

## **1999 MARYLAND WHEAT & BARLEY VARIETY PERFORMANCE TRIALS**

The 1999 wheat and barley variety trials were conducted by the Maryland Agricultural Experiment Station and the Department of Natural Resource Science and Landscape Architecture at five locations across Maryland: (1) Lower Eastern Shore Research and Education Center's (REC) Poplar Hill Facility near Quantico in Wicomico County; (2) Wye REC at Queenstown in Queen Anne's County; (3) Central Maryland REC's Beltsville Facility in Prince George's County; (4) Central Maryland REC's Clarksville Facility in Howard County; and (5) Western Maryland REC's Keedysville Facility in Washington County.

Entries that are generally available to Maryland producers and that are commonly grown in the state are selected each year for the tests. In addition, promising new varieties, commercial brands, and advanced breeding lines are included in the tests to compare their performance to that of known varieties. Sixty Eight wheat entries and 34 barley entries made up the 1999 tests. Two triticale entries (a wheat/rye cross), one hard red winter wheat entry, and four hybrid wheat entries were included in the wheat trials. Although triticale has a test weight of 48 lb/bu, its yield is reported based on a 60 lb/bu test weight. Please see Table 2 for a list of seed treatments applied to each entry. The following characteristics were evaluated in these trials: yield (adjusted to 13.5% moisture), test weight, moisture content at harvest, heading date, lodging susceptibility, plant height, winter hardiness, and disease reaction. Lodging is based on a score of 0 - 10 where 0 = no lodging and 10 = flat. Heading date is determined when 90% of the small grain heads have cleared the boot.

Wheat and barley entries in the respective tests were planted (conventional tillage) at all locations in six-row plots 18 feet in length and later trimmed to 14 feet in randomized blocks with three replications per entry. Both the wheat and barley were planted in 6 inch rows. Wheat was seeded at a rate of 18 seeds per foot of row, which represents a population of approximately 1.3 million plants per acre (or 30 plants/sq. ft.) based on 90% germination. Seeding rate for barley was 96 lb/acre. Plots were mechanically harvested using a small plot combine (Wintersteiger Seedmech Nurserymaster Elite). Other location-specific management factors are summarized in Table 1 on pages 4 and 5.

### **PRODUCTION YEAR**

Fall planting conditions were very dry following the drought in the summer of 1998. Conditions remained dry for several weeks after planting. Temperatures were considerably above average for the winter of 1998/99. Maryland experienced its warmest January ever, with several days of temperatures above 60 degrees. Temperatures became more seasonable towards the end of February, however. Drastic swings in temperature during the winter caused some discoloration in several wheat entries, but no measurable necrosis of the leaves. Winter kill was observed and measured on barley and winter oats in the state. Below normal precipitation characterized the spring of 1999. The wheat and barley matured quickly due to the hot and dry weather. Diseases such as barley yellow dwarf and powdery mildew showed up later than usual in the season when it finally did rain. Incidence of scab was not measured in the state due to lack of rains at anthesis. Barley yields and test weights were excellent this year. Early wheat varieties seemed to fare better than later maturing varieties this season because grain fill in the earlier entries had begun while there was still some moisture in the ground. Pre-harvest sprouting occurred in several wheat entries which lowered wheat quality and test weights. Locations where pre-harvest sprouting was present included Quantico, Queenstown, and Keedysville.

### **RESULTS**

Wheat and barley performance data are summarized in the tables which follow. There are tables for individual test locations for both small grain crops as well as regional and statewide summary tables as appropriate. A three-year summary table for selected entries of each crop is also included (See Index to

Tables which follows). The multiple-year data provide additional information on a variety's yielding ability. All plot weight, test weight, and moisture content data were provided by a HarvestMaster HM-400 attached to the plot combine.

Data were statistically analyzed to determine if differences existed between varieties at each location. At the bottom of each table a mean, a LSD, and a CV are reported. Least significant differences (LSD) were calculated at the 5% probability level. Therefore, for two varieties to be statistically different for any particular character, they must have measured differences equal to or greater than the LSD value for that character. If grain yields are different at the 5% probability level (LSD 0.05) then it can be stated with 95% confidence that the yields are significantly different. "NS" in the tables indicates that no statistically significant differences were observed for that character at the 5% probability level. The coefficient of variation (CV) is a measure of field variability in relation to the mean. CV's below 15% are an indication that the precision of the test is good in distinguishing differences between varieties. A CV above 15% indicates other factors than varietal differences are causing variability. These factors can include fertility management, different soil types within the study, low spots in the field, etc.

It is important to note that although small plots tend to exaggerate yields, this increase is consistent for each variety. As an aid to assessing the performance of individual varieties in the test, a relative yield value was calculated. Tables 4 and 12 summarize the relative yields of wheat and barley, respectively, in the 1999 test by expressing them as the percent of the mean yield of all varieties at each location. Therefore, a variety with a relative yield that is consistently greater than 100 is a variety that consistently yields higher than the mean yield of all of the varieties at that location. In these tables, the relative yields of those varieties with an asterisk are not statistically different from the highest yielding variety at that location.

#### **ACKNOWLEDGMENTS**

A number of people helped to make this year's wheat and barley variety trials a success. The Small Grains Breeding Program would particularly like to recognize the farm staff at each of the five locations (see Table 1 below) for their assistance with land preparation, plot management, harvest, and equipment maintenance. We would also like to thank the **Maryland Crop Improvement Association** and the **Maryland Grain Producers Utilization Board** for their very generous financial contributions to our breeding program. The contributions of Dr. Arv Grybauskas in disease ratings are also greatly appreciated. We also wish to recognize the greenhouse staff at the University of Maryland (Laurie Hellman-Aker and Pam McGrath) for all of their assistance during the winter crossing months. Other people we would like to recognize for all of their hard work include: Andrew Blackburn, Katherine Salmon, Andrew Greene, Shivani Johri, and Yu Hong.

The cooperation and support offered by commercial seed companies, state crop improvement associations, and several University Experiment Stations in supplying seed and information about varieties are greatly acknowledged. Finally, a special note of appreciation is also extended to the County Extension Educators who disseminate this information.

**Agronomy Update No. 19 prepared by: Emma G. Shirley and Dr. José M. Costa**

**Table 1.** 1999 Wheat and Barley Variety Test Plot Information.

**1. Lower Eastern Shore Research and Education Center (LESREC) - Poplar Hill Facility  
Wicomico County - Quantico, MD**

Planting Date: Wheat and Barley = Oct. 19, 1998

Harvest Date:

Wheat = July 7, 1999

Barley = June 23, 1999

Soil Type: Mattapex silt loam

Previous Crop: Corn

Fertilizer:

Fall = Liquid blend of 21# N, 15# P, 30# Potash, and 24# sulfate sulfur

Spring = Liquid blend of 90# N, 20# P, 20# Potash, and 24# sulfate sulfur

Herbicide: Harmony Extra 0.5 oz/A

Insecticide: Warrior 4.0 oz/A

**Farm Staff: F.R. Mulford, D.R. Sockriter, E.C. Anderson, and H.F. Anderson**

**2. Wye Research and Education Center (WREC)  
Queen Anne's County - Queenstown, MD**

Planting Date: Wheat and Barley = Oct. 15, 1998

Harvest Date: Wheat = July 12, 1999 Barley = June 10, 1999

Soil Type: Matapeake silt loam

Previous Crop: Corn

Fertilizer:

Fall = 200# 8-17-33

Spring = Wheat: 80# N/A of 30% solution; Barley: 60# N/A of ammonium nitrate

Herbicide: Harmony Extra 0.5 oz/A on wheat

Insecticide: Warrior 3.0 oz/A

**Farm Staff: L.H. Smith, M.A. Sultenfuss, and P.R. Stafford**

**3. Central Maryland Research and Education Center (CMREC) - Beltsville Facility (Hayden Farm)  
Prince George's County - Beltsville, MD**

Planting Date: Wheat and Barley = Oct. 12, 1998

Harvest Date: Wheat = June 25, 1999 Barley = June 8, 1999

Previous Crop: Corn

Fertilizer:

Fall = 200# 10-0-40

Spring = Wheat: 80# UAN; Barley: 60# UAN

Herbicide: Harmony Extra 0.5 oz/A

Insecticide: None

**Farm Staff: K.J. Conover, T.H. Runner, R.W. Griffith**

**4. Central Maryland Research and Education Center (CMREC) - Clarksville Facility**  
**Howard County - Clarksville, MD**

Planting Date: Wheat and Barley = Oct. 7  
 Harvest Date: Wheat = June 30, 1999 Barley = June 16, 1999  
 Previous Crop: Corn  
 Fertilizer:  
 Fall = None  
 Spring = Wheat: 60# UAN; Barley: 40# UAN  
 Herbicide: Harmony Extra 0.5 oz/A  
 Insecticide: None

**Farm Staff: D.M. Justice and T.D. Ridgley and D.W. Bowman**

**5. Western Maryland Research and Education Center (WMREC) - Keedysville Facility**  
**Washington County - Keedysville, MD**

Planting Date: Wheat and Barley = Oct. 2, 1998  
 Harvest Date: Wheat = July 8, 1999 Barley = June 24, 1999  
 Soil Type: Hagerstown silt loam (silty variant)  
 Previous Crop: Corn  
 Fertilizer:  
 Fall = None  
 Spring = Wheat and Barley: 40# N/A (10-10-10)  
 Herbicide: Harmony Extra 0.4 oz/A  
 Insecticide: None

