550(R)	88		58.6	-	0.9	-	0	-		 
VA00W-526	87		59.0	-	6.4	+	0	-		
CHOPTANK	87		59.0	-	0.9	-	0	-		 
VA97W-375WS	86		58.4	-	1.8	-	0	-		
VA98W-335	86		59.2	+	1.3	-	0	-		 
SS 560(R)	85		58.1	-	1.0	-	2	+		
SS 520(R)	85		57.8	-	4.4	-	0	-		 
USG 3209(RT)	85		58.0	-	2.9	-	0	-		
VAN98W-342	85		58.8	-	0.9	-	0	-		 
VA98W-631	84		56.8	-	1.4		2	+		
McCORMICK	84		59.7	+	1.7	-	0	-		 
RENWOOD 3706	83	-	59.0	-	0.5	-	1	$\square$		
FEATHERSTONE 520(RT)	83		59.7	+	2.7	-	0	-		 
COKER 9184(D)	82		60.5	+	1.1		2	+		
COKER 9295(D)	82		57.7	-	3.9	-	1	$\square$		 
VA99W-176	82		58.1	-	7.2	+	0	-		
PIONEER 26R24(B)	81		58.9	-	3.8		2	+		 
USG 3650 (RT)	79	-	58.6		2.5		1	$\square$		
NEUSE(R)	78	-	60.3	+	2.3	-	0	-		 
VA00W-38	74	-	57.0	-	7.5	+	1	$\vdash$		
MASSEY	71	-	58.6	-	6.9	+	1	$\vdash$		
Average	84	1	58.7		2.7		1	$\square$		
LSD (0.05)	5	-	0.4	$\vdash$	3.2	1	0.4	$\square$		 
C.V.	7		0.8		71	-	71	$\square$		
Released cultivars are shown in bo	ld print.	Vari	eties are	ord	ered by a	desc	endina tr	eate	d yields.	 
The number in parentheses below					-		-		-	
based. A plus or minus sign indica										
Fungicide-treated plots received Ba										
Belgian Lodging Scale = Area X Inf	ensity X	0.2.	Area =	1-1	0, where	1 is	wheat u	naffe	cted and 10 is	 
entire plot affected and Intensity =	-									
The 0-9 ratings indicate a genotype						-			-	
susceptible.		-		, -		3	, <u>,</u>			 

 Table 32. Summary of performance of entries using seed treatment (Baytan® and Gaucho®) and foliar fungicide (Tilt®) in the Virginia Tech Wheat Test at

 Painter and Warsaw, 2004 harvest.

			Test		Date	е			Barley Yell	WC	
	Yield		Weight		Head	ed	Height		Dwarf Vir	JS	_
Line	(Bu/a	)	(Lb/bu)		(Mar3	1+)	(ln)		(0-9)		
	(2)		(2)		(1)		(1)		(1)		
PIONEER 26R15(D)	87	+	54.9	-	29	+	33		1	+	
VA97W-24	87	+	57.2	+	29	+	35	+	1	+	
VA02W-398	86	+	55.4	-	26	-	33		0		
PIONEER 26R58(D)	85	+	55.2	-	27		32		0		_
RACHEL	83	+	56.2		26	-	34	+	0		
PIONEER 26R24(D)	83	+	56.5	-	27		34	+	0		
USG 3209(RT)	82		56.4		27		31		0		
SS 560(R)	82		57.2	+	29	+	33		0		
MD71-5	82		55.5	-	27		30	-	1	+	
VA01W-21	82		57.6	+	26	-	32	-	0		_
VA02W-555	82		56.1	-	26	-	30	-	0		
VAN98W-342	81		55.3	-	27		30	-	1	+	_
VA01W-353	81		54.9	-	26	-	31	-	1	+	
SS 8308(R)	81	+	56.2	-	27		32	-	0		_
VA01W-148	80	+	57.0	_	28	+	29	-	0		
VA99W-176	80		55.8	-	26	-	33		1	+	
VA02W-513	80		57.9	+	28	+	31		0	•	
VA02W-519	80		55.7	-	26	-	32		0		
COKER 9295(D)	79		55.9	-	30	+	34	+	0		
VA00W-286	79		56.5	_	28	+	32		0		
VA00W-280 VA01W-112	79		55.9	-	20	- T	32	_	0		
COKER 9312(D)	79		57.3	_			32				
MV27-0187	79		56.1	+	27 26	-	32		0	+	
						_				<b>T</b>	
MV8-29 PIONEER XW02M(D)	79 79		57.5 56.2	+	26 26	-	31 29		0		
. ,				_		-	-	-			
SS 8302(R)	79		56.9		30	+	34	+	1	+	
SS 550(B)	79		56.4		26	-	32		0		
SISSON	79	$\square$	56.6		26	-	32	_	0		
	79	$\square$	58.0	+	27		32		0		
VA02W-683	79		55.3	-	27		31		0		
FEATHERSTONE 520(RT)	78		57.7	+	26	-	34	+	U		
	78		56.6		27		29	-	0		
VA98W-631	78		54.0	-	28	+	33		1	+	
VA00W-526	78		57.5	+	28	+	30	-	1	+	
VA01W-18	78		56.9		30	+	33		0		
VA01W-205	78		56.5		28	+	29	-	0		
VA97W-375RS	78		56.3		27		32		1	+	
SS 520(R)	78		55.1	-	26	-	35	+	0		
RENWOOD 3706	78		56.7		27		30	-	0		
MV5-46	78		57.4	+	26	-	32		0		
GA931233E17(D)	78		57.4	+	28	+	38	+	0		
V9212(D)	78		55.2	-	28	+	37	+	1	+	
VA98W-627RS	78		56.4		26	-	32		0		

Tech Wheat Test at F	Painter and	Wa	arsaw, 2	200	4 har	ves	t.			
			Test		Date	е			Barley Yello	w
	Yield		Weight		Head	ed	Height	t	Dwarf Viru	JS
Line	(Bu/a)		(Lb/bu)		(Mar3	1+)	(In)		(0-9)	
	(2)		(2)		(1)		(1)		(1)	
VA02W-124	78		56.7		28	+	33		0	
VA98W-335	77		56.4		28	+	30	-	0	
/A00W-38	77		55.2	-	27		33		0	
USG 3592(RT)	77		57.0		28	+	35	+	0	
NC99-13022(R)	77		56.8		28	+	32		0	
H-84(D)	77		56.8		28	+	33		1	+
PIONEER 26R12(D)	77		58.0	+	28	+	33		0	
SS 8309(R)	77		56.1	-	29	+	35	+	1	+
McCORMICK	77		56.8		27		31		0	
VA01W-154	77		58.1	+	28	+	33		0	
VA02W-553	77		57.1	+	26	-	34	+	0	
VAN98W-170WS	76		56.3		27	+	34	+	0	
VA99W-28	76		54.6	-	29	+	34	+	0	
NC00-15389(R)	76		57.7	+	25	-	31		1	+
V9412(D)	76		57.7	+	27		34	+	1	+
VA02W-567	76		58.0	+	26	-	31		0	
COKER 9184(D)	75		59.3	+	30	+	33		0	
NC00-15332(R)	75		56.2	-	29	+	35	+	0	
VA97W-375WS	75		55.6	-	28	+	31	-	0	
COKER 9375	75		54.5	-	29	+	37	+	0	
/A01W-310	75		57.7	+	27		33	-	0	
MASSEY	74		57.3	+	28	+	39	+	0	
/A01W-145	74		58.0	+	29	+	31		0	
PAT(R)	74		57.4	+	34	+	36	+	0	
USG 3706(RT)	74		56.9	-	27		30	-	0	
COKER B970051(D)	74		55.7	-	31	+	31		0	
CRAWFORD	74		56.0	-	25		32		0	
VA98W-627WS	74		54.8	-	27	+	33		1	+
VA02W-370	74		56.9		26	-	30	-	0	
VA02W-596	74		55.6	-	30	+	33	-	0	
VX6-82	73	-	56.7		25	<u> </u>	32	-	0	
RENWOOD 3260	73	-	58.2	+	26	-	34	+	1	+
VA02W-267	73	-	55.9	- ·	26	-	30	-	0	
USG 3650(RT)	73	-	56.2		29	+	34	+	2	+
VA01W-99	72	-	57.1	+	29	-	32	-	0	-
NEUSE(R)	72	-	59.1	+	30	+	34	+	0	
Average	72	-	56.6	- <b>T</b>	27		34	-	0	
_SD (0.05)	5		0.5		1		2		1	
C.V.	6		0.5	_	3		2	_	148	
	-		0.7	_	3		3	_	140	
Released cultivars are shown		<b></b>	oo ^!:	10.5		alara	indic -t -			
Varieties are ordered by deso performance significantly above										

The 0-9 ratings indicate a genotype's response to disease, where 0 = highly resistant susceptible. There was no significant lodging at either location.

