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# Agronomy Facts No. 19

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(Revised August, 2004)

## 2004 MARYLAND WHEAT & BARLEY VARIETY PERFORMANCE TRIALS

<http://www.nrsl.umd.edu/extension/crops/wheat/>

Wheat and barley cultivar trials were conducted by the Maryland Agricultural Experiment Station and the Department of Natural Resource Science and Landscape Architecture at five locations across Maryland in the 2003/2004 season: (1) Allen, in Wicomico County (2) Lower Eastern Shore Research and Education Center's (REC) Poplar Hill Facility near Quantico in Wicomico County; (3) Wye REC at Queenstown in Queen Anne's County; (4) Central Maryland REC's Clarksville Facility in Howard County; and (5) Western Maryland REC near Keedysville 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, new varieties, commercial brands, and advanced breeding lines are included in the tests to compare their performance to that of known varieties. Fifty wheat entries and fourteen barley entries made up the 2004 tests. Two triticale (a wheat/rye cross) entries were included in the wheat trials. One hull-less barley variety was included in the barley trials. Table 2 lists the suppliers and seed treatments applied to each entry. The following characteristics were evaluated in these trials: grain yield (adjusted to 13.5% moisture), test weight, moisture content at harvest, heading date, lodging, and plant height. Lodging was based on a score of 0 - 9 where 0=no lodging and 9=flat. Heading date was determined when approximately 50% of the small grain heads had cleared the boot.

Wheat and barley entries in the respective tests were planted (both for conventional tillage and no-till) at all locations in seven-row plots 16 feet in length and later trimmed to 12 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. For no-till studies, a rate of 22 seeds per foot of row was used. Seeding rate for barley was 96 lb/acre. Plots were mechanically harvested using a small plot combine (Wintersteiger Seedmech Nurserymaster Elite). Plot weight, test weight, and moisture content data of the wheat trials were obtained with a HarvestMaster HM-400 attached to the plot combine. Other location-specific management factors are summarized in Table 1.

### PRODUCTION YEAR

Planting conditions were favorable at all locations in the fall of 2003. The winter months were relatively cold. Spring green-up occurred slightly later than usual but was followed with a very warm month of May and both barley and wheat matured much earlier than normal. Powdery mildew was uncharacteristically absent during the spring of 2004. Some scab damage was observed on the western shore.

## RESULTS

Wheat and barley performance data are summarized in the tables that follow. There are tables summarizing the individual test locations for both small grain crops. In addition, there are statewide summary tables. A two and three-year summary table for selected entries of each crop is also included (see Index to Tables).

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. "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.

As an aid to assess the performance of individual varieties in the test, relative yield values were calculated. Relative yield value of a variety is the percentage of the mean yield for all varieties at a location. 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. Tables 4 and 13 summarize the relative yields of wheat and barley, respectively, in the 2004 test. In these tables, the relative yields of those varieties with an asterisk were not statistically different from the highest yielding variety at that location.

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## ACKNOWLEDGMENTS

The Small Grains Breeding Program would like to recognize the farm staff of the Maryland Agricultural Experiment Stations and Mr. Clifford Cooper (Table 1) for their assistance with land preparation, plot management, harvest, and equipment repair. We would also like to thank the **Maryland Crop Improvement Association** and the **Maryland Grain Producers Utilization Board** for their generous financial contributions to our breeding and testing program. The contributions of Dr. Arv Grybauskas and Mr. Sydney Wallace in disease ratings are also greatly appreciated. We also wish to recognize the greenhouse staff at the University of Maryland (Ms. Laurie Hellman-Aker, Ms. Richelle Green, and John Korns) for all of their assistance during the winter crossing months and Tom Sikora, Kelly Liberator, Sam Grodofsky, Gina Conte, and for their hard work in the greenhouse as well as during harvest and processing of seed.

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 Facts No. 19 prepared by: Dr. José M. Costa and Mr. Aaron Cooper**

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**Table 1. 2003/2004 Wheat and Barley Variety Test Plot Information.****1. Allen.****Wicomico County- Allen, MD.**

Planting dates: 10/17/03 (wheat and barley). Harvest date: 6/1/04 (barley); 6/14/04 (wheat)

Soil Type: Matapeake fine sandy loam. Previous crop: soybeans. Fertilizer: Fall: 29# N, 49#P, 75#K

Spring at greenup: 44 lb N, 50lb S as Ammonium Sulfate

Spring at GS 6: 55 lbs N (wheat) and 39 lb N (barley) as 30-0-0 UAN. Herbicide at GS 8: Harmony Extra 0.6 oz/A.

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

Planting dates: 10/17/03 (wheat and barley). Harvest date: 6/1/04 (barley); 6/14/04 (wheat)

Soil Type: Matapex silt loam. Previous crop: corn. Fertilizer: Fall: 30lbs N (40 lbs N for No-till) , 20# P, 40# K, 24# S

Spring at greenup: 50lbN, 20lbP, 40lbsK, 24lbsS as Ammonium Sulfate

Spring at GS 6: 60lbsN as 30-0-0 UAN.

Herbicide at GS 8: Harmony Extra 0.5 oz/A.

Insecticide: Warrior @ GS 8

**Farm Staff: Ron Mulford, Fred Senkbeil, Mike Senkbeil, Dover Dickerson, and Jim Martin.**

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

Planting date: 10/13/03 (conventional wheat and barley); 11/4/03 (no-till). Harvest date: 6/8/04 (barley); 6/16/04 (wheat)

Soil Type: Matapeake silt loam. pH = 6.2. Previous crop: corn and soybeans for no-till. Fertilizer: 40# N of 30-0-0 UAN on 3/1/03 for wheat, 62 # N for barley; 45# of N as ammonium nitrate for wheat on 3/26/04 .

Herbicide: Harmony XL 0.5 oz/A plus surfactant on 3/26/04.

**Farm Staff: Mark Sultenfuss, Reese Stafford, and Joe Streett.**

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

**Farm Staff: Kevin Conover, Mike Heyser, Donny Murphy, and Patrick Murphy.**

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

Planting dates: 10/8/03 (wheat and barley). Harvest dates: 6/9/04 (barley); 6/21/04 (wheat)

Soil type: Chester silt loam. pH= 6.7. Previous crop: corn

Fertilizer: Fall: 14-36-72. Spring: Wheat = 50# N. of 30-0-0 UAN; Barley = 40# N of. 30-0-0 UAN

Herbicide: Harmony Extra 0.6 oz/A in April 2004

**Farm Staff: Dave Justice, and Tim Ridgley Sr.**

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

Planting dates: 10/3/03 (conventional wheat and barley); 10/9/03 (no-till). Harvest dates: 6/10/04 (barley); 6/22/04 (wheat).

Soil Type: Hagerstown silt loam (silty variant); Previous crop: corn (conventional); soybeans (no-till)

Fertilizer: Fall: none. Spring: wheat and barley = 40# N/A as Urea

Herbicide: Harmony Extra 0.5 oz/A on wheat none in barley

**Farm Staff: Tim Ellis and Dave Wyand.**

**Table 2. Sources of Winter Wheat, Triticale, and Barley Entries Tested in Maryland, 2004.**

| <b>Supplier/Address/Local Rep.</b>  | <b>Brand</b> | <b>Varieties and Seed Treatments*</b>   |
|---|--------------|---|
| AgriPro Wheat; Box 411, 520 E. 1050 S.,<br>Brookston, IN 47923; Curtis Beazer 1(877)943-2827                                | AgriPro      | Benton (RR), Crawford (R),<br>Douglas (RR)  |
| Campbell Seed; Tim Bishop's Pro-Farm Service 616 Stagwell RD,<br>Queenstown, MD 21658; Tim Bishop (410) 822-5235            | Campbell     | 9202 (RT)   |
| Syngenta Seeds, Inc.; P.O. Box 1240, Winterville, NC 28590; Jim<br>Popham (302) 378-8148                                    | NK           | Coker 9184, Coker 9295, Coker<br>9375 (B960457), Coker 9312<br>(B961416), B970051 (all treated<br>with D) |
| Pioneer Hi-Bred Intl., Inc.; P.O. Box 280, Mount Joy, PA 17552;<br>Joe Mayer (717) 653-5605                                 | Pioneer      | 25R37, 25R54, 26R58, 25R78 (all<br>treated with DXL)  |
| Resource Seeds, Inc.; 2355 Rice Pike, Union, KY 41091; William<br>(Bill) Smith (859) 802-2288                               | Trical       | 2115 (RSI301), 2205 (RSI331)<br>(None)  |
| Southern States Coop.; P.O. Box 26234, Richmond, VA 23260;<br>Jerry Hevner (302) 629-7991                                   | SS           | 520 (RT), 550 (RT), 560 (GXT),<br>Exp 830238 (RT), Exp 830838<br>(RT), Exp 830938 (RT)                    |
| Renwood Farms, Inc. ; 17303 Sandy Point RD, Charles City, VA<br>23030; David Hula (804) 829-6345                            | Renwood      | 3260 (Dx2), 3706 (Dx2)  |
| Royster-Clark AgriBusiness, Inc.; 717 Robinson RD SE,<br>Washington Court House, OH 43160; Mick Shonauer (740) 869-<br>2181 | Vigoro       | Tribute (RT), V9412 (Dividend +<br>Apron XL-LS)   |
| Growmark FS; 308 NE Front St., Milford, DE 19963; (610) 967-<br>4131  | FS           | 621 (RTA), 652 (RTA), EX8302<br>(RTA), EX8309 (RTA)   |
| UniSouth Genetics, Inc.; 2640-C Nolensville RD, Nashville, TN<br>37211; Kevin Anderson (410) 651-2706                       | USG          | 3137 (RT), 3209 (RT), 3412 (RT),<br>3592 (RT), Exp. 370 (RT)  |
| Florida Agric. Exp. Stn.  | -----        | FL 304 (RT)   |
| University of Georgia, GA Station, 1109 Experiment St., Griffin,<br>GA 30223; Jerry Johnson (770) 228-7321                  | -----        | UGA 931233-E17 (R)  |
| Maryland Agric. Exp. Stn.   | -----        | MD & MV Breeding Lines (RT)   |
| VPI & SU/VCIA/EVAREC; 2229 Menokin RD, Warsaw, VA<br>22572; Jason Kenner (804) 333-3485                                     | -----        | Jackson (RT), Pocahontas (RT),<br>Roane (RT), Sisson (RT),<br>McCormick (RT), VA Breeding<br>Lines (RT)   |
| Kentucky Agric. Exp. Stn.   | -----        | Barsoy (RT)   |
| Maryland Agric. Exp. Stn.   | -----        | Catchpenny (RT), MD Breeding<br>Lines (RT)  |
| VPI & SU/VCIA/EVAREC; 2229 Menokin RD, Warsaw, VA<br>22572; Mark Vaughn (804) 333-3485                                      | -----        | Nomini (RT), Callao (RT), Doyce<br>(RT), Price (RT), Thoroughbred<br>(RT)                                 |