**Farm Staff: T.S. Ellis, D. Wyand, G.R. Welsh, D. Price, and D. Thompson**

**Table 2. Sources of Winter Wheat, Triticale, and Barley Entries Tested in Maryland, 1999.**

Supplier/Address/Local Rep.	Brand	Varieties/Hybrids and (Seed Treatments*)
AgriBioTech, Inc., 120 Corporate Park Dr., Henderson, NV 89014 Kevin Lyons (410)820-4664	Hyttest	<b>W9850</b> (RT), <b>W215</b> (DXL)
Ag-Chem, Inc., Box 2178, Salisbury, MD 21802. Tom Mullineaux (410)548-2200	DynaGro	<b>422</b> (DA), <b>424</b> (DA), <b>419</b> (DA)
AgriPro Seeds, Inc., 6025 W 300 S, Lafayette, IN 47905.	AgriPro	<b>Patton</b> (RT), <b>Mason</b> (RT), <b>Hickory</b> (RT), <b>Foster</b> (RA), <b>Hondo</b> (RT)(Hard Red Winter Wheat)
Featherstone Seed, Inc., 13941 Genito Road, Amelia, VA 23002 Juan Whittington (804)561-3754	Featherstone	<b>520</b> (BC)
Hoffman Seeds, Inc., 167 Greenfield Road, P.O. Box 12400, Lancaster, PA 17605	Hoffman	<b>37</b> (DXL), <b>Exp 614</b> (RT), <b>95</b> (DXL), <b>Century II</b> , <b>57</b> (DXL)(at Keedysville loc. only)

Monsanto(HybriTech), 6075 Westbrooke Dr., Salisbury, MD 21801	Quantum	<b>706 (RXT), 7203 (RXT), 7123 (RXT), EH 9839 (RXT)</b>
Novartis Seeds, Inc., P.O. Box 249, Grifton, NC 28530. J. Phil Farmer (910)452-5597	NK Coker	<b>9835 (D), 9663 (D), 9704 (D), 9803 (D), BL 931167 (D)</b>
Pioneer Hi-Bred Intl., Inc., P.O. Box 280, Mt. Joy, PA 17552	Pioneer	<b>2552 (D), 25R57 (D), 2643 (D)</b>
Resource Seeds, Inc., 2355 Rice Pike, Union, KY 41091. Bill Smith (606)384-3962	Trical	<b>498 (RT)(Triticale)</b>
Southern States Coop., P.O. Box 26234, Richmond, VA 23260	FFR	<b>522 (B), 523 (B), 518 (B), 555 (B), 566 (D), Exp 2704 (D)</b>
Stine Seed Co., Inc., P.O. Box 231, Sheridan, IN 46069	Stine	<b>455 (RT), 488 (RT)</b>
Terra Industries, Inc., 600 4th St., P.O. Box 6000, Sioux City, IA 51102	Terra	<b>SR216 (DXL), SR215 (DXL), E218 (DXL)</b>
UniSouth Genetics, 2640C Nolensville Road, Nashville, TN 37211	USG	<b>3408 (BC), Exp 97-20 (RT), Exp 97-41 (RT), 3209 (BC)</b>
Florida Agric. Exp. Stn.	-----	<b>Arcia (V)(Triticale)</b>
University of Georgia, GA Station, 1109 Experiment St., Griffin, GA 30223	-----	<b>Fleming (RT), Roberts (V), 89482E7 (V)</b>
Indiana Agric. Exp. Stn.	-----	<b>Patterson (RT)</b>
Kentucky Agric. Exp. Stn.	-----	<b>KY 86C-61-8 (DXL)</b>
Maryland Agric. Exp. Stn.	-----	<b>Catoctin (RT), MD Breeding Lines (RT)</b>
Ohio Agric. Exp. Stn.	-----	<b>Hopewell (RT), Freedom (RT), Glory (RT)</b>
Pennsylvania Agric. Exp. Stn.	-----	<b>Pennmore (RT)</b>
Clemson University, 277 Poole Ag. Center, Box 340359, Clemson, SC 29634	-----	<b>Clemson 201 (RT)</b>
Virginia Tech and Virginia Crop Imp. Assoc., 9142 Atlee Station Rd., Mechanicsville, VA 23111	-----	<b>Madison (RT), Jackson (RT), Pocahontas (BC), Roane (RT), VA Breeding Lines (RT)</b>
University of Georgia, GA Station, 1109 Experiment St., Griffin, GA 30223	-----	<b>GA-Luttrell (V), GA-Acton (RT)</b>
Kentucky Agric. Exp. Stn.	-----	<b>Barsoy (RT)</b>
Maryland Agric. Exp. Stn.	-----	<b>MD Breeding Lines (RT)</b>
Pennsylvania Agric. Exp. Stn.	-----	<b>Pennco (RT), Pennbar 66 (RT)</b>
Clemson University, 277 Poole Ag. Center, Box 340359, Clemson, SC 29634	-----	<b>Clemson 100 (RT)</b>
Virginia Tech and Virginia Crop Imp. Assoc., 9142 Atlee Station Rd., Mechanicsville, VA 23111	-----	<b>Nomini (RT), Starling (RT), Callao (RT), Pamunkey (RT), Wysor (RT), VA Breeding Lines (RT)</b>

\* Seed treatment codes in parentheses after each entry are as follows: **RT** = Raxil/Thiram; **RXT** = Raxil XT; **RA** = Raxil - Apron; **B** = Baytan; **BC** = Baytan + Captan; **D** = Dividend; **DA** = Dividend - Apron; **DXL** = Dividend XL; **V** = Vitavax

**Table 3.** 1999 Maryland State Wheat Variety Performance Trials Averaged Over 5 Locations in Maryland - **Quantico, Queenstown, Beltsville, Clarksville, and Keedysville.**

Brand-Entry	Yield (bu/A)	Test Weight (lbs/bu)	Heading Date	Height (in)	Lodging <sup>1</sup> (0-10)	Proj. Powdery Mildew Resis. <sup>2</sup>	Beards <sup>3</sup>
USG 3209	83.3	56.8	May 9	35.9	1.8	MR	None
Roberts	81.1	56.2	May 8	38.7	2.5	MR	None
Century II	79.3	57.4	May 10	38.6	0.8	MR	None
Pocahontas	78.6	57.0	May 9	37.6	0.2	R-MR	None
Quantum 7203 <sup>§</sup>	77.9	57.5	May 11	41.1	0.2	MR	None
Pioneer 2643	77.3	57.3	May 9	33.3	0.0	MR	None
VA 97W-358	77.3	56.2	May 10	36.8	4.8	MR	None
VA 96-54-326	77.0	58.0	May 8	39.1	1.3	MR	None
Southern States FFR-518	76.9	56.0	May 8	36.5	2.7	MR	None
Jackson	76.8	57.6	May 12	39.6	2.2	MR-MS	None
USG Exp. 97-20	76.7	55.5	May 11	36.3	0.0	R	None
Southern States FFR-Exp. 2704	76.5	58.4	May 11	36.7	1.0	MR	None
USG 3408	76.3	57.5	May 12	39.1	1.8	MR	None
Quantum 706 <sup>§</sup>	76.1	56.5	May 12	41.5	0.5	MR	None
Quantum 7123 <sup>§</sup>	75.6	57.4	May 11	41.5	1.0	MR	None
Hoffman 614	75.5	57.4	May 10	39.2	0.3	MR-MS	None
Roane	75.3	58.1	May 14	36.9	1.8	R	None
Hoffman 37	75.0	56.2	May 11	39.6	0.5	MR-MS	Long
Fleming	75.0	58.1	May 4	35.5	0.3	R	Long
NK Coker 9835	74.7	56.4	May 11	35.3	1.2	MR-MS	None
Pioneer 2552	74.6	57.4	May 12	38.4	1.3	MR-MS	Long
MD 90011-8	74.4	57.4	May 7	39.8	2.8	MS	None
Madison	74.2	56.5	May 8	41.7	1.3	MR	None
Trical 498*	74.0	48.8	May 2	44.8	0.0	R	Long
89482E7	73.8	56.9	May 9	38.3	2.0	MR	Long
MD 88130-24	73.3	55.8	May 10	42.0	0.2	R-MR	None
Hyttest W215	73.3	55.9	May 11	37.9	0.5	MR-MS	Long
Featherstone 520	73.2	58.4	May 10	38.6	2.3	MR-MS	None
MD PW 71-19	73.1	56.9	May 11	36.0	3.0	R-MR	None
Pioneer 25R57	72.8	55.6	May 11	39.8	0.5	MR-MS	None
MD PW 71-16	72.5	56.9	May 11	35.8	4.8	MR	None
NK Coker 9803	71.8	58.2	May 10	38.0	3.0	MR-MS	None
NK Coker 9704	71.8	58.9	May 10	37.5	1.8	MR	None
USG Exp. 97-41	71.0	56.1	May 11	40.1	0.5	MR-MS	Long
AgriPro Mason	70.9	56.4	May 9	40.2	0.7	MR	None
Southern States FFR-522	70.8	58.1	May 10	39.2	2.7	MR-MS	None
VA 97W-533	70.7	56.4	May 12	35.8	2.5	MR	None
DynaGro 422	70.7	56.0	May 11	39.4	1.0	MR-MS	Long
AgriPro Hickory	70.6	57.0	May 9	40.7	2.5	MR	None
DynaGro 419	70.5	56.7	May 14	42.1	1.2	MR	None
Hoffman 95	70.1	57.4	May 12	40.2	0.3	MR-MS	None
AgriPro Patton	70.0	55.6	May 11	41.1	0.7	MR	None