(Baytan® and Gaucho Test at Painter and Wa					-				in the	e V	irgir		I ec	n V	vneat	1		
Test at Painter and Wa	arsaw T	, Z	003 a	na	2004	na	rves	<u>.</u>	1	_	Pov	V-			Barle		-	
										-	der				Yello	-		_
			Tes	t	Date	;			Lodg	9-	Mil	-	Lea	af	Dwa		Glur	me
	Yiel	b	Weig	ht	Heade	d	Heig	ht	ing	1	de	N	Rus	st	Viru	IS	Blot	cł
Line	(Bu/a	a)	(Lb/b	u)	(Mar31	+)	(Ir	I)	(0.2-1	10)				(C	-9)			
	(4)		(4)		(2)	1	(2	2)	(1)	)	(2	)	(1	)	(1)	)	(1	)
VA97W-24	85	+	57.4		34	+	36	+	0.2		1	+	1		1	+	2	
TRIBUTE	84	+	59.1	+	31	-	33		0.3		0	-	0	-	0		1	-
MD71-5	83		57.5		31	-	30	-	0.2		0	-	0	-	1	+	3	
PIONEER 26R24(D)	83		57.7		31	-	35	+	0.2		1	+	2	+	0		1	
SS 520(R)	83		56.7	-	30	-	36	+	0.2		0	-	0	-	0		1	
VA01W-353	82		56.2	-	31	-	32	-	0.2		0	-	1		1	+	3	
SISSON	82		57.8		30	-	32	-	0.2		0	-	3	+	0		3	
VA01W-148 VA00W-526	82 82		57.9 58.3	++	33 32	+	30 31	-	0.2		0 0	-	0	-	0	+	3	
VA0000-520 VAN98W-342	82	-	57.4	т	31	_	30	-	0.2		0	-	0	-	1	+	2	_
SS 550(B)	82	-	57.5	-	31	-	32	-	0.2		0	-	2	+	0	- <u>'</u> -	2	
MV5-46	82	-	58.8	+	31	-	33		0.3		0	-	-		0		2	_
VA99W-176	82		57.0	-	30	-	33		0.2		0	-	0	-	1	+	1	
V9212(D)	81		56.9	-	31	-	38	+	0.2		1	+	0	-	1	+	3	
CHOPTANK	81		58.2	+	31	-	30	-	0.5		0	-	0	-	0		3	
VA97W-375RS	81		57.7		31	-	32	-	0.5		0	-	0	-	1	+	2	
USG 3209(RT)	81		56.8	-	31	-	32	-	0.4		0	-	3	+	0		2	_
SS 560(R) VA01W-205	81 81		57.5 58.2	+	33 32	+	33 31	_	0.2		1	++	2	+	0		2	
FEATHERSTONE 520(RT)	80	_	58.7	+	32	-	34	-+	1.3	+	1	+	1	-	0		2	_
VA01W-112	80	-	56.9	-	31	-	32	-	0.2		0	-	1		0	_	2	_
GA931233E17(D)	80	-	58.5	+	32	-	37	+	1.8	+	1	+	0	-	0		2	_
VA00W-286	80		57.3		32		32	-	0.2		0	-	1		0		1	
VA99W-28	80		56.2	-	32		35	+	0.5		0	-	0	-	0		1	
PIONEER 26R58(D)	79		56.0	-	32		32	-	0.2		1	+	1		0		3	
VA98W-335	79		57.9		33	+	30	-	0.4		0	-	0	-	0		3	
RENWOOD 3706	79		58.0	+	31	-	31	-	0.2		0	-	0	-	0		3	
VA97W-375WS	79	_	57.3		32		32	-	0.3		0	-	0	-	0		2	
VA98W-631	78 78		55.3 55.9	-	33 31	+	32 34	-	0.2		1	+	0	-	1 0	+	2	
VA00W-38 COKER 9295(D)	78	_	55.9 56.4	-	31	-+	34 34	++	0.2		1	+++	1		0	_	2	
VA01W-99	78	-	58.2		31	-	34	+	0.2		0	÷	2	+	0		1	
COKER 9375	78	-	55.6	-	33	+	38	+	0.2	-	1	+	1	<u> </u>	0	_	1	
VA01W-18	78		57.5		33	+	33		0.2		0	-	0	-	0		1	
McCORMICK	78	-	58.5	+	32	-	31	-	0.2		0	-	0	-	0		1	

Table 33, continued. Two year summary of performance of entries using seedtreatment (Baytan® and Gaucho®) and foliar fungicide (Tilt®) in the VirginiaTech Wheat Test at Painter and Warsaw, 2003 and 2004 harvest.

Teen Wheat Testa				-u					2004				_				_
										Pov	N-			Barle	зy		
										der	У			Yello	w		Ι
			Tes	t	Dat	е			Lodg-	Mi	-	Le	af	Dwa	rf	Glun	n
	Yiel	d	Weig	ght	Head	ed	Heig	ght	ing	dev	N	Ru	st	Viru	s	Blot	с
Line	(Bu/a	a)	(Lb/b	ou)	(Mar3	1+)	(In	)	(0.2-10)				((	)-9)			_
	(4)		(4)	)	(2)		(2	)	(1)	(2	)	(1	)	(1)	_	(1)	)
												-					_
CRAWFORD	77		58.0	+	30	-	34	+	0.7	0	-	0	-	0		2	
VA01W-145	77		57.8		32		32	-	0.2	0	-	0	-	0		2	
COKER 9184(D)	77		59.6	+	34	+	33		0.2	1	+	0	-	0		1	Τ
VAN98W-170WS	76	-	57.6		30	-	35	+	0.2	1	+	0	-	0		2	T
NEUSE(R)	74	-	59.4	+	34	+	33		0.3	0	-	0	-	0		1	T
USG 3650(RT)	73	-	57.0	-	34	+	34	+	0.2	0	-	0	-	2	+	2	Τ
MASSEY	73	-	57.9	+	32		39	+	0.3	1	+	5	+	0		2	
Average	80		57.5		32	-	33	-	0.3	0.4	-	1	-	0.3	-	2	+
LSD (0.05)	4		0.4		1		1		0.7	0.4		1		0.8		1	T
C.V.	6		0.8		2		3		135	87		121		149		35	
Released cultivars are sl	hown in bol	d p	orint. Va	arie	ties are	e orc	dered	by c	descendi	ng trea	ated	l yield	s.	The nur	nbe	er in	-
parentheses below colur	mn heading	ls i	ndicate	es tl	he num	ber	ofloc	atio	n-years c	on whi	ch c	lata a	re t	based.	Аp	lus or	-
minus sign indicates a p	erformance	si	gnifica	ntly	above	or b	elow t	he	test avera	ige.							1
																-	

Belgian Lodging Scale=Area X Intensity X 0.2. Area=1-10, where 1 is wheat unaffected and 10 is entire plot affected and Intensity=1-5, where 1 is wheat standing upright and 5 is wheat totally flat. The 0-9 ratings indicate a genotype's response to disease, where 0 = highly resistant and 9 = highly susceptible.

Test at Painter and W	arsa	w.	2002	. 2	003. a	nd	200	4 r	arve	est	-									T
		Ĺ		Ĺ		-					Pow	/-			Barley	/				Ť
	-										der	y			Yellov	v				t
			Tes	t	Date	Э			Lodg	<b>j</b> -	Mil	-	Le	af	Dwar	f	Glu	me	Earl	y
	Yie	d	Weig	ht	Heade	ed	Heig	ht	ing	1	dev	/	Ru	st	Virus	;	Blot	ch	Heigh	ht
_ine	(Bu	/a)	(Lb/b	u)	(Mar3 <sup>2</sup>	1+)	(In	)	(0.2-1	10)				(0	)-9)				(In)	)
																				T
	(6	)	(6)		(3)		(3)	)	(3)		(5)		(4	)	(2)		(	1)	(1)	)
																				Ī
VA97W-24	94	+	57.5	-	29	+	35	+	1.0		1		2	+	3	+	2		7.3	Î
TRIBUTE	94	+	59.6	+	27	-	32		0.6		0	-	0	-	2		1	-	5.7	I
SS 520(R)	93	+	57.0	-	26	-	35	+	1.9		1		1		3	+	1	-	8.8	T
SISSON	93	+	57.9		26	-	31	-	1.6		0	-	4	+	2		3	+	8.7	Ι
SS 550(R)	93	+	57.5	-	27	-	33	+	1.1		0	-	3	+	2		2		7.8	I
SS 560(R)	92		57.6		29	+	33	+	1.5		2	+	2	+	3	+	2		6.8	ļ
VA97W-375RS	92		57.7		28		31	-	1.0		0	-	1		2		2		6.7	ļ
/A00W-526	91		58.4	+	28		31	-	2.3		0	-	1		3	+	2		8.7	ļ
	91		58.1	+	27	-	29	-	0.6		0	-	1		2		3	+	7.7	ļ
VAN98W-342	91	_	57.6	<u> </u>	27	-	29	-	0.5		0	-	1	_	3	+	2		7.7	ļ
VA98W-335 V <b>A97W-375WS</b>	91 91		58.1 57.4	+	29 28	+	30 31	-	0.8 0.8		0	-	0	-	3 2	+	3 2	+	7.0 6.8	ł
USG 3209(RT)	90	-	57.1	-	20	-	31	-	1.3		0	-	2	+	3	+	2	-	8.8	ł
VA99W-176	90		57.1	-	26	-	33	+	3.5	+	0	-	2	+	3	+	2	-	8.0	ł
PIONEER 26R24(B)	90	-	58.0	-	27	-	35	+	1.5		2	+	2	+	1	-	1	-	6.7	ł
VA98W-631	88	_	55.8	-	29	+	32	· ·	0.9	_	3	+	0	-	2	-	2	-	7.0	
RENWOOD 3706	88		58.3	+	27	-	31	-	1.0		0	-	1		3	+	3	+	6.2	ł
COKER 9295(D)	87		56.5	-	29	+	34	+	1.4		2	+	1		2	ŀ	2		8.8	ł
	87		58.9	+	28		31	-	0.9		0	-	0	-	2	H	1	-	6.0	t
FEATHERSTONE 520(RT)	86		58.6	+	28		33	+	3.0	+	1		2	+	3	+	2		8.8	t
COKER 9184(D)	85	-	59.6	+	31	+	32		0.8		2	+	1		1	-	1	-	7.0	Ť
VA00W-38	82	-	56.1	-	27	-	33	+	4.5	+	1		1		2		2		11.5	t
NEUSE(R)	82	-	59.3	+	30	+	33	+	1.8		0	-	0	-	1	-	1	-	8.3	t
USG 3650 (RT)	82	-	57.5	-	30	+	34	+	1.2		1		1		3	+	2		7.7	Î
MASSEY	76	-	57.5	-	28		38	+	4.0	+	1		6	+	3	+	2		10.7	
		L	57.8	-	28		32		1.6		1	$\vdash$	1	$\left  - \right $	2	$\vdash$	2	-	7.8	╉
Average	89											-			1			-	1.6	ł
Average _SD (0.05)	89 4		0.3		1		1		1.5		0.4		1				1			11