\*Seed treatment codes in parentheses after each entry are as follows: **RT** = Raxil/Thiram; **RTA** = Raxil/Thiram/Allegiance; **B** = Baytan; **G** = Gaucho; **D** = Dividend; **DXL** = Dividend/Apron; **R** = Raxil; **RR** = Raxil MD/Reldan 4E

The information presented here is also available on the World Wide Web at:

<http://www.nrsl.umd.edu/extension/crops/wheat/>

**Table 3. 2004 Maryland State Wheat Variety Performance Trials Averaged Over Allen, Quantico, Queenstown, Clarksville, and Keedysville, MD.**

| Wheat Entry          | Yield (bu/A) | Test Weight (lbs/bu) | Heading Date (May) | Height (in) | Lodging (0-10) |
|----------------------|--------------|----------------------|--------------------|-------------|----------------|
| USG 3137             | 81.9         | 57.1                 | 9                  | 38.6        | 1.5            |
| 25R54                | 79.3         | 57.3                 | 8                  | 36.4        | 2.7            |
| USG 3209             | 79.2         | 56.9                 | 8                  | 34.3        | 0.8            |
| VA97W-024            | 78.6         | 56.4                 | 9                  | 38.2        | 1.3            |
| FS 621               | 78.5         | 56.6                 | 7                  | 37.8        | 0.2            |
| USG Exp. 370         | 77.8         | 57.3                 | 8                  | 33.8        | 1.3            |
| V9412                | 77.6         | 58.6                 | 7                  | 37.1        | 0.5            |
| FS EX8302            | 77.3         | 57.4                 | 9                  | 36.4        | 0.0            |
| 25R78                | 77.0         | 57.9                 | 7                  | 34.2        | 0.0            |
| SS-Exp. 830838       | 76.7         | 58.8                 | 7                  | 34.9        | 2.2            |
| SS-560               | 76.6         | 56.2                 | 9                  | 34.1        | 2.0            |
| USG 3592             | 76.6         | 57.7                 | 9                  | 37.9        | 3.0            |
| MV5-46               | 76.0         | 58.8                 | 7                  | 34.2        | 0.8            |
| McCormick            | 75.8         | 58.7                 | 8                  | 34.0        | 2.3            |
| SS-520               | 75.7         | 56.1                 | 7                  | 36.9        | 0.5            |
| SS-Exp. 830238       | 75.5         | 57.4                 | 9                  | 36.3        | 1.2            |
| Vigoro Tribute       | 75.3         | 58.8                 | 8                  | 33.4        | 0.3            |
| 26R58                | 75.3         | 56.1                 | 8                  | 34.5        | 0.0            |
| Renwood 3706         | 75.3         | 57.6                 | 8                  | 33.2        | 1.5            |
| Sisson               | 75.2         | 57.9                 | 6                  | 33.8        | 0.3            |
| MV8-29               | 75.1         | 58.8                 | 8                  | 34.8        | 0.8            |
| USG 3412             | 74.8         | 59.0                 | 9                  | 35.0        | 0.8            |
| Renwood 3260         | 74.7         | 58.7                 | 7                  | 36.0        | 0.5            |
| Douglas              | 74.3         | 55.4                 | 11                 | 35.9        | 0.0            |
| 25R37                | 74.1         | 57.3                 | 9                  | 34.6        | 0.0            |
| B970051              | 74.1         | 56.2                 | 9                  | 33.4        | 1.2            |
| Jackson              | 73.6         | 57.8                 | 9                  | 36.8        | 1.8            |
| Coker 9312 (B961416) | 73.0         | 58.8                 | 7                  | 33.8        | 0.8            |
| Roane                | 72.7         | 58.4                 | 9                  | 33.5        | 1.2            |
| Pocahontas           | 72.6         | 56.6                 | 7                  | 35.4        | 1.2            |
| SS-550               | 72.5         | 57.4                 | 8                  | 34.0        | 0.8            |
| FS 652               | 72.4         | 56.0                 | 9                  | 34.2        | 0.2            |
| VAN98W-342           | 72.1         | 56.9                 | 7                  | 32.0        | 0.3            |
| Coker 9375 (B960457) | 71.9         | 55.4                 | 9                  | 39.0        | 0.2            |
| FS EX8309            | 71.6         | 56.8                 | 9                  | 36.8        | 0.3            |
| UGA 931233-E17       | 71.4         | 58.0                 | 8                  | 39.0        | 4.7            |
| Choptank             | 71.2         | 57.9                 | 7                  | 31.1        | 0.0            |
| SS-Exp. 830938       | 71.2         | 56.6                 | 9                  | 37.0        | 0.3            |
| Crawford             | 71.2         | 57.1                 | 5                  | 36.0        | 1.2            |
| Benton               | 71.1         | 56.1                 | 8                  | 35.0        | 0.2            |
| MV6-82               | 70.7         | 58.6                 | 6                  | 34.6        | 0.8            |
| Coker 9184           | 70.6         | 58.8                 | 9                  | 34.2        | 0.2            |
| Coker 9295           | 70.3         | 56.0                 | 10                 | 35.8        | 0.2            |
| VA98W-335            | 70.1         | 57.2                 | 9                  | 31.4        | 0.2            |
| MD71-5               | 69.1         | 56.5                 | 8                  | 31.7        | 0.8            |
| CAMPBELL 9202        | 69.0         | 56.8                 | 8                  | 39.2        | 3.2            |
| Trical 2115*         | 66.5         | 50.0                 | 6                  | 38.3        | 0.0            |
| Trical 2205*         | 65.0         | 49.9                 | 6                  | 39.2        | 0.2            |
| MV27-0187            | 64.8         | 57.5                 | 9                  | 33.8        | 0.5            |
| FL304                | 58.4         | 57.9                 | 9                  | 39.0        | 1.2            |
| State-wide Means     | 73.4         | 57.0                 | 8                  | 35.3        | 0.9            |
| LSD (0.05)           | 3.3          | 0.6                  | 1                  | 0.8         | 1.9            |
| CV (%)               | 7.8          | 1.7                  | 9.4                | 4.1         | 179.9          |

\* These are a wheat/rye cross or triticale, not a wheat variety.

**Table 4. Two-year and Three-year Averages of Grain Yield and Test Weight of Wheat Entries in Maryland, 2002-2004.**

| Entry                | Two-year average |                         | Three-year average |                         |
|----------------------|------------------|-------------------------|--------------------|-------------------------|
|                      | Yield<br>(bu/A)  | Test Weight<br>(lbs/bu) | Yield<br>(bu/A)    | Test Weight<br>(lbs/bu) |
| MV5-46               | 66.6             | 57.0                    | -                  | -                       |
| SS-520               | 65.1             | 54.4                    | 68.8               | 55.5                    |
| VA97W-024            | 65.1             | 54.5                    | -                  | -                       |
| McCormick            | 64.4             | 57.1                    | 69.2               | 58.3                    |
| MD71-5               | 64.3             | 55.0                    | 67.1               | 56.3                    |
| Tribute              | 62.8             | 57.2                    | 69.1               | 58.4                    |
| Renwood 3706         | 61.6             | 55.3                    | -                  | -                       |
| Sisson               | 61.5             | 54.8                    | 66.7               | 56.1                    |
| 25R37                | 61.2             | 55.3                    | 64.8               | 56.7                    |
| Choptank             | 61.0             | 55.3                    | 65.2               | 56.7                    |
| USG 3209             | 60.8             | 53.5                    | 66.5               | 55.0                    |
| SS-560               | 60.7             | 53.3                    | 67.5               | 55.0                    |
| 25R78                | 60.2             | 54.1                    | -                  | -                       |
| Coker 9375 (B960457) | 59.2             | 52.0                    | -                  | -                       |
| SS-550               | 59.1             | 54.1                    | 65.6               | 55.5                    |
| Jackson              | 58.9             | 54.8                    | 62.3               | 56.2                    |
| USG 3592             | 58.8             | 54.3                    | -                  | -                       |
| Roane                | 58.3             | 56.1                    | 60.5               | 57.4                    |
| 26R58                | 57.1             | 52.2                    | -                  | -                       |
| Coker 9184           | 56.0             | 56.6                    | 60.5               | 57.6                    |
| Trical 2115*         | 54.1             | 47.9                    | 60.3               | 49.6                    |
| Coker 9295           | 54.1             | 53.3                    | -                  | -                       |
| Trical 2205*         | 53.1             | 48.2                    | 59.7               | 49.4                    |
| FL304                | 41.0             | 54.5                    | 44.3               | 55.7                    |

\* These are a wheat/rye cross or triticale, not a wheat variety.