Quantum EH 9839 <sup>§</sup>	69.6	57.4	May 14	44.5	1.2	MR	Mix
AgriPro Foster	69.6	56.9	May 13	39.7	1.2	MR	None
KY 86C-61-8	68.7	56.0	May 11	39.8	1.0	S	None
NK Coker 9663	68.5	57.1	May 10	44.8	3.0	MR-MS	None
Penmore	68.3	56.8	May 13	44.5	1.7	MR-MS	None
Glory	68.0	57.6	May 13	38.8	0.3	MR-MS	None
Arcia*	67.9	53.2	May 3	48.2	2.2	R	Long
Hytest W9850	67.8	56.8	May 14	41.9	0.3	MR	None
Freedom	67.1	55.6	May 13	41.1	1.5	MR	None
Terra E218	66.9	57.0	May 14	41.9	0.2	MR	None
MD PW 31-64	66.8	54.8	May 10	36.8	1.0	MR	Long
Stine 488	66.5	56.7	May 14	41.5	0.8	MR	None
Terra SR215	66.3	56.6	May 12	43.1	2.5	MR-MS	None
Hopewell	66.3	56.1	May 14	39.6	0.5	MR	None
Stine 455	66.3	56.1	May 11	40.5	2.7	MR	None
Terra SR216	65.9	55.7	May 12	40.5	2.8	MR-MS	None
MD 89130-43	65.7	57.4	May 10	35.4	0.8	MR	None
Patterson	65.4	57.8	May 10	41.8	1.3	MS	None
Southern States FFR-523	65.3	56.4	May 10	35.6	3.8	MR-MS	None
Southern States FFR-566	65.2	57.8	May 13	40.9	0.7	MR	None
BL 931167	64.5	56.4	May 14	38.0	0.0	MR	Long
DynaGro 424	64.3	54.7	May 15	40.7	0.8	MS	None
Clemson 201	61.8	56.7	May 9	39.1	4.5	MR-MS	None
Southern States FFR-555	61.6	56.0	May 14	37.1	0.5	MS	None
Catocin	59.4	56.8	May 12	40.6	3.0	MS	None
AgriPro Hondo <sup>^</sup>	58.5	58.5	May 12	40.4	5.0	R	Long
<b>Means</b>	<b>71.2</b>	<b>56.7</b>	<b>May 11</b>	<b>39.5</b>	<b>1.5</b>	-----	-----
<b>LSD (.05)</b>	<b>6.8</b>	<b>0.9</b>	<b>1 Day</b>	<b>0.9</b>	<b>1.6</b>	-----	-----
<b>CV (%)</b>	<b>13.4</b>	<b>2.2</b>	<b>9.0</b>	<b>3.3</b>	-----	-----	-----

<sup>1</sup> Lodging based on a score of 0 - 10 where 0 = no lodging and 10 = flat. Lodging scores taken at Queenstown and Keedysville only.

<sup>2</sup> Projected Powdery Mildew Resistance estimates genetic resistance of the untreated entry. Ratings for powdery mildew were taken at Queenstown only. R=Resistant, MR=Moderately Resistant, MS=Moderately Susceptible, and S=Susceptible. Disease ratings provided by Dr. Arv Grybauskas, Dept. of Natural Resource Sciences, U of MD.

<sup>3</sup> Entries with a few awns at the tip of the seed head were considered to be non-awned (or non-bearded). Only entries with awns throughout were labeled as bearded.

\* This is a wheat/rye cross or triticale, not a wheat variety. Its standard test weight is like that of barley, 48 lbs/bu.

<sup>§</sup> Quantum brand entries in this test are hybrid wheats.

<sup>^</sup> This entry is a hard red winter wheat.

**Table 4.** Relative Yield of Wheat Entries Compared to the Mean Yield of all Entries at Each Location and Throughout the State in 1999.

	State	Quantico	Queenstown	Beltsville	Clarksville	Keedysville
<b>Brand-Entry</b>	<b>Relative Yield (%)</b>					
USG 3209	117.0*	117.4*	111.9*	129.6*	111.8*	115.0*
Roberts	113.9*	109.2*	125.0*	121.6*	101.5	115.0*
Century II	111.4*	110.0*	121.4*	109.9	98.6	119.5*
Pocahontas	110.4*	116.9*	115.6*	100.7	95.0	126.4*
Quantum 7203 <sup>s</sup>	109.4*	94.7	96.1	115.7*	114.8*	125.1*
Pioneer 2643	108.6*	104.0	110.3*	111.5	105.3*	112.8*
VA 97W-358	108.6*	120.8*	97.5	125.0*	101.2	98.7
VA 96-54-326	108.1*	116.2*	113.7*	104.4	102.7	104.7*
Southern States FFR-518	108.0*	121.1*	102.1*	108.4	97.5	112.2*
Jackson	107.9*	105.4	114.9*	107.1	106.3*	106.2*
USG Exp. 97-20	107.7*	97.4	118.6*	101.2	108.6*	113.3*
Southern States FFR Exp. 2704	107.4*	102.1	110.7*	108.4	98.6	119.5*
USG 3408	107.2	112.8*	116.7*	93.7	95.3	119.8*
Quantum 706 <sup>s</sup>	106.9	105.4	104.6*	103.0	113.0*	107.4*
Quantum 7123 <sup>s</sup>	106.2	110.7*	99.1	114.2*	105.5*	101.3
Hoffman 614	106.0	109.5*	107.3*	107.0	103.9*	-----
Roane	105.8	111.2*	122.3*	90.4	96.9	109.4*
Hoffman 37	105.3	108.8*	108.0*	95.9	107.8*	105.3*
Fleming	105.3	107.4	119.3*	92.6	91.3	118.6*
NK Coker 9835	104.9	101.2	105.6*	114.2*	100.0	104.4*
Pioneer 2552	104.8	99.3	116.5*	93.7	109.3*	105.2*
MD 90011-8	104.5	98.9	116.2*	109.6	107.1*	90.3
Madison	104.2	96.4	114.4*	100.7	102.4	108.2*
Trical 498 <sup>l</sup>	103.9	95.2	98.4	116.7*	115.5*	91.7
89482E7	103.6	113.4*	111.4*	102.9	100.0	91.0
MD 88130-24	102.9	101.7	93.7	107.3	103.4*	108.4*
Hyttest W215	102.9	92.2	102.7*	105.9	99.1	115.6*
Featherstone 520	102.8	101.8	106.7*	104.5	99.5	102.8*
MD PW 71-19	102.7	111.4*	93.4	98.4	105.2*	101.3
Pioneer 25R57	102.1	113.3*	92.0	102.5	98.0	105.6*
MD PW 71-16	101.8	106.8	80.5	109.6	107.4*	103.1*
NK Coker 9803	100.8	100.8	101.5*	102.3	99.8	100.1
NK Coker 9704	100.8	95.8	103.1*	101.4	102.9	100.7
USG Exp. 97-41	99.7	107.8*	97.8	94.5	102.0	95.9
AgriPro Mason	99.6	101.5	101.9*	101.0	91.9	103.1*
Southern States FFR-522	99.4	92.9	107.4*	99.0	107.1*	89.7
VA 97W-533	99.3	114.9*	105.3*	95.5	90.1	91.7
DynaGro 422	99.3	92.3	111.7*	90.0	107.0*	94.4
AgriPro Hickory	99.2	97.5	98.2	103.3	100.7	95.3
DynaGro 419	99.0	101.5	87.3	106.1	100.1	99.4
Hoffman 95	98.4	92.6	113.8*	94.2	90.3	103.7*
AgriPro Patton	98.3	100.8	89.9	95.2	92.4	114.4*

Quantum EH 9839 <sup>§</sup>	97.8	90.8	98.7	95.6	102.5	100.6
AgriPro Foster	97.8	104.6	90.2	96.8	103.2*	92.2
KY 86C-61-8	96.5	93.8	90.5	99.8	102.7	94.7
NK Coker 9663	96.2	92.3	117.1*	98.2	90.3	84.5
Penmore	95.9	90.1	102.1*	92.7	100.7	93.5
Glory	95.5	102.5	87.9	89.1	95.2	102.2
Arcia <sup>¶</sup>	95.4	87.0	84.1	81.5	114.6*	106.2*
Hyttest W9850	95.2	83.0	100.7	86.8	101.9	103.2*
Freedom	94.2	94.7	70.8	95.8	94.7	114.7*
Terra E218	94.0	92.3	75.0	96.1	99.3	105.7*
MD PW 31-64	93.8	98.3	74.7	99.6	102.4	91.9
Stine 488	93.4	94.4	84.4	81.4	98.1	107.8*
Terra SR215	93.1	85.6	83.8	96.5	105.6*	92.0
Hopewell	93.1	85.0	81.7	95.6	99.0	103.4*
Stine 455	93.1	97.3	98.4	100.4	90.6	78.8
Terra SR216	92.5	93.1	93.9	89.1	98.4	86.9
MD 89130-43	92.3	98.6	78.3	95.2	94.4	93.8
Patterson	91.8	77.9	96.1	85.0	96.9	103.4*
Southern States FFR-523	91.7	97.8	108.5*	102.5	93.7	55.2
Southern States FFR-566	91.6	90.9	82.0	91.1	87.3	107.2*
BL 931167	90.6	84.8	87.9	83.0	85.6	113.1*
DynaGro 424	90.3	85.7	82.0	103.2	100.7	78.0
Clemson 201	86.8	95.0	93.3	105.2	89.2	50.4
Southern States FFR-555	86.5	96.9	83.6	72.5	89.3	88.9
Catoctin	83.4	92.0	89.3	94.2	76.2	66.7
AgriPro Hondo <sup>^</sup>	82.2	86.4	98.1	84.9	101.0	36.9
Hoffman 57 <sup>ˆ</sup>	-----	-----	-----	-----	-----	102.5*
<b>Loc. Mean Yield (bu/A)</b>	<b>71.2</b>	<b>71.6</b>	<b>67.2</b>	<b>68.8</b>	<b>80.6</b>	<b>67.8</b>

\* The relative yield of those entries with an asterisk are not significantly different (LSD .05) from the highest yielding entry in that location.

<sup>¶</sup> This is a wheat/rye cross or triticale, not a wheat variety. Its standard test weight is like that of barley, 48 lbs/bu.

<sup>§</sup> Quantum brand entries in this test are hybrid wheats.

<sup>^</sup> This is a hard red winter wheat type.

<sup>ˆ</sup> Due to the late arrival of seed, Hoffman 57 was substituted for Hoffman 614 at Keedysville only.