#### SECTION 4 - WHEAT PLANTED NO-TILL INTO CORN STUBBLE

Wheat was planted no-till into corn stubble at the Eastern Virginia AREC near Warsaw, Virginia. Cooperator Charles Sanford harvested the corn and shredded the stalks. Preplant fertilizer of 30-80-100-5 and Gramaxone Extra® at 1.5 pints per acre was applied October 14, 2003. Lime was applied at 1.0 ton per acre and the wheat varieties were planted on October 17, 2003 with a Hege plot drill at 30 seeds/row. Finesse ® herbicide was applied at 0.4 ounces per acre on Dec. 13, 2003. Nitrogen was applied at 25 pounds per acre as 15-0-0 on Dec. 20, 2003, 50 pounds per acre as 15-0-0 on Feb. 17, 2004, and 60 pounds per acre as 24-0-0-3 on Mar. 30, 2004. Warrior T ® insecticide was applied on May 11, 2004 at a rate of 2.56 ounces per acre. Plots were harvested on June 15, 2004.

An acceptable stand was obtained. Due to sustained cold temperatures in late fall and winter, tillering was slightly less than normal going into early spring. The mean yield for the test was 59 bushels per acre and as was the case with many wheat fields this year, grain yields were 10-15% lower than expected based on late spring tiller and spike numbers. Ten of the 16 varieties that had yields significantly above average also had heading dates that were later than average. Only three were earlier. This is likely explained by increased moisture availability to the later varieties under the no-tillage production regime. Top varieties of wheat when planted without tillage into corn residue were VA97-W24, SS 560, GA931233E17, VA99W-176, Pioneer 26R15, USG 3592, Featherstone 520, USG 3209, and SS 8302. All of these varieties yielded significantly more than the mean for the test. Most also did well in the conventional tillage tests. Long term, it will be beneficial in no-tillage and conventional tillage when effective Fusarium resistance is incorporated into more varieties. Tribute, McCormick, Roane, and Neuse have some resistance to scab spread in the head.

 Table 35. Summary of performance of entries in the Virginia Tech No-tillage

 Wheat Test at Warsaw, 2004 harvest

Wheat Test at Warsaw	<b>/</b> , 200	4 h	arvest										
	1		Te	st	Da	ate					Bar	ley Yellow	
	Yie	ld	Wei	ght	Hea	aded	He	eight	Lodg	ging	Dv	varf Virus	
Line	(Bu/	′a)	(Lb/	bu)	(Ma	r31+)	(	(In)	(0.2	-10)		(0-9)	
		T.											
VA97W-24	70	+	55.1		32	+	33	+	0.2		1		
SS 560(R)	69	+	55.8	+	32	+	32		0.2	_	2	+	
GA931233E17(D)	69	+	56.3	+	31	+	36	+	1.2	+	1		
VAN98W-342	68	+	53.6	-	29	-	29	-	0.2	-	1		
VA99W-176	68	+	53.6	-	29	-	31		0.2		1		
VA02W-513	68	+	56.1	+	30		30		0.2		1		
PIONEER 26R15(D)	67	+	53.4	-	31	+	33	+	0.2		1		
USG 3592(RT)	66	+	55.5		32	+	35	+	0.2	-	1		
NC00-15332(R)	66	+	54.8		32	+	34	+	0.2		1		
PIONEER XW02M(D)	66	+	55.4		30	<u> </u>	29	-	0.2	-	1		
VA00W-366	66	+	55.2		30		30		0.2	1	2	+	
FEATHERSTONE 520(RT)	65	+	56.0	+	30		32		0.2	-	1		
USG 3209(RT)	65	+	55.0		31	+	31		0.2	-	1		
NC99-13022(R)	65	+	53.4	-	32	+	32		0.2	-	1		
SS 8302(R)	65	+	55.5		32	+	34	+	0.2		1		
VA02W-596	65	+	54.6		32	+	31		0.2		1		
CHOPTANK	64	Ľ.	54.9		29	-	29	-	0.2	-	3	+	
VA98W-335	64	-	55.6		31	+	30		0.2		2	+	
H-84(D)	64	-	55.9	+	30	<u> </u>	32		0.2		3	+	
SS 550(B)	64	-	54.5		30		31		0.2		2	+	
VA01W-310	64	-	55.6		30		33	+	0.2		- 2	· · · · · · · · · · · · · · · · · · ·	
VA01W-310 VA02W-124	64	-	54.7		31	+	33	• +	0.2		2	+	
VA02W-124 VA00W-38	63	-	53.4	_	32	+	31	<u> </u>	0.2	-	2	+	
VA00W-38 VA99W-28	63	-	53.7		30	<u> </u>	32		0.2	-	1	· · · · · ·	
COKER B970051(D)	63	-	55.0	-	33	+	31		0.2		1		
SS 520(R)	63		53.5		27	-	32		0.2	-	2	+	
SS 520(R) RENWOOD 3706	63	-	55.3	-	31	-+	32 29	L	0.2		2	+	
MV6-82	62	-	55.3			_	29 31	Ē	0.2		_	· · · ·	
MV6-82 MD71-5	62 62	_	55.3		27 29	-	31 29		0.2		1	+	
		-		-				-			_		
USG 3650(RT) VA00W-286	61	_	54.9		32	+	34	+	0.2		1		
	61	-	55.4		31	+	31	<u> </u>	0.2	-	1		
VA01W-18	61	_	55.6		32	+	31		0.2	_	1		
USG 3706(RT)	61	-	54.9		31	+	30	L	0.2		1	ļ	
SS 8308(R)	61	_	55.4		30	<u> </u>	32		0.2	_	1		
PIONEER 26R24(D)	61	_	54.2	-	30		33	+	0.2		1		
	61		55.9	+	30		30		0.2		1		
PIONEER 26R58(D)	61		53.9	-	30		30	L	0.2		2	+	
VA00W-526	60		55.3		32	+	30		0.2		2	+	
VA01W-205	60		55.2		30		29	-	0.2		1		
MV27-0187	60		54.4		29	-	31		0.2		3	+	
VA02W-555	60		54.5		30		30		0.2		1		
VA01W-99	59		56.5	+	28	-	32		0.2		1		
VA01W-112	59		53.4	-	31	+	31		0.2		1		
CRAWFORD	59		54.7		26	-	35	+	0.2		1		
VA01W-154	59		56.5	+	30		33	+	0.2		1		

			Te		Da	ate					ley Yellow
	Yiel	d	Wei	ght	Hea	ided	He	eight	Lodginę	g Dv	warf Virus
Line	(Bu/	a)	(Lb/	bu)	(Mar	31+)	(	(In)	(0.2-10	))	(0-9)
VA02W-519	59		53.1	-	29	-	30		0.2	1	
VA02W-567	59		56.7	+	29	-	31		0.2	1	
VA02W-683	59		53.4	-	28	-	30		0.2	1	
COKER 9295(D)	58		55.4		32	+	34	+	0.2	2	+
VAN98W-170WS	58		53.9	-	29	-	32		0.2	1	
SISSON	58		54.4		28	-	31		0.2	1	
V9212(D)	58		55.1		30		35	+	0.2	1	
VA98W-627WS	58		53.8	-	31	+	31		0.2	2	+
VA98W-631	57		51.6	-	32	+	31		0.2	2	+
VA01W-145	57		55.5		30		30		0.2	1	
PAT(R)	57		55.8	+	34	+	34	+	0.2	1	
MV8-29	57		56.1	+	29	-	32		0.2	1	
RACHEL	57		54.4		28	-	32		0.2	2	+
VA97W-375RS	57		54.8		30		30		0.2	2	+
VA97W-375WS	57		53.4	-	30		30		0.2	2	+
VA01W-21	57		56.4	+	28	-	32		0.2	1	
VA02W-267	57		53.9	-	27	-	31		0.2	1	
VA02W-553	57		55.7		29	-	33	+	0.2	2	+
VA01W-353	56		54.1	-	31	+	30		0.2	1	
TRIBUTE	56		56.2	+	30		29	-	0.2	1	
VA01W-148	55		55.5		32	+	29	-	0.2	1	
MASSEY	54		56.0	+	31	+	38	+	0.2	2	+
MV5-46	54		56.2	+	29	-	32		0.2	1	
VA02W-370	54		55.9	+	27	-	30		0.2	1	
VA02W-398	53	-	53.0	-	28	-	31		0.2	2	+
COKER 9184(D)	52	-	58.7	+	32	+	32		0.2	1	
RENWOOD 3260	52	-	56.1	+	29	-	33	+	0.2	2	+
COKER 9375	52	-	52.6	-	31	+	35	+	0.2	2	+
VA98W-627RS	51	-	55.0		30		31		0.2	1	
NC00-15389(R)	50	-	56.1	+	27	-	32		0.2	2	+
PIONEER 26R12(D)	49	-	56.5	+	32	+	33	+	0.2	1	
NEUSE(R)	48	-	57.5	+	32	+	32		0.2	2	+
COKER 9312(D)	48	-	55.6		29	-	31		0.2	1	
V9412(D)	48	-	55.6		29	-	32		0.2	2	+
SS 8309(R)	44	-	54.3		31	+	34	+	0.2	1	
Average	59		55.0		30		31		0.2	1	
LSD (0.05)	6		0.8		1		2		0.3	1	
C.V.	7		1.0		3		4		105.2	47	
Released cultivars are shown A plus or minus sign indicates Belgian Lodging Scale = Area	s a perfo					-		•		es.	