**Table 5. Relative Yield of Wheat Entries Compared to the Mean Yield of All Entries at Each Location and Throughout the State in 2004.**

| Wheat Entry                  | State | Allen NT | Quantico NT | Quantico NT | Wye  | Wye NT | Clarksville | Keedysville | Keedysville NT |
|------------------------------|-------|----------|-------------|-------------|------|--------|-------------|-------------|----------------|
| -----Relative Yield (%)----- |       |          |             |             |      |        |             |             |                |
| USG 3137                     | 112*  | 110*     | 111*        | 114*        | 108* | 110*   | 113*        | 112*        | 113*           |
| 25R54                        | 108*  | 108*     | 105         | 108*        | 111* | 113*   | 105*        | 105*        | 109*           |
| USG 3209                     | 108*  | 115*     | 108         | 115*        | 100  | 103    | 113*        | 101*        | 107*           |
| VA97W-024                    | 107*  | 105*     | 114*        | 107*        | 106* | 103    | 110*        | 107*        | 102            |
| FS 621                       | 107*  | 116*     | 104         | 107*        | 100  | 107*   | 109*        | 105*        | 106*           |
| USG Exp. 370                 | 106   | 106*     | 107         | 112*        | 103* | 104    | 104*        | 107*        | 104*           |
| V9412                        | 106   | 99       | 107         | 98          | 108* | 109*   | 107*        | 111*        | 107*           |
| FS EX8302                    | 105   | 100      | 108         | 100         | 105* | 116*   | 102         | 109*        | 103            |
| 25R78                        | 105   | 109*     | 103         | 105         | 112* | 104    | 99          | 106*        | 103            |
| SS-Exp. 830838               | 104   | 102      | 99          | 111*        | 105* | 106*   | 100         | 106*        | 106*           |
| SS-560                       | 104   | 107*     | 111*        | 109*        | 103* | 101    | 104*        | 103*        | 98             |
| USG 3592                     | 104   | 106*     | 100         | 114*        | 92   | 103    | 101         | 106*        | 110*           |
| MV5-46                       | 104   | 103      | 106         | 101         | 104* | 101    | 103         | 103*        | 107*           |
| McCormick                    | 103   | 103      | 116*        | 101         | 106* | 98     | 104*        | 100         | 97             |
| SS-520                       | 103   | 108*     | 95          | 107*        | 98   | 99     | 101         | 109*        | 107*           |
| SS-Exp. 830238               | 103   | 103      | 103         | 98          | 106* | 105    | 101         | 105*        | 103            |
| Tribute                      | 103   | 104      | 107         | 100         | 109* | 100    | 99          | 93          | 108*           |
| 26R58                        | 103   | 102      | 100         | 91          | 110* | 108*   | 102         | 102*        | 107*           |
| Renwood 3706                 | 103   | 94       | 109*        | 103         | 103* | 105    | 103         | 99          | 104*           |
| Sisson                       | 102   | 114*     | 106         | 105         | 102  | 106*   | 102         | 94          | 90             |
| MV8-29                       | 102   | 101      | 101         | 104         | 100  | 101    | 107*        | 103*        | 102            |
| USG 3412                     | 102   | 109*     | 105         | 100         | 95   | 105    | 99          | 95          | 106*           |
| Renwood 3260                 | 102   | 100      | 106         | 104         | 96   | 97     | 98          | 107*        | 105*           |
| Douglas                      | 101   | 103      | 100         | 95          | 110* | 106*   | 99          | 97          | 100            |
| 25R37                        | 101   | 86       | 101         | 101         | 103* | 105    | 110*        | 102*        | 99             |
| B970051                      | 101   | 106*     | 96          | 100         | 98   | 101    | 103         | 99          | 104*           |
| Jackson                      | 100   | 96       | 103         | 104         | 93   | 103    | 101         | 98          | 103            |
| Coker 9312                   | 99    | 107*     | 107         | 97          | 95   | 101    | 103         | 96          | 90             |
| Roane                        | 99    | 101      | 97          | 103         | 96   | 94     | 101         | 98          | 101            |
| Pocahontas                   | 99    | 95       | 86          | 105         | 90   | 103    | 100         | 100         | 111*           |
| SS-550                       | 99    | 104      | 99          | 99          | 97   | 98     | 99          | 103*        | 90             |
| FS 652                       | 99    | 104      | 97          | 107*        | 101  | 91     | 95          | 96          | 97             |
| VAN98W-342                   | 98    | 103      | 100         | 93          | 98   | 88     | 102         | 105*        | 96             |
| Coker 9375                   | 98    | 101      | 98          | 99          | 93   | 100    | 93          | 99          | 100            |
| FS EX8309                    | 97    | 90       | 92          | 98          | 107* | 106*   | 91          | 92          | 105*           |
| UGA 931233-E17               | 97    | 102      | 92          | 101         | 98   | 93     | 89          | 100         | 103            |
| Choptank                     | 97    | 91       | 96          | 96          | 92   | 98     | 102         | 100         | 100            |
| SS-Exp. 830938               | 97    | 97       | 92          | 99          | 103* | 102    | 89          | 94          | 102            |
| Crawford                     | 97    | 107*     | 105         | 109*        | 106* | 89     | 109*        | 79          | 66             |
| Benton                       | 97    | 97       | 100         | 90          | 104* | 98     | 95          | 99          | 92             |
| MV6-82                       | 96    | 94       | 100         | 93          | 101  | 99     | 99          | 91          | 93             |
| Coker 9184                   | 96    | 85       | 100         | 96          | 94   | 102    | 100         | 95          | 96             |
| Coker 9295                   | 96    | 93       | 88          | 87          | 91   | 91     | 106*        | 102*        | 110*           |
| VA98W-335                    | 96    | 96       | 96          | 93          | 99   | 86     | 101         | 97          | 97             |
| MD71-5                       | 94    | 97       | 100         | 88          | 95   | 85     | 95          | 103*        | 91             |
| CAMPBELL 9202                | 94    | 89       | 93          | 87          | 100  | 103    | 79          | 101*        | 100            |
| Trical 2115**                | 91    | 82       | 81          | 94          | 87   | 97     | 87          | 107*        | 92             |
| Trical 2205**                | 89    | 83       | 91          | 89          | 93   | 90     | 90          | 93          | 80             |
| MV27-0187                    | 88    | 86       | 79          | 81          | 85   | 91     | 96          | 92          | 97             |
| FL304                        | 80    | 80       | 75          | 80          | 92   | 75     | 78          | 70          | 85             |

\*Indicates that the relative yield of an entry is not significantly different ( $LSD_{0.05}$ ) from the highest yielding entry at that location.

\*\* These are a wheat/rye cross or triticale, not a wheat variety.

**Table 6. 2004 Maryland State Wheat Variety Performance Trials at the Allen Location (No-Till)- Allen, MD.**

| <b>Wheat Entry</b>   | <b>Yield (bu/A)</b> | <b>Test Weight (lbs/bu)</b> | <b>Heading Date (May)</b> | <b>Height (in)</b> |
|----------------------|---------------------|-----------------------------|---------------------------|--------------------|
| FS 621               | 81.5                | 56.9                        | 4                         | 38.7               |
| USG 3209             | 80.5                | 58.2                        | 4                         | 35.0               |
| Sisson               | 80.1                | 58.4                        | 2                         | 34.0               |
| USG 3137             | 76.9                | 58.9                        | 6                         | 37.3               |
| 25R78                | 76.5                | 58.6                        | 4                         | 34.0               |
| USG 3412             | 76.3                | 59.3                        | 5                         | 32.7               |
| SS-520               | 76.0                | 56.6                        | 4                         | 37.7               |
| 25R54                | 75.4                | 57.9                        | 4                         | 38.3               |
| Crawford             | 75.1                | 57.1                        | 2                         | 35.7               |
| Coker 9312 (B961416) | 74.8                | 59.2                        | 3                         | 33.3               |
| SS-560               | 74.8                | 57.1                        | 5                         | 34.3               |
| USG Exp. 370         | 74.6                | 57.4                        | 3                         | 35.3               |
| B970051              | 74.5                | 57.0                        | 6                         | 32.7               |
| USG 3592             | 74.3                | 58.5                        | 6                         | 37.0               |
| VA97W-024            | 73.9                | 57.2                        | 6                         | 36.3               |
| FS 652               | 73.1                | 56.7                        | 6                         | 36.3               |
| SS-550               | 73.0                | 57.7                        | 4                         | 33.7               |
| Vigoro Tribute       | 72.7                | 59.4                        | 5                         | 33.3               |
| VAN98W-342           | 72.4                | 56.6                        | 4                         | 33.3               |
| Douglas              | 72.4                | 55.1                        | 9                         | 35.0               |
| MV5-46               | 72.3                | 59.2                        | 4                         | 35.0               |
| McCormick            | 72.1                | 59.0                        | 4                         | 34.3               |
| SS-Exp. 830238       | 72.0                | 58.8                        | 6                         | 36.3               |
| UGA 931233-E17       | 71.7                | 59.1                        | 4                         | 39.3               |
| SS-Exp. 830838       | 71.4                | 58.7                        | 4                         | 36.3               |
| 26R58                | 71.2                | 56.2                        | 5                         | 36.7               |
| Coker 9375 (B960457) | 70.9                | 55.6                        | 5                         | 38.3               |
| Roane                | 70.7                | 59.2                        | 5                         | 33.0               |
| MV8-29               | 70.7                | 59.4                        | 3                         | 37.7               |
| Renwood 3260         | 70.1                | 59.8                        | 3                         | 35.7               |
| FS EX8302            | 70.1                | 59.1                        | 6                         | 38.0               |
| V9412                | 69.7                | 58.5                        | 5                         | 33.7               |
| Benton               | 68.2                | 56.5                        | 5                         | 35.0               |
| MD71-5               | 67.8                | 56.5                        | 4                         | 33.3               |
| SS-Exp. 830938       | 67.7                | 58.0                        | 6                         | 36.7               |
| VA98W-335            | 67.4                | 58.1                        | 5                         | 31.3               |
| Jackson              | 67.1                | 58.7                        | 6                         | 35.7               |
| Pocahontas           | 66.7                | 56.8                        | 4                         | 35.0               |
| Renwood 3706         | 65.8                | 57.7                        | 4                         | 32.3               |
| MV6-82               | 65.8                | 58.4                        | 3                         | 34.7               |
| Coker 9295           | 64.9                | 57.7                        | 6                         | 35.3               |
| Choptank             | 63.5                | 58.2                        | 3                         | 32.0               |
| FS EX8309            | 63.2                | 58.1                        | 5                         | 37.0               |
| CAMPBELL 9202        | 62.5                | 57.5                        | 6                         | 36.7               |
| MV27-0187            | 60.3                | 57.5                        | 4                         | 34.7               |
| 25R37                | 60.2                | 58.3                        | 6                         | 34.3               |
| Coker 9184           | 59.8                | 60.6                        | 6                         | 33.7               |
| Trical 2205          | 57.9                | 51.6                        | 3                         | 40.0               |
| Trical 2115          | 57.2                | 53.6                        | 4                         | 38.3               |
| FL304                | 56.0                | 59.3                        | 6                         | 37.7               |
| Location Means       | 70.1                | 57.8                        | 5                         | 35.4               |
| State-wide Means     | 73.4                | 57.0                        | 8                         | 35.3               |
| LSD (0.05)           | 7.7                 | 0.9                         | 2                         | 3.6                |
| CV (%)               | 6.8                 | 1.0                         | 21.5                      | 6.2                |

\* These are a wheat/rye cross or triticale, not a wheat variety.