Relative yields are expressed as the percent of the mean yield of all entries at each location. Therefore, an entry with a relative yield that is consistently greater than 100 is a variety that consistently yields higher than the mean yield of all of the entries at that location.

**Table 5.** Three Year Average Yield Performance of Wheat Entries in Maryland, 1997 - 1999.

Brand-Entry	State		East of the Bay		West of the Bay	
	bu/A	Rank	bu/A	Rank	bu/A	Rank
Trical 498 <sup>‡</sup>	97.7	1	87.0	1	106.1	3
Pocahontas	94.5	2	76.5	11	110.7	1
Jackson	93.4	3	77.5	6	107.1	2
DynaGro 424	92.7	4	77.3	7	105.2	5
Southern States 518	92.5	5	78.0	5	105.4	4
Pioneer 2552	91.2	6	77.1	8	103.5	6
Hoffman 37	91.2	6	80.7	4	100.2	8
Madison	90.8	8	80.8	3	98.9	12
DynaGro 422	90.2	9	82.3	2	96.9	17
NK Coker 9663	89.7	10	66.8	25	99.8	9
NK Coker 9835	89.3	11	75.7	13	100.8	7
Featherstone 520	88.7	12	76.6	10	99.3	10
Glory	88.4	13	76.3	12	98.7	13
Hopewell	88.0	14	75.1	14	98.1	14
AgriPro Mason	87.7	15	76.7	9	97.3	15
Freedom	87.6	16	74.7	16	97.2	16
Southern States 523	86.1	17	74.0	17	96.6	18
Southern States 555	85.4	18	74.8	15	94.2	21
NK Coker 9803	85.3	19	69.9	23	99.1	11
AgriPro Foster	85.2	20	72.3	19	96.1	20
Hoffman 95	84.3	21	73.2	18	93.4	22
NK Coker 9704	83.5	22	69.2	24	96.5	19
Patterson	83.1	23	70.5	22	93.4	22
Catoctin	82.7	24	71.7	20	92.4	24
Penmore	82.4	25	70.6	21	91.9	25
Clemson 201	76.2	26	66.2	26	84.9	26
AgriPro Hickory*	95.7	-----	84.7	-----	106.2	-----
USG 3209*	80.3	-----	70.3	-----	86.9	-----
Quantum 7203 <sup>§*</sup>	79.6	-----	66.7	-----	88.2	-----
Quantum 706 <sup>§*</sup>	77.5	-----	68.9	-----	83.2	-----
Roberts*	77.1	-----	71.6	-----	80.8	-----
AgriPro Patton*	76.9	-----	66.6	-----	83.8	-----
Pioneer 2643*	75.9	-----	65.6	-----	82.8	-----
Southern States 522*	75.8	-----	66.2	-----	82.1	-----
MD 88130-24*	74.6	-----	64.4	-----	81.4	-----
Pioneer 25R57*	74.4	-----	67.0	-----	79.4	-----
Roane*	74.1	-----	69.3	-----	77.2	-----
Fleming*	72.8	-----	66.7	-----	76.8	-----
Hyttest W9850*	72.3	-----	62.1	-----	79.0	-----

<sup>‡</sup> This is a wheat/rye cross or triticale, not a wheat variety. Its standard test weight is like that of barley, 48 lbs/bu.

<sup>§</sup> Quantum brand entries in this test are hybrid wheats.

\* Data for two years only - values cannot be ranked.

**Table 6.** 1999 Maryland State Wheat Variety Performance Trials at the Poplar Hill Facility - **Quantico**, MD.

<b>Brand-Entry</b>	<b>Yield (bu/A)</b>	<b>Test Weight (lbs/bu)</b>	<b>Heading Date</b>	<b>Height (in)</b>
Southern States FFR-518	86.7	55.0	May 2	38.3
VA 97W-358	86.5	55.4	May 5	38.8
USG 3209	84.1	56.8	May 3	37.0
Pocahontas	83.7	56.0	May 5	39.0
VA 96-54-326	83.2	56.6	May 4	41.0
VA 97W-533	82.3	57.1	May 8	37.2
89482E7	81.2	57.1	May 4	40.8
Pioneer 25R57	81.1	55.8	May 6	41.8
USG 3408	80.8	57.1	May 6	41.7
MD PW 71-19	79.8	57.6	May 6	37.0
Roane	79.6	57.7	May 10	38.3
Quantum 7123 <sup>§</sup>	79.3	56.5	May 7	42.7
Century II	78.8	56.7	May 5	40.5
Hoffman 614	78.4	56.6	May 4	40.5
Roberts	78.2	55.4	May 3	41.3
Hoffman 37	77.9	55.7	May 6	41.3
USG Exp. 97-41	77.2	55.4	May 6	41.5
Fleming	76.9	56.2	April 28	37.0
MD PW 71-16	76.5	57.1	May 5	37.0
Quantum 706 <sup>§</sup>	75.5	55.7	May 6	42.7
Jackson	75.5	56.9	May 7	41.2
AgriPro Foster	74.9	55.8	May 9	39.8
Pioneer 2643	74.5	57.3	May 4	34.8
Glory	73.4	56.8	May 9	39.0
Southern States FFR Exp. 2704	73.1	57.0	May 5	38.2
Featherstone 520	72.9	57.2	May 5	39.3
MD 88130-24	72.8	56.1	May 6	43.2
AgriPro Mason	72.7	56.3	May 4	42.5
DynaGro 419	72.7	55.1	May 10	42.5
NK Coker 9835	72.5	56.0	May 6	36.2
NK Coker 9803	72.2	57.2	May 5	39.5
AgriPro Patton	72.2	54.5	May 7	42.0
Pioneer 2552	71.1	54.8	May 8	38.0
MD 90011-8	70.8	57.3	May 1	42.2
MD 89130-43	70.6	56.8	May 5	36.8
MD PW 31-64	70.4	54.0	May 5	38.3
USG Exp. 97-20	70.1	55.3	May 6	38.3
Southern States FFR-523	70.0	55.5	May 5	37.5
AgriPro Hickory	69.8	56.6	May 5	41.3
Stine 455	69.7	55.2	May 6	42.7
Southern States FFR-555	69.4	55.5	May 8	39.5
Madison	69.0	56.8	May 4	43.8
NK Coker 9704	68.6	57.3	May 5	38.5

Trical 498*	68.2	49.1	April 26	44.8
Clemson 201	68.0	55.6	May 5	40.7
Quantum 7203 <sup>§</sup>	67.8	56.3	May 5	43.0
Freedom	67.8	54.4	May 9	42.2
Stine 488	67.6	54.6	May 10	42.3
KY 86C-61-8	67.2	54.4	May 5	41.7
Terra SR216	66.7	55.1	May 8	41.0
Southern States FFR-522	66.5	56.9	May 6	40.5
Hoffman 95	66.3	56.0	May 9	39.8
NK Coker 9663	66.1	55.9	May 7	45.5
DynaGro 422	66.1	55.1	May 6	41.5
Terra E218	66.1	55.1	May 10	43.8
Hystest W215	66.0	55.9	May 7	39.3
Catocin	65.9	55.6	May 7	42.8
Southern States FFR-566	65.1	56.5	May 8	42.8
Quantum EH 9839 <sup>§</sup>	65.0	56.4	May 10	44.0
Pennmore	64.5	55.9	May 10	45.0
Arcia*	62.3	53.2	April 26	50.0
AgriPro Hondo <sup>^</sup>	61.9	55.9	May 9	41.3
DynaGro 424	61.4	54.2	May 11	43.2
Terra SR215	61.3	54.0	May 9	42.5
Hopewell	60.9	54.9	May 12	39.8
BL 931167	60.7	54.9	May 10	38.8
Hystest W9850	59.4	55.4	May 11	44.0
Patterson	55.8	56.6	May 7	42.3
<b>Location Means</b>	<b>71.6</b>	<b>55.8</b>	<b>May 6</b>	<b>40.8</b>
<b>Statewide Means</b>	<b>71.2</b>	<b>56.7</b>	<b>May 11</b>	<b>39.5</b>
<b>LSD (.05)</b>	<b>9.7</b>	<b>1.7</b>	<b>1 Day</b>	<b>2.1</b>
<b>CV (%)</b>	<b>8.4</b>	<b>1.9</b>	<b>12.9</b>	<b>3.2</b>

\* This is a wheat/rye cross or triticale, not a wheat variety. Its standard test weight is like that of barley, 48 lbs/bu.

<sup>§</sup> Quantum brand entries in this test are hybrid wheats.

<sup>^</sup> This entry is a hard red winter wheat.

Pre-harvest sprouting at this location lowered test weights.

**Table 7.** 1999 Maryland State Wheat Variety Performance Trials at the Wye Research and Education Center - Queenstown, MD.