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

Tech No-tillage Whea	t Test	tat	Warsa	aw,	, 2003	ano	d 200	4 ł	narve	sts	-					
											Po	N-			Barle	y
											der	У			Yellov	N
			Test		Date	:		T	Lodg	- 1	Mi	I-	Lea	f	Dwar	f
	Yield	k	Weigh	nt	Heade	d	Heigh	nt	ing		dev	N	Rus	t	Virus	5
Line	(Bu/	a)	(Lb/bu	I)	(Mar31	+)	(ln)		(0.2-1	0)			(0-9	))		
	(2)		(2)		(2)		(2)		(2)	· .	(1	)	(1)	)	(1)	
VAN98W-342	78	+	56.1		33		28	-	0.2		0	-	1		1	
VA99W-176	77	+	55.1	-	33		31		0.5		0	-	1		1	
MD71-5	75	+	56.0		33		29	-	0.2		0	-	0	-	2	+
PIONEER 26R24(D)	74	+	55.9		34		34	+	0.6		1		1		1	
VA98W-335	73	+	57.2	+	35		29	-	0.2		0	-	0	-	2	+
McCORMICK	73	+	58.2	+	33		30	-	0.2		0	-	0	-	1	
SS 550(B)	72	t	55.8		34		30	-	1.4	+	1		1		2	+
RENWOOD 3706	72		56.6		34	_	29	-	0.2		0	-	0	-	2	+
VA97W-24	72	T	56.1		36	+	33	+	0.5		1		1	-	1	+
VA99W-28	72		55.2	-	34		32	+	1.9	+	2	+	0	-	1	-
GA931233E17(D)	72		57.4	+	34		35	+	2.3	+	1		0	-	1	
CHOPTANK	71		56.4		33		28	-	0.2		0	-	0	-	3	+
SS 560(R)	71		55.9		35		30	-	0.2		1		1		2	+
USG 3209(RT)	71		56.1		35		30	-	0.2		0	-	2	+	1	
PIONEER 26R58(D)	70		54.6	-	34		31		0.2		1	_	1		2	+
SS 520(R)	69	-	55.3	-	31	-	33	+	1.3	+	1	_	1	-	2	+
SISSON	69	-	55.9		32	-	30	-	0.7		1	_	4	+	1	
VA01W-112	69		55.2	-	34		30	-	0.3		0	-	1		1	+
CRAWFORD	69		56.4		31	-	33	+	1.4	+	0	-	0	-	1	+
TRIBUTE	69		58.4	+	34		30	-	0.2		0	-	0	-	1	-
MV5-46	68		57.9	+	33		31	-	0.2		0	-	2	+	1	
V9212(D)	68		56.3		33		36	+	0.4		2	+	0	-	1	-
VA01W-18	68		56.4		35		30	-	0.2		0	-	0	-	1	+
VA00W-38	67		54.4	-	35	_	30	-	0.4		1		0	-	2	+
VA00W-286	67	-	55.7		35		30	-	0.3		1		0	-	1	+
VA01W-145	67	-	56.5	-	34	-	29	-	0.3	-	0	-	0	-	1	-
VA97W-375RS	66	-	56.0		34		28	1.	0.4		0	_	1		2	+
VA00W-526	66	-	56.8	+	35		29	-	0.4		0	-	0	_	2	+
FEATHERSTONE 520(RT)	66	-	57.1	+	34		32	+	1.2		1		1		-	
VA01W-353	66	-	55.2	-	34		29	÷.	0.2		0	_	1		1	-
VAN98W-170WS	66	-	55.7	-	33		32	+	1.1	-	2	+	0	-	1	
VA98W-631	65	-	53.0	-	35		30	÷	0.2	+	1		0	-	2	+
VA01W-99	65	-	57.5	+	33		32	+	0.2		0	-	1		- 1	+
VA01W-39 VA01W-205	65		56.3	-	34		28	L.	0.2		2	-+	0	_	1	+
VA01W-148	64	-	56.6	_	36	+	28	-	0.2		1	· ·	0	-	1	+
VA0100-140	63	-	55.0		33	ſ	28	-	0.2	+	0		0	-	2	+
USG 3650(RT)	63		55.5	-	31		32	+	0.2		0	-	1	-		-
COKER 9295(D)	63	-	55.5 55.5	-	31	-+	32	+	0.2		3	-+	0	-	1 2	+
		-		_		_		Ť			2			-	2 1	-
COKER 9184(D) COKER 9375	62 61	-	59.2 53.9	+	36 35	+	30 36	-+	0.2 0.2		2	++	1	_	2	+

Table 36, continued.	Two	ye	ar ave	ra	ge sum	n	nary o	of	perfor	man	ce c	of en	trie	es in	
the Virginia Tech No-	tillag	e V	Nheat	Te	est at W	la	rsaw	, 2	2003 ai	nd 20	)04	harv	es	ts.	
										Po	W-			Barle	у
										de	ery			Yello	w
			Test		Date				Lodg-	М	il-	Lea	af	Dwa	ſſ
	Yiel	d	Weigł	nt	Headed	1	Heigh	nt	ing	de	w	Rus	st	Virus	3
Line	(Bu/	a)	(Lb/bu	1)	(Mar31+	)	(ln)		(0.2-10)			(0-9	))		
	(2)		(2)		(2)		(2)	_	(2)	(*	1)	(1)	)	(1)	
NEUSE(R)	60	_	58.8	+	35	_	31	_	0.5	0	_	0	_	2	+
MASSEY	59	-	56.7	-	35	-	37	+	1.1	2	+	4	-+	2	+
MASSET	- 59	-	50.7	-	- 35	-	37	Ŧ	1.1	2	- T	4	Ŧ	2	
Average	68	-	56.2		34		31		0.5	1		1	-	1	
LSD (0.05)	5		0.6		2		1		0.8	1		1		1	
C.V.	7		0.9		7		4		157	86		94		48	
Released cultivars are show			•							-					
The number in parentheses					-										
based. A plus or minus sign			•		-									-	
Belgian Lodging Scale = Are															
entire plot affected and Inter	-						-		•						
The 0-9 ratings indicate a ge	enotyp	e's	respons	se t	to disease	e,	where	0	= highly	resist	ant a	and 9	= h	ighly	
susceptible.															

Tech No-tillage Wheat Test at Warsaw, 2002, 2003, and 2004 harvests. Pow-Barlev derv Yellow Test Date Loda-Mil-Leaf Dwarf Freeze Yield Weight Headed Height dew Rust Virus Damage ing (Mar31+) (0.2-10) (0-9)(1-5) Line (Bu/a) (Lb/bu) (ln)(3) (3) (3) (3) (3) (2) (2) (1) (2) VA97W-24 55.4 32 1.0 3 2 84 + 31 + + 1 3 VA99W-176 82 + 54.2 -28 31 0.9 0 -4 + 4 + 2 McCORMICK 57.4 29 1.3 0 2 1 82 + + 30 1 --SS 550(R) 54.8 29 30 1.4 3 81 + 1 4 3 + VAN98W-342 81 + 54.8 29 28 0.2 0 3 4 + 1 --TRIBUTE 81 58.0 29 29 0.3 0 1 2 1 + + ---SS 560(R) 55.3 0.2 2 80 + 31 30 1 4 4 + + + VA98W-335 + 2 80 + 56.1 + 30 28 -0.3 0 2 -4 -VA00W-526 30 0.5 1 80 + 56.2 + 29 -0 2 4 + ---RENWOOD 3706 + 55.7 0.2 + 2 79 29 29 0 -2 -5 29 1.0 2 PIONEER 26R24(B) 32 79 54.9 + 1 4 3 + SS 520(R) 77 54.4 27 33 + 0.9 1 3 5 + 2 SISSON 76 54.6 27 29 0.7 1 5 + 3 2 \_ CHOPTANK 75 55.3 28 27 -0.2 0 3 5 + 2 \_ USG 3650(RT) 75 55.0 27 0.7 2 32 + 0 4 4 + --+ USG 3209(RT) 74 54.8 30 29 0.5 3 3 4 -1 VA97W-375RS 74 54.7 29 28 0.8 0 3 3 2 -VA97W-375WS 73 54.4 29 27 -0.3 0 3 2 -1 --VA00W-38 72 54.0 -30 30 1.6 1 2 3 3 + -VA98W-631 72 52.4 -31 + 29 -0.2 2 1 3 3 + -FEATHERSTONE 520(RT) 69 55.7 30 31 1.3 1 4 3 4 + + COKER 9295(D) 67 54.0 31 + 32 + 0.3 4 1 4 + 3 + -COKER 9184(D) 2 57.7 0.2 2 2 67 31 30 2 + + + -+ 2 NEUSE(R) 66 -57.0 + 31 31 + 0.4 0 -1 -3 MASSEY 54.7 + 2.9 2 4 59 \_ 30 35 6 4 + + + + Average 75 55.3 29 30 0.7 1 3 3 2 LSD (0.05) 4 0.6 2 1 0.8 1 1 1 C.V. 7 8 1.3 4 137 66 47 29 \_\_\_ Released cultivars are shown in bold print. Varieties are ordered by descending treated yields. The number in parentheses below column headings indicates the number of years on which data are based. 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. Belgian Lodging Scale = Area X Intensity X 0.2. Area = 1-10, where 1 is wheat unaffected and 10 is entire plot affected and Intensity = 1-5, where 1 is wheat standing upright and 5 is wheat totally flat. The freeze damage ratings 1-5 are 1=no damage and 5=all early tillers killed. Freeze damage ratings