**Table 7. 2004 Maryland State Wheat Variety Performance Trials at the Poplar Hill Facility- Quantico, MD.**

| <b>Wheat Entry</b>   | <b>Yield (bu/A)</b> | <b>Test Weight (lbs/bu)</b> | <b>Heading Date (May)</b> | <b>Height (in)</b> |
|----------------------|---------------------|-----------------------------|---------------------------|--------------------|
| McCormick            | 87.6                | 58.3                        | 6                         | 35.0               |
| VA97W-024            | 86.2                | 57.5                        | 7                         | 39.3               |
| USG 3137             | 83.8                | 57.1                        | 7                         | 39.3               |
| SS-560               | 83.5                | 57.1                        | 6                         | 36.3               |
| Renwood 3706         | 82.4                | 56.7                        | 5                         | 33.3               |
| FS EX8302            | 81.6                | 57.1                        | 7                         | 37.0               |
| USG 3209             | 81.2                | 55.0                        | 6                         | 35.0               |
| VigoroTribute        | 81.1                | 58.9                        | 5                         | 33.7               |
| Coker 9312 (B961416) | 81.0                | 58.4                        | 4                         | 34.3               |
| V9412                | 80.9                | 58.6                        | 4                         | 37.3               |
| USG Exp. 370         | 80.8                | 57.1                        | 5                         | 33.7               |
| MV5-46               | 80.4                | 58.7                        | 5                         | 33.7               |
| Renwood 3260         | 80.0                | 59.2                        | 4                         | 37.0               |
| Sisson               | 79.8                | 57.2                        | 4                         | 33.7               |
| Crawford             | 79.5                | 56.3                        | 2                         | 36.0               |
| USG 3412             | 79.5                | 58.4                        | 6                         | 36.0               |
| 25R54                | 79.1                | 56.5                        | 6                         | 37.0               |
| FS 621               | 78.5                | 55.8                        | 4                         | 39.0               |
| Jackson              | 78.1                | 56.4                        | 8                         | 38.3               |
| SS-Exp. 830238       | 78.0                | 57.1                        | 6                         | 37.0               |
| 25R78                | 77.4                | 56.5                        | 4                         | 34.3               |
| MV8-29               | 76.3                | 58.5                        | 6                         | 34.3               |
| 25R37                | 76.2                | 56.9                        | 7                         | 36.3               |
| VAN98W-342           | 75.8                | 55.8                        | 4                         | 33.0               |
| USG 3592             | 75.8                | 56.4                        | 8                         | 38.0               |
| MD71-5               | 75.7                | 55.7                        | 5                         | 32.0               |
| 26R58                | 75.5                | 55.4                        | 5                         | 35.7               |
| Coker 9184           | 75.4                | 59.2                        | 8                         | 35.0               |
| MV6-82               | 75.4                | 57.8                        | 4                         | 34.7               |
| Benton               | 75.3                | 54.7                        | 6                         | 36.0               |
| Douglas              | 75.3                | 54.7                        | 8                         | 36.7               |
| SS-550               | 75.1                | 56.2                        | 5                         | 35.0               |
| SS-Exp. 830838       | 75.0                | 57.2                        | 5                         | 36.3               |
| Coker 9375 (B960457) | 74.2                | 54.9                        | 7                         | 40.0               |
| Roane                | 73.4                | 58.2                        | 7                         | 32.3               |
| FS 652               | 73.2                | 56.4                        | 6                         | 35.3               |
| B970051              | 72.8                | 55.5                        | 8                         | 34.7               |
| VA98W-335            | 72.6                | 55.9                        | 7                         | 32.3               |
| Choptank             | 72.6                | 56.8                        | 5                         | 31.0               |
| SS-520               | 71.7                | 55.6                        | 4                         | 37.3               |
| CAMPBELL 9202        | 70.4                | 56.0                        | 6                         | 41.7               |
| UGA 931233-E17       | 69.6                | 57.2                        | 6                         | 40.0               |
| FS EX8309            | 69.4                | 55.6                        | 5                         | 37.3               |
| SS-Exp. 830938       | 69.2                | 55.1                        | 6                         | 38.0               |
| Trical 2205          | 68.4                | 48.5                        | 4                         | 42.3               |
| Coker 9295           | 66.4                | 55.4                        | 8                         | 35.3               |
| Pocahontas           | 64.9                | 54.8                        | 4                         | 35.0               |
| Trical 2115          | 60.8                | 50.7                        | 3                         | 39.7               |
| MV27-0187            | 60.0                | 56.5                        | 7                         | 34.0               |
| FL304                | 56.8                | 56.8                        | 6                         | 40.7               |
| Location Means       | 75.5                | 56.4                        | 6                         | 36.1               |
| State-wide Means     | 73.4                | 57.0                        | 8                         | 35.3               |
| LSD (0.05)           | 5.4                 | 0.8                         | 1                         | 1.7                |
| CV (%)               | 4.4                 | 0.9                         | 10.8                      | 2.9                |

\* These are a wheat/rye cross or triticale, not a wheat variety.

**Table 8. 2004 Maryland State Wheat Variety Performance Trials No-Till at the Poplar Hill Facility- Quantico, MD.**

| <b>Wheat Entry</b>   | <b>Yield (bu/A)</b> | <b>Test Weight (lbs/bu)</b> | <b>Heading Date (May)</b> | <b>Height (in)</b> |
|----------------------|---------------------|-----------------------------|---------------------------|--------------------|
| USG 3209             | 95.4                | 58.2                        | 5                         | 34.7               |
| USG 3137             | 94.7                | 59.2                        | 6                         | 38.3               |
| USG 3592             | 94.5                | 58.7                        | 6                         | 38.0               |
| USG Exp. 370         | 92.7                | 58.4                        | 5                         | 32.7               |
| SS-Exp. 830838       | 92.2                | 58.2                        | 5                         | 36.3               |
| Crawford             | 90.7                | 57.4                        | 2                         | 36.7               |
| SS-560               | 90.4                | 58.0                        | 7                         | 35.7               |
| 25R54                | 89.5                | 57.4                        | 6                         | 36.0               |
| FS 621               | 89.1                | 56.8                        | 4                         | 39.0               |
| SS-520               | 89.1                | 56.5                        | 4                         | 37.3               |
| FS 652               | 88.8                | 57.8                        | 6                         | 34.3               |
| VA97W-024            | 88.8                | 58.0                        | 6                         | 38.7               |
| Sisson               | 86.9                | 58.8                        | 4                         | 33.7               |
| 25R78                | 86.7                | 58.9                        | 4                         | 34.7               |
| Pocahontas           | 86.7                | 57.0                        | 3                         | 37.0               |
| Renwood 3260         | 86.6                | 60.4                        | 4                         | 35.3               |
| MV8-29               | 85.9                | 59.0                        | 5                         | 34.7               |
| Jackson              | 85.8                | 58.5                        | 6                         | 37.7               |
| Roane                | 85.6                | 59.8                        | 6                         | 33.3               |
| Renwood 3706         | 85.4                | 57.5                        | 6                         | 33.0               |
| 25R37                | 83.9                | 58.5                        | 7                         | 34.7               |
| McCormick            | 83.7                | 59.2                        | 5                         | 33.7               |
| UGA 931233-E17       | 83.6                | 58.6                        | 6                         | 39.3               |
| MV5-46               | 83.5                | 58.9                        | 5                         | 34.0               |
| VigoroTribute        | 83.3                | 60.3                        | 5                         | 33.7               |
| B970051              | 82.9                | 56.1                        | 7                         | 34.3               |
| FS EX8302            | 82.7                | 58.3                        | 6                         | 36.3               |
| USG 3412             | 82.6                | 60.1                        | 6                         | 35.0               |
| SS-550               | 82.1                | 57.9                        | 5                         | 33.3               |
| Coker 9375 (B960457) | 81.9                | 55.8                        | 6                         | 39.0               |
| SS-Exp. 830938       | 81.7                | 59.0                        | 6                         | 37.7               |
| SS-Exp. 830238       | 81.5                | 58.2                        | 6                         | 36.3               |
| V9412                | 81.5                | 60.0                        | 4                         | 36.7               |
| FS EX8309            | 81.1                | 57.9                        | 6                         | 36.7               |
| Coker 9312 (B961416) | 80.4                | 59.5                        | 4                         | 33.7               |
| Coker 9184           | 79.7                | 60.8                        | 7                         | 34.3               |
| Choptank             | 79.5                | 58.6                        | 4                         | 32.0               |
| Douglas              | 78.6                | 56.2                        | 8                         | 36.0               |
| Trical 2115          | 77.5                | 51.5                        | 3                         | 40.3               |
| VAN98W-342           | 77.4                | 56.9                        | 4                         | 32.0               |
| MV6-82               | 77.2                | 59.4                        | 4                         | 33.7               |
| VA98W-335            | 76.8                | 57.9                        | 6                         | 31.7               |
| 26R58                | 75.9                | 55.9                        | 5                         | 35.0               |
| Benton               | 74.7                | 56.5                        | 7                         | 35.3               |
| Trical 2205          | 74.1                | 52.3                        | 4                         | 40.0               |
| MD71-5               | 72.9                | 57.0                        | 5                         | 31.0               |
| CAMPBELL 9202        | 72.2                | 57.0                        | 6                         | 39.0               |
| Coker 9295           | 71.8                | 57.6                        | 7                         | 36.7               |
| MV27-0187            | 67.5                | 58.4                        | 6                         | 33.0               |
| FL304                | 66.2                | 57.9                        | 6                         | 40.7               |
| Location Means       | 82.9                | 57.9                        | 5                         | 35.6               |
| State-wide Means     | 73.4                | 57.0                        | 8                         | 35.3               |
| LSD (0.05)           | 8.1                 | 2.1                         | 1                         | 1.8                |
| CV (%)               | 5.9                 | 2.1                         | 8.6                       | 3.1                |

\* These are a wheat/rye cross or triticale, not a wheat variety.