<b>Brand-Entry</b>	<b>Yield (bu/A)</b>	<b>Test Weight (lbs/bu)</b>	<b>Heading Date</b>	<b>Height (in)</b>	<b>Lodging<sup>1</sup> (0-10)</b>
Roberts	84.0	56.0	May 6	39.3	1.0
Roane	82.2	57.1	May 12	38.2	1.0
Century II	81.6	56.7	May 7	40.7	0.7
Fleming	80.2	57.1	May 1	37.8	0.0
USG Exp. 97-20	79.7	55.1	May 8	37.0	0.0
NK Coker 9663	78.7	57.0	May 7	46.3	1.0
USG 3408	78.4	56.7	May 9	40.3	1.0
Pioneer 2552	78.3	55.8	May 9	40.8	0.3
MD 90011-8	78.1	57.1	May 4	41.8	1.7
Pocahontas	77.7	55.0	May 8	39.3	0.0
Jackson	77.2	55.9	May 9	40.5	2.0
Madison	76.9	56.1	May 7	42.2	0.7
Hoffman 95	76.5	56.2	May 9	41.5	0.0
VA 96-54-326	76.4	57.7	May 5	41.5	0.7
USG 3209	75.2	55.0	May 7	36.5	1.7
DynaGro 422	75.1	54.5	May 8	40.2	0.0
89482E7	74.9	55.1	May 8	39.7	0.3
Southern States FFR Exp. 2704	74.4	56.4	May 8	38.5	0.7
Pioneer 2643	74.1	56.0	May 7	35.0	0.0
Southern States FFR-523	72.9	55.3	May 8	36.7	0.3
Hoffman 37	72.6	54.5	May 8	41.5	0.0
Southern States FFR-522	72.2	57.7	May 9	41.0	1.3
Hoffman 614	72.1	56.0	May 7	39.5	0.3
Featherstone 520	71.7	56.3	May 9	40.3	1.3
NK Coker 9835	71.0	55.0	May 8	37.0	0.7
VA 97W-533	70.8	56.0	May 10	37.5	0.7
Quantum 706 <sup>§</sup>	70.3	54.4	May 9	42.2	0.0
NK Coker 9704	69.3	57.2	May 8	39.0	1.7
Hyttest W215	69.0	54.7	May 9	38.7	0.0
Southern States FFR-518	68.6	54.6	May 6	37.5	1.7
Pennmore	68.6	54.7	May 12	45.5	0.7
AgriPro Mason	68.5	55.5	May 6	40.7	0.3
NK Coker 9803	68.2	56.7	May 7	39.3	2.3
Hyttest W9850	67.7	54.9	May 12	42.7	0.0
Quantum 7123 <sup>§</sup>	66.6	54.9	May 9	42.3	0.3
Quantum EH 9839 <sup>§</sup>	66.3	54.5	May 13	45.3	1.3
Trical 498*	66.1	49.7	April 29	47.2	0.0
Stine 455	66.1	54.0	May 8	42.8	0.3
AgriPro Hickory	66.0	55.7	May 7	40.8	0.0
AgriPro Hondo <sup>^</sup>	65.9	57.0	May 9	40.8	1.0
USG Exp. 97-41	65.7	54.6	May 8	41.3	0.0
VA 97W-358	65.5	55.0	May 9	37.8	4.0

Patterson	64.6	56.1	May 9	42.7	0.0
Quantum 7203 <sup>§</sup>	64.6	54.9	May 9	41.2	0.0
Terra SR216	63.1	54.1	May 10	41.8	1.0
MD 88130-24	63.0	54.3	May 8	43.2	0.0
MD PW 71-19	62.8	55.0	May 9	36.7	2.7
Clemson 201	62.7	56.1	May 7	41.2	1.7
Pioneer 25R57	61.8	54.0	May 8	41.5	0.0
KY 86C-61-8	60.8	54.7	May 9	41.0	0.3
AgriPro Foster	60.6	54.4	May 11	41.7	2.0
AgriPro Patton	60.4	53.4	May 9	41.7	0.3
Catoctin	60.0	55.5	May 9	41.7	0.7
BL 931167	59.1	55.0	May 13	39.3	0.0
Glory	59.1	56.6	May 11	40.0	0.3
DynaGro 419	58.7	55.0	May 12	43.0	0.0
Stine 488	56.7	54.5	May 13	43.0	0.0
Arcia*	56.5	54.1	May 1	47.8	0.3
Terra SR215	56.3	55.1	May 9	43.5	1.0
Southern States FFR-555	56.2	54.5	May 11	38.3	0.3
DynaGro 424	55.1	52.7	May 13	41.0	0.0
Southern States FFR-566	55.1	56.1	May 10	42.8	0.3
Hopewell	54.9	54.5	May 13	40.2	0.3
MD PW 71-16	54.1	54.7	May 9	37.0	5.0
MD 89130-43	52.6	55.5	May 8	36.3	1.0
Terra E218	50.4	54.9	May 13	43.0	0.0
MD PW 31-64	50.2	52.3	May 8	37.2	0.3
Freedom	47.6	53.5	May 12	42.8	1.7
<b>Location Means</b>	<b>67.2</b>	<b>55.2</b>	<b>May 8</b>	<b>40.6</b>	<b>0.7</b>
<b>Statewide Means</b>	<b>71.2</b>	<b>56.7</b>	<b>May 11</b>	<b>39.5</b>	<b>1.5</b>
<b>LSD (.05)</b>	<b>16.1</b>	<b>1.6</b>	<b>1 Day</b>	<b>1.3</b>	<b>1.1</b>
<b>CV (%)</b>	<b>14.8</b>	<b>1.7</b>	<b>8.3</b>	<b>2.0</b>	<b>-----</b>

<sup>1</sup> Lodging based on a score of 0 - 10 where 0 = no lodging and 10 = flat. Lodging scores taken at Queenstown and Keedysville only.

\* This is a wheat/rye cross or triticale, not a wheat variety. Its standard test weight is like that of barley, 48 lbs/bu.

<sup>§</sup> Quantum brand entries in this test are hybrid wheats.

<sup>^</sup> This entry is a hard red winter wheat type.

Pre-harvest sprouting at this location lowered test weights.

**Table 8.** 1999 Maryland State Wheat Variety Performance Trials at Hayden Farm - **Beltsville, MD**

<b>Brand-Entry</b>	<b>Yield (bu/A)</b>	<b>Test Weight (lbs/bu)</b>	<b>Heading Date</b>	<b>Height (in)</b>
USG 3209	89.2	57.5	May 9	37.2
VA 97W-358	86.0	58.1	May 10	38.0
Roberts	83.7	58.5	May 8	40.3
Trical 498*	80.3	47.9	April 30	46.8
Quantum 7203 <sup>s</sup>	79.6	59.4	May 11	42.3
Quantum 7123 <sup>s</sup>	78.6	58.6	May 12	41.3
NK Coker 9835	78.6	56.6	May 10	36.5
Pioneer 2643	76.7	58.8	May 9	33.5
Century II	75.6	58.8	May 9	39.8
MD 90011-8	75.4	58.1	May 8	40.3
MD PW 71-16	75.4	58.2	May 12	36.8
Southern States FFR-518	74.6	57.0	May 10	38.2
Southern States FFR Exp. 2704	74.6	60.1	May 11	35.8
MD 88130-24	73.8	57.3	May 9	43.5
Jackson	73.7	60.8	May 11	41.0
Hoffman 614	73.6	58.3	May 10	39.7
DynaGro 419	73.0	58.7	May 14	42.7
Hyttest W215	72.9	56.4	May 12	38.7
Clemson 201	72.4	58.8	May 8	39.2
Featherstone 520	71.9	61.0	May 10	38.8
VA 96-54-326	71.8	59.1	May 9	39.2
AgriPro Hickory	71.1	57.5	May 10	41.0
DynaGro 424	71.0	57.0	May 15	42.5
Quantum 706 <sup>s</sup>	70.9	57.6	May 12	42.2
89482E7	70.8	59.0	May 8	39.0
Pioneer 25R57	70.6	57.7	May 10	40.7
Southern States FFR-523	70.5	57.9	May 11	35.8
NK Coker 9803	70.4	61.4	May 10	38.3
NK Coker 9704	69.8	61.4	May 11	38.3
USG Exp. 97-20	69.6	56.6	May 11	37.0
AgriPro Mason	69.5	57.1	May 9	41.2
Madison	69.3	57.2	May 8	42.5
Pocahontas	69.3	59.0	May 9	37.7
Stine 455	69.1	57.3	May 11	41.3
KY 86C-61-8	68.7	57.2	May 10	41.3
MD PW 31-64	68.5	57.4	May 11	37.5
Southern States FFR-522	68.1	60.5	May 11	40.0
MD PW 71-19	67.7	58.1	May 12	36.5
NK Coker 9663	67.6	57.6	May 9	44.3
AgriPro Foster	66.6	59.0	May 13	40.3
Terra SR215	66.4	58.8	May 12	44.0
Terra E218	66.1	59.4	May 15	42.5
Hoffman 37	66.0	58.3	May 11	40.2

Freedom	65.9	57.2	May 13	40.5
Quantum EH 9839 <sup>§</sup>	65.8	59.7	May 14	46.0
Hopewell	65.8	57.6	May 14	40.0
VA 97W-533	65.7	58.6	May 13	36.5
AgriPro Patton	65.5	59.0	May 11	41.7
MD 89130-43	65.5	59.2	May 10	35.3
USG Exp. 97-41	65.0	58.5	May 11	40.3
Hoffman 95	64.8	58.4	May 12	42.3
Catoctin	64.8	57.5	May 11	42.3
Pioneer 2552	64.5	60.3	May 12	40.0
USG 3408	64.5	59.9	May 12	39.3
Pennmore	63.8	59.4	May 12	44.3
Fleming	63.7	61.4	May 4	34.3
Southern States FFR-566	62.7	59.7	May 13	41.0
Roane	62.2	61.0	May 14	36.3
DynaGro 422	61.9	58.9	May 12	39.7
Terra SR216	61.3	57.3	May 12	41.3
Glory	61.3	59.6	May 13	39.7
Hyttest W9850	59.7	59.1	May 14	41.2
Patterson	58.5	59.1	May 11	42.0
AgriPro Hondo <sup>^</sup>	58.4	60.2	May 11	40.0
BL 931167	57.1	58.6	May 14	37.8
Arcia*	56.1	51.8	May 3	50.0
Stine 488	56.0	58.6	May 14	40.5
Southern States FFR-555	49.9	58.6	May 14	37.0
<b>Location Means</b>	<b>68.8</b>	<b>58.4</b>	<b>May 11</b>	<b>40.0</b>
<b>Statewide Means</b>	<b>71.2</b>	<b>56.7</b>	<b>May 11</b>	<b>39.5</b>
<b>LSD (.05)</b>	<b>12.0</b>	<b>1.5</b>	<b>1 Day</b>	<b>1.8</b>
<b>CV (%)</b>	<b>10.8</b>	<b>1.6</b>	<b>6.7</b>	<b>2.8</b>

\* This is a wheat/rye cross or triticale, not a wheat variety. Its standard test weight is like that of barley, 48 lbs/bu.