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Table 37. Three year average summary of performance of entries in the Virginia

## **SECTION 5 – TRITICALE VARIETIES**

Test, 2004 I	141763	L.														-
Line	Paint	ter	War	saw	Но	lland	Blac	ckstone	Ora	ange	Va	lley	Blac	ksburg	Avera	age
TRICAL 2205	62		60		60		72		88		64		72		68	+
TRICAL 2115	65		65		52		68		84		64		76		68	
RSI 42203	58		51	-	59		71		78		58	-	72		64	-
Average	62		59		57		70		83		62		73		67	-
LSD (0.05)	8		7		12		4		6		3		10		2	
C.V.	8		7		13		3		4		3		7		7	
Yields were ca	culated	using	g 60 lk	o/bu.												-
Varieties are or	dered by	des	cendi	ng st	atew	ide yie	eld ave	erages.								

Table 39. Su	ummar	y of p	erforman	ce of ent	ries in	the \	/irginia	Tech	Tritica	le Te	est,
2004 harvest	t.										
			Test	Heading				P	owdery	Barl	ey Yellow
	Yi	ield	Weight	Date	He	eight	Lodging	g N	Aildew	Dw	/arf Virus
Line	(Bu/	'acre)	(Lb/bu)	(Mar31+	) (Inc	ches)	(0.2-10	))		(0-9)	
		(7)	(7)	(3)		(3)	(1)		(1)		(1)
TRICAL 2205	68		51.5	28	40		1.0	0		2	
TRICAL 2115	68		51.2	28	38	-	0.5	0		1	-
RSI 42203	64	-	50.9	28	42	+	3.7	0		3	+
Average	67	-	51.2	28	40		1.7	0		2	
LSD (0.05)	2		0.5	0	1		2.4	0	-	1	
C.V.	7		1.6	1	2		83	34	6	29	
Yields were calcu		-									
Varieties are orde	-			-							
A plus or minus s	•	•						•			
The number in pa	rentheses	below	column headii	ngs indicates	the nun	nber of	locations c	on which	data		
are based. Belgian Lodging S	Scale = Ar	rea X Int	tensity X 0.2.	Area = 1-1	0, where	1 is tr	iticale unafi	fected ar	nd 10 is		
entire plot affected											
The 0-9 ratings in		•			-				-		
susceptible.											

Table 40. Tw	o yea	r a	vera	ge	sun	۱m	ary	of	perfo	rn	nance	0	f all en	tri	es	in	the Vi	rgin	ia
Tech Triticale	e Teste	s, 2	2003	aı	nd 20	)04	4 ha	rve	ests.										
													Pow	/-			E	Barle	y
													der	y				/ello	w
			-	Tes	st		Date				Lode	]-	Mil	-		Le	af	Dwa	rf
	Yiel	d	W	/ei	ght	Н	eadeo	d	Heigh	t	ing		dev	V		Ru	st	Viru	3
Line	(Bu/	a)	(L	b/	bu)	(M	ar31-	+)	(ln)	_	(0.2-1	0)				(0-9	9)		_
	(12	()	_	(12	2)		(6)	-	(6)		(4)		(2)		-	(1	)	(1)	
	, ,	<u>,</u>			/		(-)		(-)							(	,	( )	
TRICAL 2205	65		50	).2		3	32	+	40	+	0.7		1	+		0		2	+
TRICAL 2115	63		49	9.3	-	2	29		38	-	0.3		0	-		0		1	
Average	64	+	40	9.8		2	30	-	39	-	0.5	+	0	-	-	0		1	-
LSD (0.05)	2	-		.5			0.4	-	1	$\vdash$	0.6	+	1	-	-	0		1	
C.V.	7			.2			2		3	-	174	+	163	-	-			33	+
Varieties are orde																			
performance sign																			
statistically analy	-		-				-							-					
the number of loc											•		dicate a	ge	noty	/pe'	S		_
response to dise			•						• •		•								_
Belgian Lodging																			_
entire plot affecte																			
Table 41. TI	-				-			-	-					en	τιε	es l	in the	_	
Virginia Tec	h Triti	са	le Te	st	s, 20	02	, 20	03,	and 2	20			ests.						
											Pow-				arle	-			
											dery				ello				
			Test		Dat				Lodg		Mil-		Leaf		Dwai		Early		
	Yiel		Weig				Heig	•			dew		Rust	\	/irus	5	Height		
Line	(Bu/a	a)	(Lb/b	u)	(Mar3	1+)	(In	I)	(0.2-1	0)			(0-9)			_	(ln)		
	(18)	)	(17)		(10	)	(10	))	(8)		(2)	4	(1)		(1)		(1)	_	
	(10)	/	()		(	/	(11	- /	(-)		(-)		(1)		(-)		(-)	-	
TRICAL 2205	75	+	50.0	+	27	+	39	+	0.6		1	+	0		2	+	8.4		
TRICAL 2115	71	-	49.3		25	-	37	-	0.3		0	-	0		1		8.3		
Average	70	_	40.6		06	_	20	_	0.4			$\square$			1		0.2	_	
Average	73		49.6		26		38	_	0.4	L	0	$\square$	0		1		8.3	_	

Varieties are ordered by descending statewide yield averages. A plus or minus sign indicates a performance significantly above or below the test average, where hulled and hulless lines have been statistically analyzed separately. The number in parentheses below column headings indicates the number of location-years on which data are based. The 0-9 ratings indicate a genotype's response to disease, where 0=highly resistant and 9=highly susceptible. Belgian Lodging Scale=Area X Intensity X 0.2. Area=1-10, where 1 is wheat unaffected and 10 is entire plot affected and Intensity=1-5, where 1 is wheat standing upright and 5 is wheat totally flat. The freeze damage ratings 1-5 are 1=no damage and 5=all early tillers killed. Freeze damage ratings were performed on one replication of plots in 2002.

1

3

0.3

152

1

163

1

33

0

\_\_\_\_

2.1

11.2

LSD (0.05)

C.V.

2

7

0.4

2.1

0.3

3

### **SECTION 6 - MILLING AND BAKING QUALITY**

Milling and baking quality of wheat lines grown in the 2002-2003 Virginia State Wheat Test were assessed by the USDA-ARS Soft Wheat Quality Laboratory (SWQL) in Wooster, Ohio (Table 42). Quality evaluations were conducted using 3000 gram seed 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.

Milling and baking quality of wheat lines were compared to that of the local check cultivar Sisson. On the basis of six independent quality evaluations conducted by the SWQL, Sisson ranked 215 out of 700 cultivars for milling quality and has better than average milling qualities. Sisson has weak protein gluten strength and pastry baking quality is below average but acceptable. Lines receiving milling and baking scores of "A" have average (numeric score = 100) or better than average (scores > 100) quality compared with Sisson. Because Sisson is rather lenient as a quality standard, wheat lines with scores below those of Sisson, particularly for baking quality may have questionable quality for pastry products. For comparison, Neuse has excellent milling and pastry baking quality and ranks 4<sup>th</sup> out of 700 cultivars on the basis of three independent quality evaluations by the SWQL.

Milling quality scores of released varieties ranged from a high of 110 for Neuse to a low of 77.6 for USG 3209 with six released varieties and five experimental lines having better milling quality than Sisson (score of 100). Flour yields ranged from a high of 79.9% for Neuse to a low of 77.0% for Pioneer 26R24, compared to 78.0% for Sisson. Pastry baking quality scores of released varieties ranged from a high of 108.3 for Coker 9184 to a low of 73.4 for USG 3209 with seven released varieties and four experimental lines having similar or better baking quality than Sisson (score of 100). Cookie diameters of released varieties were lower than normal and ranged from 16.50 cm to 17.31 cm, compared to 16.76 cm for Sisson.

Flour protein concentration was higher than normal and varied from 8.63% for SS 520 to 11.13% for Neuse, compared with 10.42% for Sisson. Protein quality, specifically gluten strength, based on Lactic Acid Solvent Retention Capacity varied among released varieties from a high of 110.2 for Pioneer 26R24 to a low of 61.8 for VA99W-176, compared to 83.1 for the weak gluten check variety Sisson. Four experimental lines had scores of 115 or higher, thus indicating stronger gluten strength. Lines having lower Lactic Acid scores such as Sisson likely would produce a dough having weak gluten strength and more suitable for pastry products, while lines having higher Lactic Acid scores such as Pioneer 26R24 would produce a dough having stronger gluten strength and more suitable for cracker or certain bread products.