**Table 9. 2004 Maryland State Wheat Variety Performance Trials at the Wye Facility- Queenstown, MD.**

| <b>Wheat Entry</b>   | <b>Yield (bu/A)</b> | <b>Test Weight (lbs/bu)</b> | <b>Heading Date (May)</b> | <b>Height (in)</b> |
|----------------------|---------------------|-----------------------------|---------------------------|--------------------|
| 25R78                | 80.3                | 59.5                        | 7                         | 35.3               |
| 25R54                | 80.0                | 58.1                        | 8                         | 36.0               |
| 26R58                | 79.1                | 57.9                        | 8                         | 33.3               |
| Douglas              | 79.1                | 57.3                        | 10                        | 35.0               |
| VigoroTribute        | 78.4                | 61.0                        | 8                         | 32.7               |
| USG 3137             | 77.7                | 58.6                        | 9                         | 38.0               |
| V9412                | 77.5                | 60.3                        | 6                         | 37.3               |
| FS EX8309            | 76.7                | 58.5                        | 9                         | 36.0               |
| Crawford             | 76.5                | 57.9                        | 5                         | 35.0               |
| McCormick            | 76.4                | 60.6                        | 8                         | 32.3               |
| VA97W-024            | 76.3                | 57.8                        | 8                         | 37.3               |
| SS-Exp. 830238       | 76.0                | 59.8                        | 8                         | 35.7               |
| FS EX8302            | 75.7                | 59.4                        | 9                         | 35.3               |
| SS-Exp. 830838       | 75.2                | 59.4                        | 7                         | 33.7               |
| MV5-46               | 74.6                | 60.0                        | 7                         | 34.3               |
| Benton               | 74.5                | 57.7                        | 7                         | 35.0               |
| Renwood 3706         | 74.1                | 58.6                        | 8                         | 32.3               |
| SS-Exp. 830938       | 74.0                | 58.7                        | 8                         | 36.0               |
| SS-560               | 73.8                | 57.7                        | 8                         | 33.3               |
| 25R37                | 73.7                | 58.7                        | 8                         | 34.3               |
| USG Exp. 370         | 73.7                | 58.3                        | 7                         | 33.7               |
| Sisson               | 73.5                | 59.0                        | 6                         | 33.7               |
| FS 652               | 72.6                | 58.1                        | 9                         | 34.0               |
| MV6-82               | 72.5                | 60.2                        | 6                         | 34.3               |
| CAMPBELL 9202        | 72.0                | 58.1                        | 8                         | 39.0               |
| FS 621               | 72.0                | 57.5                        | 6                         | 38.0               |
| USG 3209             | 71.7                | 58.8                        | 9                         | 33.0               |
| MV8-29               | 71.7                | 60.0                        | 7                         | 34.0               |
| VA98W-335            | 71.0                | 59.3                        | 8                         | 31.0               |
| B970051              | 70.8                | 57.9                        | 9                         | 33.0               |
| VAN98W-342           | 70.8                | 58.5                        | 7                         | 30.7               |
| SS-520               | 70.7                | 57.1                        | 6                         | 37.3               |
| UGA 931233-E17       | 70.3                | 59.5                        | 7                         | 38.0               |
| SS-550               | 69.9                | 59.2                        | 8                         | 34.3               |
| Renwood 3260         | 69.3                | 60.9                        | 6                         | 36.0               |
| Roane                | 69.0                | 61.0                        | 9                         | 33.0               |
| USG 3412             | 68.6                | 60.7                        | 9                         | 34.7               |
| MD71-5               | 68.5                | 58.2                        | 7                         | 31.3               |
| Coker 9312 (B961416) | 68.4                | 59.9                        | 6                         | 34.7               |
| Coker 9184           | 67.4                | 61.1                        | 9                         | 33.7               |
| Coker 9375 (B960457) | 66.8                | 57.3                        | 9                         | 37.7               |
| Jackson              | 66.8                | 59.4                        | 9                         | 35.7               |
| Trical 2205          | 66.7                | 53.5                        | 5                         | 39.7               |
| Choptank             | 66.4                | 59.7                        | 7                         | 30.0               |
| USG 3592             | 66.3                | 59.2                        | 9                         | 36.7               |
| FL304                | 66.2                | 59.8                        | 8                         | 40.0               |
| Coker 9295           | 65.3                | 58.4                        | 10                        | 35.0               |
| Pocahontas           | 64.9                | 58.1                        | 7                         | 35.0               |
| Trical 2115          | 62.2                | 52.5                        | 5                         | 37.3               |
| MV27-0187            | 61.1                | 59.2                        | 9                         | 33.0               |
| Location Means       | 71.9                | 58.8                        | 8                         | 34.9               |
| State-wide Means     | 73.4                | 57.0                        | 8                         | 35.3               |
| LSD (0.05)           | 6.3                 | 0.7                         | 1                         | 1.6                |
| CV (%)               | 5.4                 | 0.7                         | 7.8                       | 2.9                |

\* These are a wheat/rye cross or triticale, not a wheat variety.

**Table 10. 2004 Maryland State Wheat Variety Performance Trials No-Till at the Wye Facility- Queenstown, MD.**

| <b>Wheat Entry</b>   | <b>Yield (bu/A)</b> | <b>Test Weight (lbs/bu)</b> | <b>Height (in)</b> |
|----------------------|---------------------|-----------------------------|--------------------|
| FS EX8302            | 82.4                | 57.8                        | 35.0               |
| 25R54                | 80.5                | 58.0                        | 35.7               |
| USG 3137             | 78.2                | 57.8                        | 39.3               |
| V9412                | 77.7                | 59.8                        | 38.7               |
| 26R58                | 76.9                | 56.9                        | 33.3               |
| FS 621               | 76.2                | 56.9                        | 36.3               |
| SS-Exp. 830838       | 75.3                | 59.6                        | 34.0               |
| Sisson               | 75.2                | 58.8                        | 33.0               |
| Douglas              | 74.9                | 56.8                        | 36.0               |
| FS EX8309            | 74.9                | 56.9                        | 36.7               |
| USG 3412             | 74.7                | 60.1                        | 35.3               |
| 25R37                | 74.7                | 58.4                        | 33.3               |
| Renwood 3706         | 74.5                | 58.2                        | 32.0               |
| SS-Exp. 830238       | 74.5                | 58.1                        | 34.7               |
| USG Exp. 370         | 74.0                | 58.3                        | 32.7               |
| 25R78                | 73.9                | 58.9                        | 33.7               |
| VA97W-024            | 73.4                | 57.4                        | 38.0               |
| Pocahontas           | 73.4                | 56.7                        | 35.3               |
| USG 3209             | 73.1                | 57.5                        | 33.0               |
| Jackson              | 73.0                | 58.4                        | 35.3               |
| CAMPBELL 9202        | 73.0                | 57.7                        | 38.0               |
| USG 3592             | 72.9                | 58.3                        | 37.0               |
| Coker 9184           | 72.8                | 59.1                        | 33.3               |
| SS-Exp. 830938       | 72.5                | 56.9                        | 37.0               |
| MV5-46               | 71.8                | 58.8                        | 33.3               |
| B970051              | 71.7                | 57.6                        | 32.0               |
| MV8-29               | 71.5                | 59.1                        | 33.3               |
| SS-560               | 71.5                | 57.1                        | 32.0               |
| Coker 9312 (B961416) | 71.4                | 59.7                        | 33.0               |
| VigoroTribute        | 71.2                | 59.3                        | 32.3               |
| Coker 9375 (B960457) | 70.9                | 56.0                        | 39.7               |
| MV6-82               | 70.4                | 59.2                        | 35.0               |
| SS-520               | 70.1                | 55.3                        | 35.7               |
| McCormick            | 69.7                | 59.1                        | 32.3               |
| Benton               | 69.7                | 57.1                        | 34.3               |
| SS-550               | 69.7                | 57.9                        | 32.3               |
| Choptank             | 69.7                | 58.7                        | 29.0               |
| Trical 2115          | 69.0                | 46.4                        | 38.3               |
| Renwood 3260         | 68.5                | 59.7                        | 35.3               |
| Roane                | 66.6                | 59.2                        | 33.3               |
| UGA 931233-E17       | 65.7                | 58.7                        | 38.3               |
| Coker 9295           | 64.7                | 56.2                        | 35.3               |
| MV27-0187            | 64.6                | 58.2                        | 32.7               |
| FS 652               | 64.6                | 57.1                        | 33.0               |
| Trical 2205          | 64.1                | 48.6                        | 39.3               |
| Crawford             | 63.4                | 58.4                        | 35.0               |
| VAN98W-342           | 62.2                | 57.3                        | 29.7               |
| VA98W-335            | 61.0                | 57.2                        | 29.7               |
| MD71-5               | 60.4                | 57.0                        | 31.0               |
| FL304                | 53.5                | 57.9                        | 37.7               |
| Location Means       | 71.0                | 57.6                        | 34.6               |
| State-wide Means     | 73.4                | 57.0                        | 35.3               |
| LSD (0.05)           | 7.5                 | 1.3                         | 1.6                |
| CV (%)               | 6.5                 | 1.3                         | 2.9                |

\* These are a wheat/rye cross or triticale, not a wheat variety.