<sup>§</sup> Quantum brand entries in this test are hybrid wheats.

<sup>^</sup> This entry is a hard red winter wheat type.

**Table 9.** 1999 Maryland State Wheat Variety Performance Trials - **Clarksville, MD.**

<b>Brand-Entry</b>	<b>Yield (bu/A)</b>	<b>Test Weight (lbs/bu)</b>	<b>Heading Date</b>	<b>Height (in)</b>
Trical 498*	93.1	48.2	May 6	41.5
Quantum 7203 <sup>§</sup>	92.5	59.1	May 13	37.8
Arcia*	92.4	52.1	May 8	48.0
Quantum 706 <sup>§</sup>	91.1	57.8	May 15	38.8
USG 3209	90.1	58.6	May 12	32.8
Pioneer 2552	88.1	58.7	May 15	34.2
USG Exp. 97-20	87.5	56.2	May 14	33.3
Hoffman 37	86.9	58.4	May 14	35.8
MD PW 71-16	86.6	58.1	May 14	32.3
MD 90011-8	86.3	57.7	May 11	36.0
Southern States FFR-522	86.3	60.6	May 13	35.7
DynaGro 422	86.2	57.4	May 14	36.7
Jackson	85.7	59.1	May 15	36.5
Terra SR215	85.1	58.7	May 14	41.5
Quantum 7123 <sup>§</sup>	85.0	58.4	May 14	38.7
Pioneer 2643	84.9	59.3	May 12	30.5
MD PW 71-19	84.8	58.4	May 15	32.8
Hoffman 614	83.7	58.7	May 13	34.2
MD 88130-24	83.3	57.0	May 12	38.5
AgriPro Foster	83.2	58.6	May 16	37.2
NK Coker 9704	82.9	59.9	May 14	34.7
KY 86C-61-8	82.8	59.1	May 13	35.3
VA 96-54-326	82.8	59.5	May 12	35.3
Quantum EH 9839 <sup>§</sup>	82.6	58.4	May 16	42.7
MD PW 31-64	82.5	57.0	May 13	34.2
Madison	82.5	57.0	May 12	39.0
USG Exp. 97-41	82.2	57.3	May 14	37.5
Hyttest W9850	82.1	58.0	May 17	38.5
Roberts	81.8	56.6	May 12	34.5
VA 97W-358	81.6	57.0	May 14	33.2
AgriPro Hondo <sup>^</sup>	81.4	60.7	May 14	37.7
AgriPro Hickory	81.2	58.0	May 11	37.8
DynaGro 424	81.2	55.6	May 17	37.3
Pennmore	81.2	58.9	May 15	41.8
DynaGro 419	80.7	58.8	May 17	38.2
89482E7	80.6	56.7	May 11	34.2
NK Coker 9835	80.6	58.6	May 15	31.5
NK Coker 9803	80.4	59.4	May 13	34.8
Featherstone 520	80.2	60.0	May 14	35.8
Terra E218	80.0	59.4	May 17	37.7
Hyttest W215	79.9	57.7	May 14	34.7
Hopewell	79.8	58.4	May 16	36.7
Southern States FFR Exp. 2704	79.5	59.8	May 14	33.3

Century II	79.5	58.2	May 13	33.2
Terra SR216	79.3	57.1	May 14	37.5
Stine 488	79.1	59.6	May 17	37.0
Pioneer 25R57	79.0	56.8	May 14	35.7
Southern States FFR-518	78.6	57.6	May 11	32.3
Patterson	78.1	59.6	May 12	38.8
Roane	78.1	59.1	May 17	33.0
USG 3408	76.8	57.6	May 15	34.8
Glory	76.7	58.7	May 16	35.8
Pocahontas	76.6	58.1	May 12	34.0
Freedom	76.3	56.9	May 16	37.3
MD 89130-43	76.1	58.5	May 12	33.0
Southern States FFR-523	75.5	56.9	May 13	31.3
AgriPro Patton	74.5	56.8	May 13	37.8
AgriPro Mason	74.1	57.1	May 12	37.7
Fleming	73.6	57.9	May 9	32.3
Stine 455	73.0	56.9	May 14	35.2
Hoffman 95	72.8	59.4	May 14	36.0
NK Coker 9663	72.8	58.0	May 13	41.5
VA 97W-533	72.6	56.9	May 16	31.0
Southern States FFR-555	72.0	58.3	May 17	32.7
Clemson 201	71.9	57.3	May 12	35.8
Southern States FFR-566	70.4	58.4	May 16	37.5
BL 931167	69.0	57.7	May 17	35.2
Catoctin	61.4	58.7	May 16	36.0
<b>Location Means</b>	<b>80.6</b>	<b>58.0</b>	<b>May 14</b>	<b>36.0</b>
<b>Statewide Means</b>	<b>71.2</b>	<b>56.7</b>	<b>May 11</b>	<b>39.5</b>
<b>LSD (.05)</b>	<b>10.1</b>	<b>1.6</b>	<b>1 Day</b>	<b>1.9</b>
<b>CV (%)</b>	<b>7.8</b>	<b>1.8</b>	<b>4.4</b>	<b>3.3</b>

\* This is a wheat/rye cross or triticale, not a wheat variety. Its standard test weight is like that of barley, 48 lbs/bu.

§ Quantum brand entries in this test are hybrid wheats.

^ This entry is a hard red winter wheat type.

**Table 10.** 1999 Maryland State Wheat Variety Performance Trials - Keedysville, MD.

<b>Brand-Entry</b>	<b>Yield (bu/A)</b>	<b>Test Weight (lbs/bu)</b>	<b>Heading Date</b>	<b>Height (in)</b>	<b>Lodging<sup>1</sup> (0-10)</b>
Pocahontas	85.7	56.6	May 13	38.0	0.3
Quantum 7203 <sup>§</sup>	84.8	57.6	May 16	41.2	0.3
USG 3408	81.2	56.3	May 17	39.3	2.7
Southern States FFR Exp. 2704	81.0	58.7	May 17	37.8	1.3
Century II	81.0	56.6	May 14	38.8	1.0
Fleming	80.4	57.9	May 9	36.2	0.7
Hyttest W215	78.4	55.0	May 14	38.2	1.0
Roberts	78.0	54.7	May 13	38.2	4.0
USG 3209	78.0	56.3	May 14	36.0	2.0
Freedom	77.8	56.2	May 16	42.5	1.3
AgriPro Patton	77.6	54.1	May 14	42.5	1.0
USG Exp. 97-20	76.8	54.1	May 14	35.7	0.0
BL 931167	76.7	56.0	May 18	38.8	0.0
Pioneer 2643	76.5	55.3	May 15	32.7	0.0
Southern States FFR-518	76.1	55.8	May 12	36.0	3.7
Roane	74.2	55.7	May 17	38.8	2.7
MD 88130-24	73.5	54.5	May 15	41.7	0.3
Madison	73.4	55.3	May 12	41.2	2.0
Stine 488	73.1	56.4	May 17	44.7	1.7
Quantum 706 <sup>§</sup>	72.8	57.0	May 16	41.7	1.0
Southern States FFR-566	72.7	58.2	May 17	40.2	1.0
Arcia*	72.0	54.8	May 10	45.0	4.0
Jackson	72.0	55.6	May 16	39.0	2.3
Terra E218	71.7	56.1	May 17	42.7	0.3
Pioneer 25R57	71.6	53.9	May 15	39.5	1.0
Hoffman 37	71.4	54.2	May 14	39.2	1.0
Pioneer 2552	71.3	57.5	May 15	38.8	2.3
VA 96-54-326	71.0	57.2	May 13	38.5	2.0
NK Coker 9835	70.8	55.6	May 16	35.5	1.7
Hoffman 95	70.3	57.1	May 15	41.2	0.7
Patterson	70.1	57.6	May 13	43.2	2.7
Hopewell	70.1	55.2	May 17	41.5	0.7
Hyttest W9850	70.0	56.5	May 17	43.0	0.7
AgriPro Mason	69.9	56.1	May 13	39.2	1.0
MD PW 71-16	69.9	56.3	May 16	36.0	4.7
Featherstone 520	69.7	57.4	May 15	38.5	3.3
Hoffman 57 <sup>1</sup>	69.5	57.6	May 16	42.3	0.3
Glory	69.3	56.4	May 18	39.7	0.3
Quantum 7123 <sup>§</sup>	68.7	58.3	May 15	42.7	1.7
MD PW 71-19	68.7	54.5	May 16	37.5	3.5
NK Coker 9704	68.3	58.6	May 15	37.2	2.0
Quantum EH 9839 <sup>§</sup>	68.2	58.1	May 18	44.5	1.0
NK Coker 9803	67.9	56.1	May 15	37.8	3.7