Table 42. Milli	ing and b	Jal	king (	qu	ality of	fe	n <b>tries</b> i	in	the Virg	gir	nia Tech	1 Wheat	t T	est bas	ed
on evaluations	s of the 20	00	13 har	ve	st.			Γ							
	Τ	Т	ſ				1	Π	[ī		i	ALKALIN	۱E		
							STRAIGH	<u>л</u> Т	SOFTNES	s		WATER	ર		A DJ.
			MILLIN	NG	BAKINO	.G	GRA DE		ENDOSPER		FLOUR	RETENTIC		COOKIE	
			QUALIT		QUALIT		FLOUR	_	SEPA RA TIC		PROTEIN	CAPACIT		DIA METER	
LINE	MILLABILIT	Υ	SCOR		SCORE	E_	YIELD	,	INDEX	7	%	%		CM	
STA NDA RD=SISSON	117.37		100.0	Α	100.0	А	78.00		9.30		10.42	57.2		16.76	72.89
BENCHMARK	114.31		86.0		110.0		76.60				8.20	51.3	+	18.35	93.77
Released Varieties													+		
NEUSE(R)	128.52		109.7	Α	99.3	в	79.90		7.20		11.13 *	57.3	+	17.23	76.79
RENWOOD3706	126.28		100.3		99.7		78.00		8.90		10.50	54.2	$\vdash$	17.17	84.26
VA97W-24	122.28		106.1		102.9	_			7.70		10.47	55.6	$\square$	16.90	105.91
USG 3650(RT)	120.21		109.1		106.6				8.10		9.01	56.9	+	17.31	104.75
COKER9184(D)	119.44		102.5		108.3		78.00		8.80		9.37	56.5	$\square$	16.96	98.32
SS 520(R)	117.37		100.1		107.3	_	77.70	-	8.80		8.63	54.4	$\vdash$	17.16	94.88
SISSON	117.36		100.0		100.0		78.00		9.30		10.42	57.2	+	16.76	83.10
VA97W-375WS	112.08		89.5		101.6				10.70		10.55	54.9	1	17.08	103.56
SS 560(R)	111.45		97.1	в	78.6	F	78.20		9.40		10.17	61.3	Q	16.50	96.66
CHOPTA NK	109.02		88.0		95.1	-	77.30		10.70		10.35	58.0	+	16.79	109.62
COKER9295(D)	108.57		98.6		105.3				9.40		9.67	55.6	$\vdash$	16.98	
SS 550(B)	108.39		93.6		95.0		77.40		10.10		9.82	61.2		17.15	88.35
PIONEER 26 R24(D)	106.18 *	*	93.1		98.3				9.60		9.74	60.0		17.03	110.16
VA99W-176	104.83 *		83.1		93.1						9.36	58.8		17.01	61.79
TRIBUTE	104.48 *		93.0		95.2		77.70		9.90		9.04	58.7	$\uparrow$	16.98	101.51
McCORMICK	103.67 *	*	98.1	в	101.2		77.90	Γ	9.10		10.37	58.1	1	16.83	82.80
USG 3209(RT)	86.62		77.6	F	73.4	F	77.40	*	12.10	Q	10.03	63.3	Q	16.50	92.16
ExperimentalLines				$\square$				Г		$\square$					
VA01W-205	129.07	$\uparrow$	107.0	A	104.1	A	78.90	F	8.60	$\square$	9.52	58.3	+	17.52	84.53
VAN98W-170WS	126.03	$\uparrow$	106.9		104.8		78.60		7.80		9.52	54.5	-	17.47	107.35
VA00W-526	119.60	1	103.1		89.3				8.90		10.35	57.5		16.76	116.88
VA98W-335	117.91	$\uparrow$	98.6		98.4				9.20		10.19	60.8		17.10	109.29
VA99W-28	115.41	$\neg$	97.6		99.7				9.10		9.83	55.7		16.75	119.50
VA97W-375RS	114.53	$\square$	96.6	1-1	102.4	-		1-1	9.40		10.78	55.2		16.96	79.30
VA00W-286	114.42		104.2		90.0				8.10		10.23	57.4		16.62	92.42
VA01W-353	113.62		99.4		94.4				9.10		9.92	58.1		16.74	81.31
VA01W-18	113.31	$\neg$	89.0		82.8	-			10.10		10.30	59.0		16.41 *	
VA01W-145	112.10		93.9	С	101.2				9.60		9.67	54.0	<b>—</b>	16.75	106.88
VA01W-112	111.77		103.6	1	88.3			Г	8.30		10.19	57.5	$\square$	16.48	104.85
VAN98W-342	109.23		86.1	D	81.4	Е	77.00	*	11.70	Q	11.43 *	64.3	Q	16.73	117.09
MV 5-46	106.25 *	*	88.9	D	82.0	Е	77.20	*	10.00	*	10.54	60.8	*	16.53	80.54
VA01W-99	105.89 *	*	92.3	С	86.1	D	77.70		10.30	*	11.13 *	59.1		16.57	114.91
VA98W-631	101.71 *	*	85.9	D	73.3	F	75.90	Q	11.10	Q	10.70	58.8	1	16.29 *	102.57
VA01W-148	98.30	Q	77.2	F	97.2	в	76.90	Q	12.20	Q	9.96	61.3	Q	16.84	80.59
V A 001A/ 28										<u> </u>					

75.50 Q

14.50 Q

9.10

59.0

16.82

97.2 B

101.06

VA00W-38

82.62 Q

65.2 F

#### **SECTION 7 - WHEAT SCAB RESEARCH**

A major focus of Dr. Carl Griffey's wheat breeding program is the development of adapted varieties with resistance to scab, Fusarium head blight (FHB), having reduced disease incidence and severity. Extensive past and ongoing effort by several members of Dr. Carl Griffey's staff including Jianli Chen, Julie Wilson, Daryoosh Nabati, Tom Pridgen, Pat O'Boyle, and Jason Kenner is paying off with the identification and development of new lines with increased scab resistance as well as good agronomic traits. Elite wheat lines and varieties having a FHB index [(incidence x severity) x 100] of <11 in 2003-04 were VA01W-99, Neuse, Massey, Coker B970051, VA01W-310, VA02W-519, Tribute, Pat, Coker 9295, and Vigoro 9412 (Table 43). Fusarium head blight index results from 2002-2004 demonstrate that released varieties such as McCormick, Tribute, Neuse, and Roane have reduced scab infection. Twenty-six SRW wheat lines possessing both high yield potential and scab resistance were selected among 268 lines evaluated in Virginia's 2004 Scab Observation tests. One elite scab resistant SRW wheat line VA02W-713 ranked 1st in grain yield (77 Bu/Ac) among 54 entries in Virginia's Advance Wheat Test over three locations, and will be entered in Virginia's Official Variety Trials in 2005. In addition, a set of near isogenic lines incorporating resistance QTLs from W14 and Futai 8944 into Roane and Ernie backgrounds have been developed using molecular-marker assisted backcross breeding.

est for reaction to F	Fusarium H	lead Blight	and other	/irginia T diseases	, <b>2004</b> ha	arvest.
LINE	Index	Incidence %	Severity %	Heading Mar.31+	BYDV (0-9)	S.nordorum (0-9)
A01W-99	3.6	27.5	13.8	42	6	3
EUSE(R)	6.0	50.0	12.6	43	7	4
ASSEY	7.5	55.0	13.4	41	4	4
OKER B970051(D)	7.7	60.0	12.9	41	6	7
A01W-310	8.6	40.0	21.4	41	4	2
A02W-519	10.1	70.0	15.0	40	5	4
RIBUTE	10.2	42.5	24.0	40	6	2
AT(R)	10.4	45.0	22.9	45	4	6
OKER 9295(D)	10.7	50.0	21.3	43	7	3
9412(D)	10.9	70.0	15.1	39	4	3
ONEER XW02M(D)	11.0	67.5	16.3	42	5	2
ONEER 26R15(D)	11.1	65.0	16.2	41	5	6
A01W-18	11.4	65.0	17.4	41	2	1
A01W-154	11.6	55.0	21.6	41	6	3
D71-5	11.6	55.0	20.6	41	7	5
S EXP830938(R)	12.1	80.0	15.2	41	6	2
9212(D)	12.1	55.0	20.6	40	7	5
V8-29	13.2	60.0	21.3	41	4	4
OKER 9312(D)	13.7	90.0	15.3	37	2	6
A00W-38	13.8	65.0	18.7	40	4	2
A02W-596	13.8	65.0	22.5	43	7	3
V5-46	15.1	80.0	18.5	39	5	3
/27-0187	15.1	75.0	20.1	41	6	3
.97W-24	15.7	80.0	19.2	41	6	2
.98W-335	15.7	75.0	19.2	42	8	6
	15.8	65.0	24.2	43		7
SG 3650(RT) ONEER 26R12(D)	15.8	80.0	24.2	43	6 6	3
ACHEL	16.5	80.0	20.0	39		
V6-82	16.6	65.0	20.3	40	8	4
ENWOOD 3260	17.0	55.0	31.8	-		
A00W-526	17.8	85.0	21.4	39 42	5 7	5 5
						0
A01W-145 A02W-370	18.4 18.6	57.5 75.0	27.5	41 38	4	5
			24.6			
S EXP830238(R) A02W-513	18.6 19.0	85.0 85.0	22.0 22.6	42 39	5 3	7
A01W-205 A02W-553	19.4 19.6	75.0 75.0	25.4 26.1	39 41	3 7	6
C00-15332(R)	19.8	90.0	21.7	41	6	7
02W-124	19.9	80.0	25.0	41	2	4
5 560(R)	20.0	65.0	31.7	43	4	3
A02W-567	20.8	80.0	26.0	39	5	4
DKER 9184(D)	20.8	70.0	28.6	42	4	8
CORMICK	21.3	85.0	24.7	39	5	3
401W-148	21.6	80.0	27.2	42	2	2
SG 3592(RT)	21.7	75.0	28.5	42	6	4