**Table 11. 2004 Maryland State Wheat Variety Performance Trials at the Clarksville Facility- Clarksville, MD.**

| <b>Wheat Entry</b>   | <b>Yield (bu/A)</b> | <b>Test Weight (lbs/bu)</b> | <b>Heading Date (May)</b> | <b>Height (in)</b> | <b>Lodging (0-10)</b> |
|----------------------|---------------------|-----------------------------|---------------------------|--------------------|-----------------------|
| USG 3137             | 85.3                | 54.2                        | 11                        | 39.0               | 1.0                   |
| USG 3209             | 84.9                | 53.4                        | 11                        | 34.7               | 1.7                   |
| VA97W-024            | 83.1                | 52.2                        | 11                        | 38.0               | 2.7                   |
| 25R37                | 82.9                | 54.1                        | 11                        | 36.0               | 0.0                   |
| Crawford             | 82.2                | 54.2                        | 7                         | 36.3               | 2.3                   |
| FS 621               | 81.9                | 52.2                        | 9                         | 36.0               | 0.3                   |
| MV8-29               | 80.7                | 55.2                        | 10                        | 36.0               | 1.7                   |
| V9412                | 80.5                | 55.2                        | 10                        | 37.7               | 1.0                   |
| Coker 9295           | 79.4                | 53.0                        | 11                        | 37.0               | 0.3                   |
| 25R54                | 78.8                | 53.3                        | 11                        | 35.7               | 5.0                   |
| USG Exp. 370         | 78.3                | 53.5                        | 11                        | 33.0               | 0.3                   |
| McCormick            | 78.0                | 55.3                        | 11                        | 36.0               | 4.7                   |
| SS-560               | 77.9                | 52.5                        | 11                        | 35.0               | 4.0                   |
| Renwood 3706         | 77.4                | 54.4                        | 10                        | 34.0               | 3.0                   |
| Coker 9312 (B961416) | 77.3                | 54.3                        | 9                         | 34.0               | 1.7                   |
| MV5-46               | 77.2                | 55.2                        | 10                        | 34.7               | 1.7                   |
| B970051              | 77.1                | 52.1                        | 11                        | 33.0               | 2.3                   |
| VAN98W-342           | 77.0                | 52.4                        | 10                        | 32.7               | 0.7                   |
| Choptank             | 76.9                | 54.1                        | 9                         | 32.3               | 0.0                   |
| 26R58                | 76.9                | 52.2                        | 11                        | 34.3               | 0.0                   |
| FS EX8302            | 76.5                | 54.4                        | 11                        | 35.3               | 0.0                   |
| Sisson               | 76.5                | 54.6                        | 9                         | 34.3               | 0.7                   |
| Jackson              | 76.3                | 53.3                        | 11                        | 36.3               | 3.7                   |
| USG 3592             | 76.2                | 54.1                        | 11                        | 38.7               | 5.0                   |
| SS-Exp. 830238       | 76.0                | 54.0                        | 11                        | 36.3               | 2.3                   |
| VA98W-335            | 75.9                | 53.6                        | 11                        | 32.3               | 0.3                   |
| Roane                | 75.9                | 54.9                        | 12                        | 35.3               | 2.3                   |
| SS-520               | 75.7                | 52.1                        | 10                        | 36.3               | 1.0                   |
| Pocahontas           | 75.6                | 52.4                        | 9                         | 35.3               | 0.3                   |
| SS-Exp. 830838       | 75.2                | 54.6                        | 10                        | 34.7               | 3.3                   |
| Coker 9184           | 75.1                | 55.4                        | 11                        | 36.0               | 0.3                   |
| USG 3412             | 74.6                | 55.5                        | 11                        | 36.0               | 1.7                   |
| Douglas              | 74.5                | 52.2                        | 12                        | 36.3               | 0.0                   |
| SS-550               | 74.4                | 54.6                        | 11                        | 35.0               | 1.0                   |
| MV6-82               | 74.2                | 54.8                        | 9                         | 35.7               | 1.7                   |
| VigoroTribute        | 74.1                | 55.0                        | 11                        | 34.0               | 0.7                   |
| 25R78                | 74.1                | 53.6                        | 10                        | 33.3               | 0.0                   |
| Renwood 3260         | 73.8                | 54.2                        | 10                        | 36.3               | 1.0                   |
| MV27-0187            | 71.8                | 54.1                        | 11                        | 34.7               | 1.0                   |
| Benton               | 71.8                | 53.0                        | 11                        | 34.7               | 0.3                   |
| MD71-5               | 71.5                | 52.6                        | 10                        | 33.0               | 1.7                   |
| FS 652               | 71.1                | 52.4                        | 11                        | 34.0               | 0.3                   |
| Coker 9375 (B960457) | 70.2                | 51.0                        | 11                        | 38.3               | 0.3                   |
| FS EX8309            | 68.3                | 52.0                        | 11                        | 38.0               | 0.7                   |
| Trical 2205          | 67.4                | 43.5                        | 8                         | 38.3               | 0.3                   |
| UGA 931233-E17       | 67.2                | 53.5                        | 10                        | 40.3               | 8.3                   |
| SS-Exp. 830938       | 66.6                | 52.0                        | 11                        | 37.0               | 0.7                   |
| Trical 2115          | 65.1                | 47.8                        | 8                         | 37.7               | 0.0                   |
| CAMPBELL 9202        | 59.7                | 52.4                        | 10                        | 40.7               | 6.3                   |
| FL304                | 58.8                | 53.7                        | 11                        | 40.0               | 1.7                   |
| Location Means       | 75.2                | 53.3                        | 10                        | 35.8               | 1.6                   |
| State-wide Means     | 73.4                | 57.0                        | 8                         | 35.3               | 0.9                   |
| LSD (0.05)           | 7.5                 | 1.0                         | 1                         | 2.5                | 2.9                   |
| CV (%)               | 6.1                 | 1.2                         | 4.1                       | 4.2                | 110.6                 |

\* These are a wheat/rye cross or triticale, not a wheat variety.

**Table 12. 2004 Maryland State Wheat Variety Performance Trials at the Keedysville Facility-Keedysville, MD.**

| Wheat Entry          | Yield (bu/A) | Test Weight (lbs/bu) | Heading Date (May) | Height (in) | Lodging (0-10) |
|----------------------|--------------|----------------------|--------------------|-------------|----------------|
| USG 3137             | 77.2         | 54.4                 | 13                 | 39.3        | 2.0            |
| V9412                | 76.2         | 57.3                 | 10                 | 39.7        | 0.0            |
| FS EX8302            | 75.3         | 54.7                 | 12                 | 38.7        | 0.0            |
| SS-520               | 74.8         | 57.0                 | 10                 | 37.3        | 0.0            |
| Trical 2115          | 73.7         | 47.4                 | 10                 | 38.7        | 0.0            |
| VA97W-024            | 73.7         | 54.4                 | 13                 | 41.0        | 0.0            |
| Renwood 3260         | 73.4         | 57.1                 | 10                 | 37.0        | 0.0            |
| USG Exp. 370         | 73.3         | 56.5                 | 11                 | 35.7        | 2.3            |
| USG 3592             | 73.0         | 56.4                 | 12                 | 40.0        | 1.0            |
| SS-Exp. 830838       | 73.0         | 59.7                 | 11                 | 35.7        | 1.0            |
| 25R78                | 72.8         | 57.8                 | 10                 | 36.0        | 0.0            |
| 25R54                | 72.5         | 57.1                 | 12                 | 37.7        | 0.3            |
| FS 621               | 72.3         | 57.2                 | 10                 | 38.3        | 0.0            |
| VAN98W-342           | 72.2         | 57.8                 | 11                 | 33.3        | 0.0            |
| SS-Exp. 830238       | 71.9         | 54.9                 | 12                 | 38.3        | 0.0            |
| MD71-5               | 71.0         | 55.9                 | 11                 | 33.0        | 0.0            |
| SS-550               | 70.9         | 56.8                 | 11                 | 35.7        | 0.7            |
| MV8-29               | 70.8         | 58.6                 | 10                 | 34.3        | 0.0            |
| SS-560               | 70.7         | 54.5                 | 12                 | 33.0        | 0.0            |
| MV5-46               | 70.7         | 58.5                 | 10                 | 34.3        | 0.0            |
| Coker 9295           | 70.4         | 54.4                 | 12                 | 36.3        | 0.0            |
| 25R37                | 70.4         | 54.9                 | 12                 | 36.0        | 0.0            |
| 26R58                | 70.1         | 55.6                 | 11                 | 34.3        | 0.0            |
| CAMPBELL 9202        | 69.7         | 56.6                 | 11                 | 39.7        | 0.0            |
| USG 3209             | 69.4         | 56.1                 | 10                 | 36.0        | 0.0            |
| Choptank             | 69.0         | 57.7                 | 10                 | 31.3        | 0.0            |
| Pocahontas           | 68.8         | 57.5                 | 10                 | 36.0        | 2.0            |
| UGA 931233-E17       | 68.6         | 58.4                 | 10                 | 39.7        | 1.0            |
| McCormick            | 68.5         | 57.2                 | 11                 | 35.3        | 0.0            |
| Coker 9375 (B960457) | 68.2         | 55.3                 | 11                 | 40.7        | 0.0            |
| Benton               | 68.1         | 55.0                 | 12                 | 35.7        | 0.0            |
| Renwood 3706         | 68.1         | 57.4                 | 10                 | 36.0        | 0.0            |
| B970051              | 67.9         | 55.3                 | 12                 | 35.3        | 0.0            |
| Jackson              | 67.5         | 57.7                 | 11                 | 38.3        | 0.0            |
| Roane                | 67.4         | 55.9                 | 12                 | 34.3        | 0.0            |
| Douglas              | 67.0         | 54.5                 | 13                 | 35.3        | 0.0            |
| VA98W-335            | 66.7         | 57.3                 | 12                 | 33.0        | 0.0            |
| FS 652               | 66.3         | 54.5                 | 12                 | 33.0        | 0.0            |
| Coker 9312 (B961416) | 65.9         | 58.5                 | 10                 | 35.3        | 0.0            |
| USG 3412             | 65.6         | 57.4                 | 12                 | 35.7        | 0.0            |
| Coker 9184           | 65.6         | 55.8                 | 11                 | 34.7        | 0.0            |
| SS-Exp. 830938       | 64.8         | 55.6                 | 11                 | 38.3        | 0.0            |
| Sisson               | 64.6         | 57.6                 | 9                  | 35.3        | 0.0            |
| VigoroTribute        | 64.2         | 57.2                 | 11                 | 34.7        | 0.0            |
| Trical 2205          | 64.0         | 49.4                 | 10                 | 37.7        | 0.0            |
| FS EX8309            | 63.5         | 56.0                 | 11                 | 37.0        | 0.0            |
| MV27-0187            | 63.3         | 56.4                 | 12                 | 35.3        | 0.0            |
| MV6-82               | 62.8         | 58.8                 | 10                 | 35.0        | 0.0            |
| Crawford             | 54.6         | 57.5                 | 9                  | 37.3        | 0.0            |
| FL304                | 48.1         | 57.2                 | 13                 | 38.0        | 0.7            |
| Location Means       | 68.8         | 56.2                 | 11                 | 36.3        | 0.2            |
| State-wide Means     | 73.4         | 57.0                 | 8                  | 35.3        | 0.9            |
| LSD (0.05)           | 8.1          | 1.1                  | 1                  | 2.0         | NS             |
| CV (%)               | 7.2          | 1.2                  | 4.7                | 3.4         | 418.0          |

\* These are a wheat/rye cross or triticale, not a wheat variety.