DynaGro 419	67.4	55.9	May 17	44.0	2.3
VA 97W-358	66.9	55.6	May 14	36.2	5.7
USG Exp. 97-41	65.0	54.8	May 14	39.8	1.0
AgriPro Hickory	64.6	57.2	May 12	42.5	5.0
KY 86C-61-8	64.2	54.7	May 16	39.8	1.7
DynaGro 422	64.0	54.4	May 14	39.0	2.0
MD 89130-43	63.6	57.2	May 15	35.3	0.7
Pennmore	63.4	55.0	May 18	45.7	2.7
AgriPro Foster	62.5	56.8	May 17	39.7	0.3
Terra SR215	62.4	56.3	May 14	43.8	4.0
MD PW 31-64	62.3	53.1	May 14	37.0	1.7
Trical 498*	62.2	49.1	May 11	43.5	0.0
VA 97W-533	62.2	53.2	May 15	36.8	4.3
89482E7	61.7	56.6	May 12	38.0	3.7
MD 90011-8	61.2	56.6	May 12	38.8	4.0
Southern States FFR-522	60.8	55.0	May 14	38.8	4.0
Southern States FFR-555	60.3	53.3	May 17	38.0	0.7
Terra SR216	58.9	54.9	May 15	40.8	4.7
NK Coker 9663	57.3	57.1	May 13	46.5	5.0
Stine 455	53.4	56.9	May 15	40.5	5.0
DynaGro 424	52.9	54.0	May 18	39.5	1.7
Catoctin	45.2	56.7	May 17	40.3	5.3
Southern States FFR-523	37.4	56.5	May 13	36.7	7.3
Clemson 201	34.2	55.9	May 14	38.7	7.3
AgriPro Hondo <sup>^</sup>	25.0	58.8	May 16	42.3	9.0
<b>Location Means</b>	<b>67.8</b>	<b>56.0</b>	<b>May 15</b>	<b>39.8</b>	<b>2.3</b>
<b>Statewide Means</b>	<b>71.2</b>	<b>56.7</b>	<b>May 11</b>	<b>39.5</b>	<b>1.5</b>
<b>LSD (.05)</b>	<b>16.2</b>	<b>2.0</b>	<b>1 Day</b>	<b>1.9</b>	<b>2.4</b>
<b>CV (%)</b>	<b>14.8</b>	<b>2.2</b>	<b>3.9</b>	<b>3.0</b>	<b>-----</b>

<sup>1</sup> Lodging based on a score of 0 - 10 where 0 = no lodging and 10 = flat. Lodging scores taken at Queenstown and Keedysville only.

\* This is a wheat/rye cross or triticale, not a wheat variety. Its standard test weight is like that of barley, 48 lbs/bu.

<sup>§</sup> Quantum brand entries in this test are hybrid wheats.

<sup>^</sup> This entry is a hard red winter wheat type.

<sup>1</sup> Due to the late arrival of seed, Hoffman 57 was substituted for Hoffman 614 at this location only.

Pre-harvest sprouting at this location lowered test weights.

**Table 11.** 1999 Maryland State Barley Variety Performance Trials Averaged Over 3 Locations in Maryland - **Quantico, Queenstown, and Clarksville.**

<b>Brand-Entry</b>	<b>Yield (bu/A)</b>	<b>Test Weight (lbs/bu)</b>	<b>Heading Date</b>	<b>Height (in)</b>	<b>Lodging<sup>1</sup> (0-10)</b>	<b>Beards</b>
GA-Acton	104.3	45.7	April 28	43.8	2.0	Long
VA 95-42-33	103.8	47.9	April 26	40.3	1.0	None
GA-Luttrell	102.4	45.8	April 25	40.3	3.1	Long
VA 96B-301	102.3	48.2	April 24	37.5	3.4	Short
VA 97B-388	100.9	48.7	May 1	39.8	1.0	Long
Callao	100.7	49.8	April 23	37.4	6.2	Long
VA 97B-389	100.2	50.0	April 29	40.4	0.7	Long
VA 96B-248	99.2	48.8	April 29	39.1	2.3	Short
MD 811183-28	99.0	47.5	May 2	40.8	0.8	Long
VA 96-44-321	98.8	49.4	April 30	38.1	1.3	Short
MD 881007-6	97.9	48.1	April 24	40.5	1.9	None
Pennco	97.7	46.2	April 29	42.8	2.1	None
VA 96-44-278	97.2	50.3	April 25	37.5	4.3	Short
VA 97B-284	96.6	51.5	April 26	39.8	3.4	Short
VA 97B-33	95.0	50.0	April 26	37.3	4.5	Short
Pamunkey	94.5	49.2	April 25	40.2	2.1	Long
VA 97B-178	94.5	49.5	April 27	36.9	4.3	Short
Pennbar 66	94.2	48.0	May 3	41.3	0.5	Long
MD 841006-55	93.4	46.7	April 26	43.0	1.7	None
VA 96B-302	93.1	47.7	April 26	36.3	2.3	Short
VA 96-44-318	92.9	49.3	May 2	39.2	2.0	Short
VA 96-44-307	92.9	49.0	April 25	36.2	3.3	Short
Wysor	91.7	48.0	April 27	43.1	3.2	None
VA 97B-177	91.6	49.2	April 27	36.3	5.3	Short
Nomini	90.6	47.0	April 26	44.5	2.7	None
Starling	90.4	47.2	April 27	42.7	2.2	None
VA 97B-34	90.2	49.9	April 26	36.6	4.2	Short
MD 881007-28	90.0	48.5	April 25	40.0	1.7	None
MD 881120-50	89.8	48.9	April 27	42.2	3.1	None
VA 97B-342	88.2	49.9	April 25	37.7	5.2	Short
MD 881032-5	86.0	47.9	April 27	42.4	0.8	None
MD 881028-50	85.8	46.5	April 23	42.7	2.1	None
Clemson 100	82.3	49.4	April 28	44.3	0.3	On Tip
Barsoy	80.1	49.2	April 21	40.9	2.3	Long
<b>Means</b>	<b>94.3</b>	<b>48.5</b>	<b>April 27</b>	<b>40.1</b>	<b>2.3</b>	<b>-----</b>
<b>LSD (.05)</b>	<b>10.6</b>	<b>1.3</b>	<b>1 Day</b>	<b>1.3</b>	<b>1.1</b>	<b>-----</b>
<b>CV (%)</b>	<b>12.0</b>	<b>2.8</b>	<b>-----</b>	<b>3.5</b>	<b>-----</b>	<b>-----</b>

<sup>1</sup> Lodging based on a score of 0 - 10 where 0 = no lodging and 10 = flat.

**Table 12.** Relative Yield of Barley Entries Compared to the Mean Yield of all Entries at Each Location and Throughout the State in 1999.

	State	Quantico	Queenstown	Clarksville
<b>Brand-Entry</b>	<b>-----Relative Yield (%)-----</b>			
GA-Acton	110.6*	104.2	107.7*	123.6*
VA 95-42-33	110.1*	110.0*	119.0*	99.0*
GA-Luttrell	108.6*	114.8*	115.9*	100.8*
VA 96B-301	108.5*	110.5*	111.3*	102.7*
VA 97B-388	107.0*	110.4*	101.3	109.8*
Callao	106.8*	110.7*	112.0*	96.4*
VA 97B-389	106.2*	109.1*	110.2*	98.3*
VA 96B-248	105.2*	110.1*	101.2	104.8*
MD 811183-28	105.0*	93.2	121.2*	106.4*
VA 96-44-321	104.8*	96.2	107.9*	108.1*
MD 881007-6	103.8*	103.5	113.5*	92.3*
Pennco	103.6*	103.3	101.4	92.3*
VA 96-44-278	103.1*	101.2	107.9*	98.6*
VA 97B-284	102.4*	106.0*	90.5	112.7*
VA 97B-33	100.7*	99.6	99.0	103.5*
Pamunkey	100.2*	90.7	100.9	108.4*
VA 97B-178	100.2*	94.5	106.2*	98.3*
Pennbar 66	99.9*	97.5	99.6	102.2*
MD 841006-55	99.0	102.7	88.9	107.3*
VA 96B-302	98.7	101.4	100.2	94.1*
VA 96-44-318	98.5	104.9	86.2	106.2*
VA 96-44-307	98.5	104.5	91.1	100.8*
Wysor	97.2	94.6	98.4	98.0*
VA 97B-177	97.1	90.4	97.3	103.1*
Nomini	96.1	96.1	98.4	92.8*
Starling	95.9	118.6*	92.3	77.4*
VA 97B-34	95.6	100.1	94.6	91.9*
MD 881007-28	95.4	94.4	98.0	93.0*
MD 881120-50	95.2	86.4	91.2	108.0*
VA 97B-342	93.5	100.6	90.5	89.7*
MD 881032-5	91.2	84.8	89.0	99.7*
MD 881028-50	91.0	94.2	88.7	90.0*
Clemson 100	87.3	88.7	84.4	88.9*
Barsoy	84.9	73.3	94.2	92.3*
<b>Loc. Mean Yield (bu/A)</b>	<b>94.3</b>	<b>87.8</b>	<b>106.0</b>	<b>89.5</b>

\* The relative yield of those entries with an asterisk are not significantly different (LSD .05) from the highest yielding entry in that location.

Relative yields are expressed as the percent of the mean yield of all entries at each location. Therefore, an entry with a relative yield that is consistently greater than 100 is a variety that consistently yields higher than the mean yield of all of the entries at that location.

**Table 13.** Three Year Average Yield Performance of Barley Entries in Maryland, 1997 - 1999.

Brand-Entry	Statewide		East of Bay		West of Bay	
	bu/A	Rank	bu/A	Rank	bu/A	Rank
Pennco	112.1	1	103.2	1	120.5	3
Nomini	111.2	2	98.4	6	122.7	1
Wysor	110.7	3	102.8	2	117.9	4
MD 841006-55	109.9	4	97.5	8	122.7	1
Starling	107.8	5	100.5	4	111.5	7
GA-Acton	106.0	6	96.5	10	117.1	5
MD 811183-28	105.6	7	98.2	7	113.7	6
Pennbar 66	105.0	8	99.7	5	110.0	8
Callao	104.5	9	102.6	3	104.0	10
GA-Luttrell	100.5	10	97.5	8	102.5	11
Clemson 100	98.8	11	89.8	11	107.4	9
Pamunkey	91.8	12	85.2	12	98.8	12
Barsoy	87.6	13	81.1	13	95.6	13
MD 881007-6*	90.0	-----	93.6	-----	82.5	-----

\* Data for two years only - values cannot be ranked.