Index 22.0	Incidence %		l la a d'un ai		
	Incidence %				
22.0		Severity %	Heading Mar.31+	BYDV (0-9)	S.nordorum (0-9)
22.0	85.0	25.8	41	(0=9) 7	(0-3)
22.2	95.0	23.7	10	1	3
22.7	80.0	28.1	9	5	2
					2
				-	5
					4
			-		6
					3
-			-	-	1
					3
		-			3
					6
			-		2
					3
					1
				-	1
					3
					2
					5
33.6	75.0	44.1	9	7	4
34.5	75.0	41.9	9	7	5
36.5	95.0	38.7	9	7	4
36.7	92.5	39.3	9	2	2
39.3	80.0	48.9	14	8	5
39.4	100.0	39.4	9	7	8
39.9	95.0	41.7	10	5	7
40.4	90.0	42.6	11	5	8
41.6	75.0	54.8	10	7	6
43.0	100.0	43.0	9	2	3
44.2	85.0	53.7	10	7	4
44.9	90.0	47.3	10	6	7
45.6	92.5	48.7	9	5	4
56.0	90.0	59.0	9	3	2
67.7	100.0	67.7	8	5	2
23.0	75.5	28.8	40	5	4
20.1	22.6	19.3	32	2	2
52.6	18.0	40.1	9	26	37
ied scab resist	ant lines in addi	tion to McCorr	nick, Tribute,	Neuse, and	L
ears. sburg, VA and	were inoculated	d at 50% and $^{\prime}$	100% headin	g stages wit	:h
		, ,	lected spikes		
-		-	=		
	34.5         36.5         36.7         39.3         39.4         39.9         40.4         41.6         43.0         44.2         44.9         45.6         56.0         67.7         23.0         20.1         52.6         ied scab resist         ears.         sburg, VA and         suspension (5         age of infected s	24.0       72.5         24.1       90.0         24.8       70.0         25.7       87.5         26.0       70.0         26.2       80.0         27.4       95.0         28.2       95.0         28.2       95.0         28.2       95.0         28.2       95.0         30.6       85.0         30.6       85.0         31.4       80.0         32.2       70.0         33.2       95.0         33.6       75.0         36.5       95.0         36.7       92.5         39.3       80.0         39.4       100.0         39.4       100.0         44.9       90.0         45.6       92.5         56.0       90.0         45.6       92.5         56.0       90.0         45.6       92.5         20.1       22.6         52.6       18.0         ied scab resistant lines in addi         cars.       suspension (5 x 10 4 s         age of infected spikes among 4         ge of infected spikes among 4 <td>24.0       72.5       28.6         24.1       90.0       26.7         24.8       70.0       35.4         25.7       87.5       29.4         26.0       70.0       36.6         26.2       80.0       31.1         27.4       95.0       28.7         27.5       95.0       28.6         28.2       95.0       28.6         30.6       85.0       32.8         30.6       85.0       36.4         30.8       90.0       33.2         31.4       80.0       39.2         32.2       70.0       42.2         33.2       95.0       34.4         33.6       75.0       41.9         36.5       95.0       38.7         36.7       92.5       39.3         39.3       80.0       48.9         39.4       100.0       39.4         39.9       95.0       41.7         40.4       90.0       42.6         41.6       75.0       53.7         44.9       90.0       47.3         45.6       92.5       48.7         56.0       90.0       <td< td=""><td>24.0       72.5       28.6       10         24.1       90.0       26.7       9         24.8       70.0       35.4       11         25.7       87.5       29.4       9         26.0       70.0       36.6       11         26.2       80.0       31.1       9         27.4       95.0       28.7       10         27.5       95.0       28.6       9         28.2       95.0       29.9       9         28.2       85.0       32.8       11         30.6       85.0       36.4       10         32.2       70.0       42.2       9         33.2       95.0       34.4       10         33.6       75.0       41.9       9         36.7       92.5       39.3       9         36.7       92.5       39.3       9         39.3       80.0       48.9       14         39.4       100.0       39.4       9         39.9       95.0       41.7       10         44.9       90.0       47.3       10         45.6       92.5       48.7       9      <t< td=""><td>24.0       72.5       28.6       10       6         24.1       90.0       26.7       9       8         24.8       70.0       35.4       11       7         25.7       87.5       29.4       9       3         26.0       70.0       36.6       11       3         26.2       80.0       31.1       9       5         27.4       95.0       28.7       10       3         27.5       95.0       29.9       9       7         28.2       95.0       32.8       11       8         30.6       85.0       36.4       10       7         31.4       80.0       39.2       10       6         32.2       70.0       42.2       9       5         33.6       75.0       41.9       9       7         36.5       95.0       38.7       9       7         36.5       95.0       38.7       9       7         36.7       92.5       39.3       9       2         39.3       80.0       48.9       14       8         39.4       100.0       39.4       9       7</td></t<></td></td<></td>	24.0       72.5       28.6         24.1       90.0       26.7         24.8       70.0       35.4         25.7       87.5       29.4         26.0       70.0       36.6         26.2       80.0       31.1         27.4       95.0       28.7         27.5       95.0       28.6         28.2       95.0       28.6         30.6       85.0       32.8         30.6       85.0       36.4         30.8       90.0       33.2         31.4       80.0       39.2         32.2       70.0       42.2         33.2       95.0       34.4         33.6       75.0       41.9         36.5       95.0       38.7         36.7       92.5       39.3         39.3       80.0       48.9         39.4       100.0       39.4         39.9       95.0       41.7         40.4       90.0       42.6         41.6       75.0       53.7         44.9       90.0       47.3         45.6       92.5       48.7         56.0       90.0 <td< td=""><td>24.0       72.5       28.6       10         24.1       90.0       26.7       9         24.8       70.0       35.4       11         25.7       87.5       29.4       9         26.0       70.0       36.6       11         26.2       80.0       31.1       9         27.4       95.0       28.7       10         27.5       95.0       28.6       9         28.2       95.0       29.9       9         28.2       85.0       32.8       11         30.6       85.0       36.4       10         32.2       70.0       42.2       9         33.2       95.0       34.4       10         33.6       75.0       41.9       9         36.7       92.5       39.3       9         36.7       92.5       39.3       9         39.3       80.0       48.9       14         39.4       100.0       39.4       9         39.9       95.0       41.7       10         44.9       90.0       47.3       10         45.6       92.5       48.7       9      <t< td=""><td>24.0       72.5       28.6       10       6         24.1       90.0       26.7       9       8         24.8       70.0       35.4       11       7         25.7       87.5       29.4       9       3         26.0       70.0       36.6       11       3         26.2       80.0       31.1       9       5         27.4       95.0       28.7       10       3         27.5       95.0       29.9       9       7         28.2       95.0       32.8       11       8         30.6       85.0       36.4       10       7         31.4       80.0       39.2       10       6         32.2       70.0       42.2       9       5         33.6       75.0       41.9       9       7         36.5       95.0       38.7       9       7         36.5       95.0       38.7       9       7         36.7       92.5       39.3       9       2         39.3       80.0       48.9       14       8         39.4       100.0       39.4       9       7</td></t<></td></td<>	24.0       72.5       28.6       10         24.1       90.0       26.7       9         24.8       70.0       35.4       11         25.7       87.5       29.4       9         26.0       70.0       36.6       11         26.2       80.0       31.1       9         27.4       95.0       28.7       10         27.5       95.0       28.6       9         28.2       95.0       29.9       9         28.2       85.0       32.8       11         30.6       85.0       36.4       10         32.2       70.0       42.2       9         33.2       95.0       34.4       10         33.6       75.0       41.9       9         36.7       92.5       39.3       9         36.7       92.5       39.3       9         39.3       80.0       48.9       14         39.4       100.0       39.4       9         39.9       95.0       41.7       10         44.9       90.0       47.3       10         45.6       92.5       48.7       9 <t< td=""><td>24.0       72.5       28.6       10       6         24.1       90.0       26.7       9       8         24.8       70.0       35.4       11       7         25.7       87.5       29.4       9       3         26.0       70.0       36.6       11       3         26.2       80.0       31.1       9       5         27.4       95.0       28.7       10       3         27.5       95.0       29.9       9       7         28.2       95.0       32.8       11       8         30.6       85.0       36.4       10       7         31.4       80.0       39.2       10       6         32.2       70.0       42.2       9       5         33.6       75.0       41.9       9       7         36.5       95.0       38.7       9       7         36.5       95.0       38.7       9       7         36.7       92.5       39.3       9       2         39.3       80.0       48.9       14       8         39.4       100.0       39.4       9       7</td></t<>	24.0       72.5       28.6       10       6         24.1       90.0       26.7       9       8         24.8       70.0       35.4       11       7         25.7       87.5       29.4       9       3         26.0       70.0       36.6       11       3         26.2       80.0       31.1       9       5         27.4       95.0       28.7       10       3         27.5       95.0       29.9       9       7         28.2       95.0       32.8       11       8         30.6       85.0       36.4       10       7         31.4       80.0       39.2       10       6         32.2       70.0       42.2       9       5         33.6       75.0       41.9       9       7         36.5       95.0       38.7       9       7         36.5       95.0       38.7       9       7         36.7       92.5       39.3       9       2         39.3       80.0       48.9       14       8         39.4       100.0       39.4       9       7