**Table 13. 2004 Maryland State Wheat Variety Performance No-Till Trials at the Keedysville Facility-Keedysville, MD.**

| Wheat Entry          | Yield (bu/A) | Test Weight (lbs/bu) | Heading Date (May) | Height (in) |
|----------------------|--------------|----------------------|--------------------|-------------|
| USG 3137             | 81.7         | 57.4                 | 13                 | 38.3        |
| Pocahontas           | 79.7         | 59.6                 | 10                 | 34.3        |
| Coker 9295           | 79.6         | 55.8                 | 13                 | 35.3        |
| USG 3592             | 79.5         | 60.1                 | 13                 | 38.0        |
| 25R54                | 78.4         | 59.4                 | 12                 | 34.7        |
| Vigoro Tribute       | 77.5         | 59.8                 | 11                 | 33.0        |
| MV5-46               | 77.5         | 60.8                 | 11                 | 34.0        |
| USG 3209             | 77.4         | 58.0                 | 11                 | 32.7        |
| SS-520               | 77.3         | 58.6                 | 10                 | 36.3        |
| V9412                | 77.1         | 59.6                 | 10                 | 36.0        |
| 26R58                | 77.0         | 57.7                 | 11                 | 33.3        |
| FS 621               | 76.6         | 58.9                 | 11                 | 37.0        |
| USG 3412             | 76.5         | 60.4                 | 12                 | 34.3        |
| SS-Exp. 830838       | 76.2         | 61.7                 | 10                 | 32.3        |
| Renwood 3260         | 76.0         | 59.3                 | 10                 | 35.3        |
| FS EX8309            | 75.5         | 59.1                 | 12                 | 36.0        |
| USG Exp. 370         | 75.3         | 59.2                 | 11                 | 33.3        |
| B970051              | 75.3         | 57.4                 | 13                 | 32.3        |
| Renwood 3706         | 74.6         | 59.6                 | 11                 | 32.7        |
| UGA 931233-E17       | 74.6         | 58.7                 | 10                 | 36.7        |
| 25R78                | 74.4         | 59.7                 | 10                 | 32.3        |
| SS-Exp. 830238       | 74.3         | 58.3                 | 12                 | 36.0        |
| FS EX8302            | 73.9         | 58.4                 | 13                 | 35.3        |
| Jackson              | 73.9         | 60.0                 | 12                 | 37.0        |
| MV8-29               | 73.6         | 60.4                 | 11                 | 33.7        |
| SS-Exp. 830938       | 73.3         | 58.8                 | 12                 | 35.3        |
| VA97W-024            | 73.3         | 57.5                 | 14                 | 36.7        |
| Roane                | 73.2         | 59.7                 | 13                 | 33.0        |
| Douglas              | 72.3         | 56.5                 | 14                 | 36.7        |
| Choptank             | 72.2         | 59.2                 | 10                 | 31.0        |
| CAMPBELL 9202        | 72.1         | 58.3                 | 11                 | 38.7        |
| Coker 9375 (B960457) | 71.9         | 56.7                 | 12                 | 38.7        |
| 25R37                | 71.1         | 58.6                 | 12                 | 32.0        |
| SS-560               | 70.5         | 56.5                 | 13                 | 33.0        |
| McCormick            | 69.9         | 60.4                 | 11                 | 33.3        |
| FS 652               | 69.8         | 55.9                 | 11                 | 33.3        |
| MV27-0187            | 69.7         | 59.5                 | 12                 | 32.7        |
| VA98W-335            | 69.6         | 58.6                 | 12                 | 29.7        |
| VAN98W-342           | 69.4         | 59.6                 | 11                 | 31.0        |
| Coker 9184           | 69.3         | 59.1                 | 13                 | 33.0        |
| MV6-82               | 67.1         | 60.5                 | 10                 | 33.7        |
| Benton               | 66.7         | 57.8                 | 11                 | 34.0        |
| Trical 2115          | 66.4         | 50.6                 | 11                 | 35.7        |
| MD71-5               | 65.3         | 59.2                 | 12                 | 29.0        |
| Coker 9312 (B961416) | 64.8         | 60.5                 | 11                 | 31.7        |
| Sisson               | 64.8         | 59.3                 | 10                 | 32.7        |
| SS-550               | 64.6         | 59.0                 | 11                 | 33.0        |
| FL304                | 61.6         | 59.8                 | 13                 | 37.7        |
| Trical 2205          | 57.4         | 53.0                 | 10                 | 36.3        |
| Crawford             | 47.5         | 58.0                 | 10                 | 36.3        |
| Location Means       | 72.1         | 58.6                 | 11                 | 34.4        |
| State-wide Means     | 73.4         | 57.0                 | 8                  | 35.3        |
| LSD (0.05)           | 6.4          | 1.1                  | 1                  | 2.1         |
| CV (%)               | 5.4          | 1.1                  | 6.0                | 3           |

\* These are a wheat/rye cross or triticale, not a wheat variety.

**Table 14. 2004 Maryland State Barley Variety Performance Trials Averaged Over Allen, Quantico, Queenstown, Clarksville, and Keedysville.**

| Barley Entry     | Yield (bu/A) | Test Weight (lbs/bu) | Heading Date (April) | Height (in) | Lodging (0-10) |
|------------------|--------------|----------------------|----------------------|-------------|----------------|
| Thoroughbred     | 106.6        | 48.3                 | 30                   | 33.7        | 0.1            |
| Nomini           | 94.6         | 46.2                 | 27                   | 39.2        | 1.3            |
| 931046-38        | 93.0         | 48.0                 | 28                   | 36.1        | 2.2            |
| Callao           | 92.5         | 49.3                 | 26                   | 29.7        | 3.7            |
| 931046-93        | 90.5         | 47.7                 | 28                   | 35.2        | 1.9            |
| 931043-25        | 89.7         | 47.7                 | 26                   | 31.0        | 3.3            |
| 931048-38        | 89.5         | 47.6                 | 29                   | 35.6        | 1.9            |
| Catchpenny       | 88.8         | 45.6                 | 27                   | 34.9        | 0.7            |
| 931042-98        | 87.2         | 47.2                 | 30                   | 30.3        | 3.1            |
| Barsoy           | 85.9         | 50.6                 | 24                   | 35.9        | 1.3            |
| Price            | 85.4         | 47.0                 | 30                   | 31.1        | 1.9            |
| 931042-61        | 84.2         | 46.1                 | 29                   | 30.3        | 3.8            |
| Doyce*           | 78.9         | 55.9                 | 28                   | 34.2        | 3.7            |
| 931043-46        | 78.7         | 46.6                 | 25                   | 33.2        | 4.3            |
| State-wide Means | 89.0         | 48.1                 | 28                   | 33.6        | 2.4            |
| LSD (0.05)       | 7.5          | 0.8                  | 1.0                  | 1.2         | 1.0            |
| CV (%)           | 11.7         | 2.4                  | 3.8                  | 5.0         | 58.4           |

\*Doyce is a hull-less variety.

**Table 15. Relative Yield of Barley Entries Compared to the Mean Yield of All Entries at Each Location and Throughout the State in 2004.**

| Barley Entry                 | State | Allen | Quantico | Queenstown | Clarksville | Keedysville |
|------------------------------|-------|-------|----------|------------|-------------|-------------|
| -----Relative Yield (%)----- |       |       |          |            |             |             |
| Thoroughbred                 | 120*  | 118   | 122*     | 120*       | 123*        | 114*        |
| Nomini                       | 106   | 101   | 112      | 86         | 120*        | 113*        |
| 931046-38                    | 104   | 94    | 102      | 113        | 101         | 119*        |
| Callao                       | 104   | 93    | 95       | 106        | 111*        | 123*        |
| 931046-93                    | 102   | 107   | 107      | 104        | 100         | 84          |
| 931043-25                    | 101   | 103   | 102      | 97         | 101         | 102         |
| 931048-38                    | 101   | 98    | 103      | 106        | 96          | 99          |
| Catchpenny                   | 100   | 95    | 102      | 97         | 114*        | 89          |
| 931042-98                    | 98    | 112   | 89       | 101        | 90          | 100         |
| Barsoy                       | 97    | 93    | 97       | 94         | 90          | 113*        |
| Price                        | 96    | 103   | 97       | 85         | 97          | 98          |
| 931042-61                    | 95    | 99    | 92       | 101        | 88          | 91          |
| Doyce**                      | 89    | 103   | 84       | 102        | 77          | 72          |
| 931043-46                    | 88    | 80    | 96       | 87         | 91          | 86          |

\*Indicates that the relative yield of an entry is not significantly different (LSD<sub>0.05</sub>) from the highest yielding entry at that location.

\*\*Doyce is a hull-less variety.

**Table 16. Two-year and three-year averages of grain yield and test weight of barley entries in Maryland, 2002-2004.**

| Barley Entry | Two-year average |                      | Three-year average |                      |
|--------------|------------------|----------------------|--------------------|----------------------|
|              | Yield (bu/A)     | Test Weight (lbs/bu) | Yield (bu/A)       | Test Weight (lbs/bu) |
| Thoroughbred | 88.8             | 47.3                 | 94.6               | 47.7                 |
| Callao       | 72.4             | 47.5                 | 76.2               | 47.3                 |
| 931043-25    | 70.9             | 47.1                 | -                  | -                    |
| Price        | 70.4             | 45.5                 | 78.0               | 46.0                 |
| Barsoy       | 69.1             | 48.4                 | 66.4               | 48.0                 |
| Nomini       | 68.9             | 43.0                 | 74.6               | 43.9                 |
| 931046-93    | 68.6             | 45.8                 | -                  | -                    |
| 931042-98    | 68.0             | 45.1                 | -                  | -                    |
| MD931046-38  | 67.4             | 46.5                 | -                  | -                    |
| 931048-38    | 66.7             | 45.5                 | -                  | -                    |
| Catchpenny   | 65.3             | 42.8                 | 70.7               | 43.4                 |
| 931042-61    | 64.4             | 45.2                 | -                  | -                    |
| MD931043-46  | 59.1             | 44.0                 | -                  | -                    |
| Doyce*       | 57.6             | 54.5                 | -                  | -                    |

\*Doyce is a hull-less variety.

**Table 17. 2004 Maryland State Barley Variety Performance Trials at the Poplar Hill Facility - Quantico, MD.**

| Barley Entry     | Yield (bu/A) | Test Weight (lbs/bu) | Heading Date (April) | Height (in) |
|------------------|--------------|----------------------|----------------------|-------------|
| Thoroughbred     | 138.4        | 49.2                 | 28                   | 36.7        |
| Nomini           | 127.1        | 48.2                 | 25                   | 40.3        |
| 931046-93        | 121.2        | 49.1                 | 26                   | 37.0        |
| 931048-38        | 116.2        | 48.9                 | 27                   | 37.0        |
| Catchpenny       | 115.5        | 46.3                 | 26                   | 36.7        |
| 931043-25        | 115.5        | 49.5                 | 25                   | 32.3        |
| 931046-38        | 115.4        | 49.2                 | 26                   | 38.0        |
| Barsoy           | 110.2        | 52.4                 | 23                   | 36.7        |
| Price            | 109.8        | 48.6                 | 27                   | 33.3        |
| 931043-46        | 108.3        | 48.9                 | 23                   | 34.3        |
| Callao           | 107.9        | 50.0                 | 25                   | 31.0        |
| 931042-61        | 104.7        | 47.5                 | 26                   | 32.3        |
| 931042-98        | 100.5        | 47.1                 | 29                   | 32.0        |
| Doyce*           | 95.7         | 57.9                 | 26                   | 35.3        |
| Location Means   | 113.3        | 49.5                 | 26                   | 35.2        |
| State-wide Means | 89.0         | 48.1                 | 28                   | 33.6        |
| LSD (0.05)       | 8.4          | 1.1                  | 1.4                  | 1.5         |
| CV (%)           | 4.4          | 1.3                  | 3.2                  | 2.5         |

\*Doyce is a hull-less variety.