**Table 14.** 1999 Maryland State Barley Variety Performance Trials at the Poplar Hill Facility - **Quantico, MD.**

<b>Brand-Entry</b>	<b>Yield (bu/A)</b>	<b>Test Weight (lbs/bu)</b>	<b>Heading Date</b>	<b>Height (in)</b>	<b>Lodging<sup>1</sup> (0-10)</b>
Starling	104.1	46.8	April 24	43.2	4.3
GA-Luttrell	100.8	45.1	April 20	39.3	5.0
Callao	97.2	49.2	April 20	36.8	7.3
VA 96B-301	97.0	46.3	April 20	36.8	5.3
VA 97B-388	96.9	48.1	April 29	39.0	2.0
VA 96B-248	96.7	48.1	April 27	38.8	3.0
VA 95-42-33	96.6	46.6	April 24	39.8	2.3
VA 97B-389	95.8	49.3	April 26	40.3	1.3
VA 97B-284	93.1	50.1	April 23	39.5	4.3
VA 96-44-318	92.1	49.0	April 30	39.0	2.7
VA 96-44-307	91.8	47.6	April 23	35.0	4.0
GA-Acton	91.5	44.3	April 25	43.7	3.0
MD 881007-6	90.9	46.8	April 21	39.3	2.7
Pennco	90.7	45.7	April 27	41.8	2.3
MD 841006-55	90.2	45.8	April 22	43.7	3.7
VA 96B-302	89.0	47.4	April 23	34.0	3.3
VA 96-44-278	88.9	49.5	April 21	36.2	5.7
VA 97B-342	88.3	49.1	April 22	36.2	6.3
VA 97B-34	87.9	48.9	April 23	34.2	5.3
VA 97B-33	87.5	49.1	April 24	35.5	6.3
Pennbar 66	85.6	47.4	April 30	39.5	1.0
VA 96-44-321	84.5	48.8	April 28	36.3	1.0
Nomini	84.4	47.0	April 24	43.0	3.7
Wysor	83.1	47.6	April 26	42.5	4.7
VA 97B-178	83.0	48.6	April 25	35.2	4.7
MD 881007-28	82.9	47.8	April 22	40.3	3.0
MD 881028-50	82.7	46.0	April 20	41.7	3.3
MD 811183-28	81.8	45.7	April 29	39.8	1.7
Pamunkey	79.6	48.9	April 20	38.5	3.7
VA 97B-177	79.4	48.4	April 25	36.3	6.7
Clemson 100	77.9	47.6	April 25	43.5	0.7
MD 881120-50	75.9	47.5	April 24	40.8	5.0
MD 881032-5	74.5	47.0	April 24	41.2	2.0
Barsoy	64.4	46.9	April 17	38.5	3.7
<b>Location Means</b>	<b>87.8</b>	<b>47.6</b>	<b>April 24</b>	<b>39.1</b>	<b>3.7</b>
<b>Statewide Means</b>	<b>94.3</b>	<b>48.5</b>	<b>April 27</b>	<b>40.1</b>	<b>2.3</b>
<b>LSD (.05)</b>	<b>11.6</b>	<b>2.2</b>	<b>2 Days</b>	<b>2.2</b>	<b>2.4</b>
<b>CV (%)</b>	<b>8.1</b>	<b>2.9</b>	<b>-----</b>	<b>3.4</b>	<b>-----</b>

<sup>1</sup> Lodging based on a score of 0 - 10 where 0 = no lodging and 10 = flat.

**Table 15.** 1999 Maryland State Barley Variety Performance Trials at the Wye Research and Education Center - Queenstown, MD.

<b>Brand-Entry</b>	<b>Yield (bu/A)</b>	<b>Test Weight (lbs/bu)</b>	<b>Heading Date</b>	<b>Height (in)</b>	<b>Lodging<sup>1</sup> (0-10)</b>
MD 811183-28	128.5	50.9	May 2	45.8	0.0
VA 95-42-33	126.2	48.9	April 25	43.7	0.0
GA-Luttrell	122.9	50.0	April 24	44.2	0.7
MD 881007-6	120.3	48.1	April 23	43.3	0.0
Callao	118.7	50.1	April 22	39.8	5.0
VA 96B-301	118.0	49.3	April 24	40.3	1.7
VA 97B-389	116.8	50.1	April 27	45.2	0.3
VA 96-44-278	114.4	51.2	April 24	39.5	2.0
VA 96-44-321	114.4	49.9	April 28	41.8	1.7
GA-Acton	114.2	47.7	April 26	47.5	1.3
VA 97B-178	112.6	50.6	April 26	40.3	3.0
Pennco	107.5	46.1	April 28	47.7	0.7
VA 97B-388	107.4	49.3	April 30	43.8	0.3
VA 96B-248	107.3	49.4	April 28	43.2	1.0
Pamunkey	107.0	51.2	April 24	43.5	0.3
VA 96B-302	106.2	47.4	April 26	41.2	0.7
Pennbar 66	105.6	46.9	May 2	45.7	0.3
VA 97B-33	104.9	50.8	April 26	40.8	2.0
Wysor	104.3	48.1	April 26	46.8	1.3
Nomini	104.3	46.0	April 25	48.0	0.3
MD 881007-28	103.9	48.7	April 24	43.0	0.0
VA 97B-177	103.1	49.3	April 25	38.3	4.0
VA 97B-34	100.3	50.1	April 25	39.7	1.7
Barsoy	99.9	51.2	April 21	44.3	1.3
Starling	97.9	46.4	April 26	47.5	0.3
MD 881120-50	96.7	49.7	April 27	46.2	2.0
VA 96-44-307	96.6	49.2	April 24	40.0	2.0
VA 97B-284	95.9	52.1	April 25	42.0	2.0
VA 97B-342	95.9	50.3	April 25	40.8	3.0
MD 881032-5	94.3	48.3	April 26	47.0	0.0
MD 841006-55	94.2	47.8	April 25	46.0	0.0
MD 881028-50	94.0	46.0	April 22	47.2	1.3
VA 96-44-318	91.4	50.2	May 1	43.5	2.3
Clemson 100	89.5	51.3	April 27	47.8	0.0
<b>Location Means</b>	<b>106.0</b>	<b>49.2</b>	<b>April 26</b>	<b>43.7</b>	<b>1.2</b>
<b>Statewide Means</b>	<b>94.3</b>	<b>48.5</b>	<b>April 27</b>	<b>40.1</b>	<b>2.3</b>
<b>LSD (.05)</b>	<b>20.5</b>	<b>2.4</b>	<b>1 Day</b>	<b>1.3</b>	<b>1.2</b>
<b>CV (%)</b>	<b>11.4</b>	<b>2.9</b>	<b>-----</b>	<b>1.9</b>	<b>-----</b>

<sup>1</sup> Lodging based on a score of 0 - 10 where 0 = no lodging and 10 = flat.

**Table 16.** 1999 Maryland State Barley Variety Performance Trials - Clarksville, MD.

<b>Brand-Entry</b>	<b>Yield (bu/A)</b>	<b>Test Weight (lbs/bu)</b>	<b>Heading Date</b>	<b>Height (in)</b>	<b>Lodging<sup>1</sup> (0-10)</b>
GA-Acton	110.6	45.8	May 4	40.3	1.7
VA 97B-284	100.9	52.3	April 30	37.8	4.0
VA 97B-388	98.3	48.6	May 6	36.7	0.7
Pamunkey	97.0	47.6	April 29	38.5	2.3
VA 96-44-321	96.8	49.4	May 4	36.2	1.3
MD 881120-50	96.7	49.7	April 30	39.5	2.3
MD 841006-55	96.0	46.9	April 29	39.3	1.3
MD 811183-28	95.2	46.9	May 6	36.8	0.7
VA 96-44-318	95.1	48.8	May 5	35.2	1.0
Pennco	94.8	46.9	May 2	39.0	3.3
VA 96B-248	93.8	49.0	May 2	35.3	3.0
VA 97B-33	92.6	50.2	April 28	35.7	5.3
VA 97B-177	92.3	49.9	April 30	34.2	5.3
VA 96B-301	91.9	49.0	April 28	35.5	3.3
Pennbar 66	91.5	49.9	May 7	38.8	0.3
GA-Luttrell	90.2	43.7	April 29	37.3	3.7
VA 96-44-307	90.2	50.4	April 28	33.7	4.0
MD 881032-5	89.2	48.5	May 2	39.0	0.3
VA 95-42-33	88.6	48.2	April 30	37.3	0.7
VA 96-44-278	88.3	50.3	April 29	36.8	5.3
VA 97B-178	88.0	49.4	May 1	35.2	5.3
VA 97B-389	88.0	50.7	May 4	35.8	0.3
Wysor	87.7	48.3	April 30	40.0	3.7
Callao	86.3	50.2	April 27	35.7	6.3
VA 96B-302	84.2	48.3	April 29	33.8	3.0
MD 881007-28	83.2	49.1	April 28	36.8	2.0
Nomini	83.1	47.9	April 29	42.5	4.0
MD 881007-6	82.6	49.5	April 29	39.0	3.0
Barsoy	82.6	50.1	April 26	40.0	2.0
VA 97B-34	82.3	50.6	April 30	36.0	5.7
MD 881028-50	80.6	47.5	April 28	39.3	1.7
VA 97B-342	80.3	50.3	April 28	36.0	6.3
Clemson 100	79.6	49.3	May 2	41.5	0.3
Starling	69.3	48.4	May 2	37.3	2.0
<b>Location Means</b>	<b>89.5</b>	<b>49.0</b>	<b>April 30</b>	<b>37.4</b>	<b>2.8</b>
<b>Statewide Means</b>	<b>94.3</b>	<b>48.5</b>	<b>April 27</b>	<b>40.1</b>	<b>2.3</b>
<b>LSD (.05)</b>	<b>NS</b>	<b>1.3</b>	<b>1 Day</b>	<b>2.2</b>	<b>2.0</b>
<b>CV (%)</b>	<b>13.0</b>	<b>1.6</b>	<b>-----</b>	<b>3.6</b>	<b>-----</b>

<sup>1</sup> Lodging based on a score of 0 - 10 where 0 = no lodging and 10 = flat.