**T** - 1- 1 40 42 . £ c 4.1 41 ۱*۲* . 

Scab Index: Scab incidence x scab severity x 100; an overall indicator of scab resistance/susceptibility level. Τ

2003 and 2004 harves	ts.									
	<u></u>		Те	st	FUSARI	JM HEAD BL	IGHT INDEX			
	Yiel	d	Weig	ht	(FHB Inc	idence X Se	everity) X 100	Glum	e Blot	ch (0-9)
Line	(Bu/	a)	(Lb/		2004	2003	2-Year	State	FHB	Mean
-	(12	'	(12	,	(1)	(1)	(2)	(2)	(1)	(3)
ROANE	(	/	(	/	5	3	4	(-/	(.)	(-)
NEUSE(R)	60	-	58.4	+	6	4	5	2	4	3
VA01W-99	64		56.8	+	4	6	5	2	3	3
MASSEY	59	-	56.3		8	10	9	2	4	3
/A00W-38	66		55.1	-	14	4	9	2	2	2
VA01W-18	69	+	56.4		11	9	10	2	1	2
TRIBUTE	69	+	58.4	+	10	11	10	1	2	2
COKER 9295(D)	61	-	54.8	-	11	10	10	2	3	3
/9212(D)	64		55.7	-	12	10	11	3	5	4
/A97W-24	72	+	56.1		16	8	12	2	2	2
JSG 3650(RT)	62	-	55.6	-	16	8	12	3	7	5
/A01W-205	68		56.5		19	4	12	3	6	5
MD71-5	67		56.0		12	12	12	2	5	4
McCORMICK	67		57.9	+	21	5	13	1	3	2
JSG 3209(RT)	70	+	55.4	-	22	6	14	3	5	4
VIV5-46	71	+	57.8	+	15	14	15	1	3	2
SS 560(R)	68		55.9		20	11	15	2	3	3
VA00W-526	63	-	56.4		18	15	16	2	5	4
VA01W-145	66		56.1		18	15	17	2	3	3
VA98W-335	65		56.2		16	18	17	3	6	5
/AN98W-342	69	+	56.0		24	10	17	2	5	4
PIONEER 26R58(D)	67		54.9	-	26	9	17	4	3	4
/A01W-148	64		56.1		22	16	19	2	2	2
COKER 9375	64		54.5	-	24	14	19	1	2	2
VA00W-286	65		55.8	-	26	12	19	1	1	1
SS 550(B)	68		55.9		24	14	19	1	4	3
FEATHERSTONE 520(RT)	65		56.9	+	22	18	20	2	4	3

58.0

56.5

56.4

54.9

54.7

54.1

+

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COKER 9184(D)

CHOPTANK

VA01W-112

VA99W-28

VA98W-631

SISSON

# Table 44, continued. Two year average summary of yield, test weight, Fusariumhead blight (scab), glume blotch resistance of entries in Virginia Tech Wheat Tests,2003 and 2004 harvests.

2003 and 2004 harve	ວເວ.									
			Test		FUSARI	UM HEAD B	BLIGHT INDEX			
	Yiel	d	Weight	:	(FHB Inc	idence X S	Severity) X 100	Glum	e Blot	ch (0-9)
Line	(Bu/a	a)	(Lb/bu)		2004	2003	2-Year	State	FHB	Mean
	(12)	)	(12)		(1)	(1)	(2)	(2)	(1)	(3)
RENWOOD 3706	64		56.4		40	10	25	3	8	6
VAN98W-170WS	64		56.9 +	ł	37	18	27	1	4	3
VA97W-375RS	68		56.3		39	16	28	2	8	5
VA99W-176	73	+	56.1		46	12	29	2	4	3
CRAWFORD	68		56.6 +	+	32	26	29	2	2	2
VA01W-353	70	+	54.7 ·	-	44	15	29	2	4	3
GA931233E17(D)	66		56.9 +	ł	42	18	30	2	6	4
VA97W-375WS	68		55.9		33	32	32	2	5	4
PIONEER 26R24(D)	68		55.8 ·	-	56	13	35	2	2	2
SS 520(R)	69	+	56.0		68	14	41	1	2	2
Average	66		56.2		23	12	18	2	4	3
LSD (0.05)	3		0.4		20	14		1	2	
C.V.	9		1.7		53	68		33	37	
Released cultivars are in bo	old prin	t. A	plus or m	nir	nus sign ind	dicates perf	ormance signfica	antly ab	ove or	
below mean.										
Varieties are ordered on ba	sis of 2	2-уе	ear average	е	scab index	•				
The number in parentheses	below	со	lumn head	dir	ngs indicate	es number o	of location-years	on whic	h data	are
based.				Τ						
The 0-9 ratings indicate a g	enotyp	oe's	response	to	o disease,	where 0 = h	highly resistant a	nd 9 = I	highly	
susceptible.										

Table 45. Three year average summary of yield, test weight, Fusarium head blight (scab), glume blotch resistance of entries in Virginia Tech Wheat Tests, 2002-2004 harvests.

Line	Yield (Bu/a)	Test	FUSARIUM HEAD BLIGHT INDEX							
		Weight (Lb/bu)	(FHB Incidence X Severity) X 100					Glume Blotch (0-9)		
			2004	2003	2002	2-Year	3-Year	State		Mean
	(12)	(12)	(1)	(1)	(1)	(2)	(3)	(2)	(1)	(3)
ROANE			5	3	8	4	5			
NEUSE(R)	66 -	58.5 +	6	4	9	5	6	2	4	3
MASSEY	61 -	56.5 -	8	10	6	9	8	2	4	3
/A00W-38	69 -	55.6 -	14	4	7	9	8	2	2	2
FRIBUTE	75 +	59.1 +	10	11	5	10	8	1	2	2
JSG 3650(RT)	68 -	56.4 -	16	8	6	12	10	3	7	5
McCORMICK	74 +	58.5 +	21	5	5	13	10	1	3	2
VA97W-24	77 +	56.7	16	8	10	12	11	2	2	2
/AN98W-342	73 +	56.6	24	10	2	17	12	2	5	4
COKER 9295(D)	65 -	55.4 -	11	10	16	10	12	2	3	3
USG 3209(RT)	74 +	56.0 -	22	6	12	14	13	3	5	4
/A98W-335	71	57.0	16	18	7	17	14	3	6	5
/A00W-526	72	57.2 +	18	15	10	16	14	2	5	4
SS 550(B)	74 +	56.5 -	24	14	11	19	16	1	4	3
SS 560(R)	73 +	56.7	20	11	19	15	17	2	3	3
EATHERSTONE 520(RT)	68 -	57.5 +	22	18	12	20	17	2	4	3
COKER 9184(D)	67 -	58.4 +	21	19	12	20	17	2	8	5
SISSON	74 +	56.9	28	16	10	22	18	2	2	2
CHOPTANK	72	57.0	28	16	14	22	19	2	6	4
RENWOOD 3706	70	57.2 +	40	10	8	25	19	3	8	6
VA97W-375RS	75 +	56.8	39	16	10	28	22	2	8	5
VA99W-176	75 +	56.3 -	46	12	12	29	23	2	4	3
/A98W-631	70	54.8 -	28	22	21	25	24	2	3	3
PIONEER 26R24(D)	72	56.6	56	13	9	35	26	2	2	2
VA97W-375WS	74 +	56.5 -	33	32	22	32	29	2	5	4
SS 520(R)	74 +	56.4 -	68	14	7	41	30	1	2	2
Overall Mean	71	56.8	23	12	11	18	15	2	4	3
LSD (0.05)	2	0.3	20	14	8			1	2	
C.V.	9	1.7	53	68	55			33	37	

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

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

#### SECTION 8 - SELECTING WHEAT VARIETIES FOR SPECIFIC PLANTING DATES

When planting early, wheat varieties that are day-length sensitive, require a longer vernalization period (must be exposed to freezing temperatures after germination for at least 6 to 8 weeks), and are relatively late in heading should be selected. Early planted varieties should also have good resistance to barley yellow dwarf virus (or use Gaucho®) and good resistance to powdery mildew (or use a fungicide seed treatment). Day-length sensitive wheat varieties tend to remain prostrate during winter through early spring and do not begin to joint (heads move up from soil level) until the day-length increases in mid-March regardless of late-winter temperatures. Day-length insensitive varieties that have been vernalized will grow and begin jointing when sufficient heat units have been accumulated. The winter of 2001-2002 in Virginia was very warm and day-length insensitive varieties were jointing by early to mid-March in eastern Virginia. Day-length sensitive varieties such as McCormick, Tribute, Coker 9025, and Roane were less than six inches tall (not jointing) whereas day-length insensitive, early varieties such as Southern States 518, Pioneer Brand 26R61, and AGS 2000 were 9-10 inches tall with the head at least three inches above the soil surface. This is all important because temperatures of 20-25 °F will kill the developing head of jointed wheat whereas such temperatures can be tolerated until jointing. Further work will be done to identify more day-length sensitive varieties for early planting. Most of the leading varieties currently available are intermediate in their response to day-length.

The recommendation is to plant varieties that are day-length sensitive with later heading dates when planting prior to the optimum planting date. Do not plant early heading day-length insensitive varieties until about the time of the first average frost for your area.