**Table 18. 2004 Maryland State Barley Variety Performance Trials at Allen - Allen, MD.**

| <b>Barley Entry</b>     | <b>Yield (bu/A)</b> | <b>Test Weight (lbs/bu)</b> | <b>Heading Date (April)</b> | <b>Height (in)</b> | <b>Lodging (0-10)</b> |
|-------------------------|---------------------|-----------------------------|-----------------------------|--------------------|-----------------------|
| Thoroughbred            | 112.3               | 46.9                        | 26                          | 34.0               | 0.0                   |
| 931042-98               | 105.8               | 49.8                        | 26                          | 30.7               | 0.0                   |
| 931046-93               | 101.3               | 49.8                        | 24                          | 36.7               | 0.0                   |
| Doyce*                  | 97.9                | 56.0                        | 25                          | 35.0               | 0.0                   |
| 931043-25               | 97.4                | 50.0                        | 23                          | 32.0               | 2.0                   |
| Price                   | 97.2                | 46.5                        | 26                          | 31.3               | 0.0                   |
| Nomini                  | 95.8                | 46.6                        | 23                          | 40.0               | 0.0                   |
| 931042-61               | 94.3                | 48.5                        | 25                          | 29.3               | 0.7                   |
| 931048-38               | 93.1                | 48.8                        | 25                          | 36.3               | 0.0                   |
| Catchpenny              | 90.2                | 46.7                        | 22                          | 35.7               | 0.0                   |
| 931046-38               | 88.9                | 50.1                        | 24                          | 35.3               | 0.0                   |
| Callao                  | 88.5                | 51.8                        | 23                          | 29.0               | 0.0                   |
| Barsoy                  | 88.3                | 52.7                        | 20                          | 37.3               | 0.0                   |
| 931043-46               | 75.9                | 47.4                        | 22                          | 33.7               | 2.3                   |
| <b>Location Means</b>   | <b>94.8</b>         | <b>49.4</b>                 | <b>24.0</b>                 | <b>34.0</b>        | <b>0.3</b>            |
| <b>State-wide Means</b> | <b>89.0</b>         | <b>48.1</b>                 | <b>28</b>                   | <b>33.6</b>        | <b>2.4</b>            |
| <b>LSD (0.05)</b>       | <b>NS</b>           | <b>1.0</b>                  | <b>1.1</b>                  | <b>2.9</b>         | <b>1.3</b>            |
| <b>CV (%)</b>           | <b>12.0</b>         | <b>1.2</b>                  | <b>2.5</b>                  | <b>5.1</b>         | <b>221.9</b>          |

\*Doyce is a hull-less variety.

**Table 19. 2004 Maryland State Barley Variety Performance Trials at the Wye Facility - Queenstown, MD.**

| <b>Barley Entry</b>     | <b>Yield (bu/A)</b> | <b>Test Weight (lbs/bu)</b> | <b>Heading Date (April)</b> | <b>Height (in)</b> | <b>Lodging (0-10)</b> |
|-------------------------|---------------------|-----------------------------|-----------------------------|--------------------|-----------------------|
| Thoroughbred            | 104.3               | 47.9                        | 30                          | 32.0               | 0.0                   |
| 931046-38               | 98.1                | 47.5                        | 28                          | 34.7               | 1.0                   |
| Callao                  | 92.7                | 49.7                        | 27                          | 27.7               | 5.0                   |
| 931048-38               | 92.1                | 47.4                        | 29                          | 34.7               | 1.3                   |
| 931046-93               | 90.8                | 47.5                        | 28                          | 33.7               | 0.7                   |
| Doyce*                  | 89.0                | 55.2                        | 27                          | 32.3               | 5.3                   |
| 931042-61               | 88.3                | 46.8                        | 29                          | 28.7               | 5.0                   |
| 931042-98               | 88.2                | 47.3                        | 30                          | 27.3               | 3.7                   |
| Catchpenny              | 84.3                | 44.3                        | 26                          | 33.3               | 1.0                   |
| 931043-25               | 84.2                | 47.3                        | 26                          | 28.0               | 3.7                   |
| Barsoy                  | 81.6                | 49.4                        | 24                          | 33.7               | 1.0                   |
| 931043-46               | 75.8                | 45.8                        | 24                          | 32.7               | 5.3                   |
| Nomini                  | 74.7                | 44.1                        | 28                          | 36.3               | 1.3                   |
| Price                   | 74.5                | 48.2                        | 30                          | 27.7               | 3.0                   |
| <b>Location Means</b>   | <b>87.1</b>         | <b>47.7</b>                 | <b>27</b>                   | <b>31.6</b>        | <b>2.7</b>            |
| <b>State-wide Means</b> | <b>89.0</b>         | <b>48.1</b>                 | <b>28</b>                   | <b>33.6</b>        | <b>2.4</b>            |
| <b>LSD (0.05)</b>       | <b>13.8</b>         | <b>1.1</b>                  | <b>2</b>                    | <b>2.6</b>         | <b>1.2</b>            |
| <b>CV (%)</b>           | <b>9.5</b>          | <b>1.4</b>                  | <b>4.1</b>                  | <b>5.1</b>         | <b>27.0</b>           |

\*Doyce is a hull-less variety.

**Table 20. 2004 Maryland State Barley Variety Performance Trials at the Clarksville Facility - Clarksville, MD.**

| Barley Entry     | Yield (bu/A) | Test Weight (lbs/bu) | Heading Date (April) | Height (in) | Lodging (0-10) | Net Blotch (%) |
|------------------|--------------|----------------------|----------------------|-------------|----------------|----------------|
| Thoroughbred     | 104.6        | 49.2                 | May 1                | 35.7        | 0.3            | 33.3           |
| Nomini           | 102.2        | 46.8                 | 28                   | 41.7        | 4.7            | 16.7           |
| Catchpenny       | 96.8         | 46.4                 | 27                   | 37.0        | 2.0            | 36.7           |
| Callao           | 94.2         | 47.6                 | 27                   | 31.3        | 7.0            | 26.7           |
| 931046-38        | 86.1         | 47.2                 | 29                   | 37.7        | 7.3            | 33.3           |
| 931043-25        | 85.7         | 46.2                 | 27                   | 34.7        | 7.3            | 56.7           |
| 931046-93        | 85.2         | 46.9                 | 29                   | 36.7        | 6.7            | 26.7           |
| Price            | 82.2         | 45.9                 | May1                 | 33.7        | 4.3            | 56.7           |
| 931048-38        | 82.1         | 47.3                 | 30                   | 37.3        | 6.0            | 16.7           |
| 931043-46        | 77.5         | 46.1                 | 26                   | 35.0        | 8.0            | 70.0           |
| Barsoy           | 76.7         | 48.3                 | 25                   | 36.7        | 4.7            | 70.0           |
| 931042-98        | 76.7         | 44.9                 | May 1                | 33.0        | 8.0            | 46.7           |
| 931042-61        | 75.3         | 43.7                 | 30                   | 32.7        | 7.3            | 60.0           |
| Doyce*           | 65.9         | 55.7                 | 29                   | 36.3        | 7.3            | 76.7           |
| Location Means   | 85.1         | 47.3                 | 29                   | 35.7        | 5.8            | 44.8           |
| State-wide Means | 89.0         | 48.1                 | April 28             | 33.6        | 2.4            | -              |
| LSD (0.05)       | 12.6         | 1.2                  | 1                    | 1.7         | 1.6            | 17.2           |
| CV (%)           | 8.8          | 1.6                  | 2.1                  | 2.8         | 16.4           | 22.9           |

\*Doyce is a hull-less variety.

**Table 21. 2004 Maryland State Barley Variety Performance Trials at the Keedysville Facility - Keedysville, MD.**

| Barley Entry     | Yield (bu/A) | Test Weight (lbs/bu) | Heading Date | Height (in) | Lodging (0-10) |
|------------------|--------------|----------------------|--------------|-------------|----------------|
| Callao           | 79.2         | 47.2                 | April 30     | 29.3        | 6.7            |
| 931046-38        | 76.6         | 46.0                 | May 2        | 35.0        | 2.7            |
| Thoroughbred     | 73.3         | 48.4                 | May 6        | 30.0        | 0.0            |
| Nomini           | 73.1         | 45.5                 | May 3        | 37.7        | 0.3            |
| Barsoy           | 72.7         | 49.9                 | April 29     | 35.3        | 0.7            |
| 931043-25        | 65.7         | 45.6                 | May 1        | 28.0        | 3.3            |
| 931042-98        | 64.9         | 46.7                 | May 5        | 28.3        | 3.7            |
| 931048-38        | 64.0         | 45.7                 | May 4        | 32.7        | 2.3            |
| Price            | 63.2         | 45.8                 | May 4        | 29.3        | 2.3            |
| 931042-61        | 58.5         | 44.0                 | May 4        | 28.7        | 6.0            |
| Catchpenny       | 57.3         | 44.6                 | May 2        | 31.7        | 0.7            |
| 931043-46        | 55.9         | 45.0                 | April 30     | 30.3        | 6.0            |
| 931046-93        | 54.1         | 45.4                 | May 5        | 32.0        | 2.0            |
| Doyce*           | 46.4         | 54.6                 | May 3        | 32.0        | 6.0            |
| Location Means   | 64.6         | 46.7                 | May 3        | 31.4        | 3.0            |
| State-wide Means | 89.0         | 48.1                 | April 28     | 33.6        | 2.4            |
| LSD (0.05)       | 12.0         | 1.7                  | 2            | 4.1         | 1.9            |
| CV (%)           | 11.0         | 2.2                  | 3.5          | 7.7         | 37.3           |

\*Doyce is a hull-less variety.