# 2013 OHIO WHEAT PERFORMANCE TEST





Ohio State University Extension
Ohio Agricultural Research and Development Center
The Ohio State University

### OHIO WHEAT PERFORMANCE TEST, 2013

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The purpose of the Ohio Wheat Performance Test is to evaluate wheat varieties, blends, brands, and breeding lines for yield, grain quality and other important performance characteristics. This information gives wheat producers comparative information for selecting the varieties best suited for their production system and market. Varieties differ in yield potential, winter hardiness, maturity, standability, disease and insect resistance, and other agronomic characteristics. Selection should be based on performance from multiple test sites and years.

### **EVALUATION PROCEDURES**

Each entry was evaluated at five test sites (see front cover) using four replications per site in a randomized complete block design. Plots consisted of 7 rows, 7.5 inches apart and 35 feet long. Participating companies specified the seeding rate used for each of their varieties. Tests were planted within twenty one days after the fly-safe date and approximately 30 pounds of nitrogen was applied at planting followed by the addition of 80-100 pounds in early spring. Herbicides and insecticides were applied as needed for weed and insect control, and the following data were collected:

Yield is reported in bushels per acre at 13.5 percent moisture.

<u>Test Weight</u> is reported in lb/bushel averaged across all locations.

Seed Size is thousands of harvested seeds per pound (Ex: 15.5 = 15,500 seeds per lb).

Percent Lodging is the percent of plants that lean more than 45 degrees from vertical.

Plant Height is the distance from the soil surface to the top of the heads.

<u>Heading Date</u> was the average calendar day of the year on which 50 percent of the heads were completely emerged. (Example: Day 135 = May 15)

<u>Fusarium Head Blight (FHB)</u> Varieties were evaluated in an inoculated disease screening nursery at Wooster. FHB was rated as the percentage of spikelets diseased per plot (disease index).

Powdery mildew (PM) Powdery mildew (caused by *Blumaria graminis* f. sp. *tritici*) was evaluated at Wooster when most varieties were past the flowering (Feekes growth stage 10.5.1) growth stage. Each plot was rated on a 0 to 10 scale where: 0 = 0 to trace % leaf area covered; 1 = leaf 4 with trace -50%; 2 = leaf 3 with 1-5%; 3 = leaf 3 with 5-15%; 4 = leaf 3 with >15%; 5 = leaf 2 with 1-5%; 6 = leaf 2 with 5-15%; 7 = leaf 2 with >15%; 8 = leaf 1 with 1-5%; 9 = leaf 1 with 5-15%; and 10 = leaf 1 with >15% leaf area covered (leaf 1 = flag leaf). This scale takes into account the percentage leaf area affected and the upward progress of the disease on the plants.

Glume Blotch (SGB) and Leaf Blotch (SLB) Varieties were evaluated for Stagonospora leaf and glume blotch in an inoculated, irrigated disease screening nursery at Wooster. Both SLB and SGB severity were rated at about Feekes growth stage 11.3 as the average percent leaf and spike area diseased, respectively.

Flour Yield is the percent flour yield from milled whole grain.

<u>Flour Softness</u> is the percent of fine-granular milled flour. Values higher than approximately 50 indicate kernel textures that are appropriate for soft wheat. Generally, high values are more desirable.

### CULTURAL PRACTICES BY TEST SITE

|                      |                  |                   | Test Site         |                |                  |
|----------------------|------------------|-------------------|-------------------|----------------|------------------|
|                      | 1                | 2                 | 3                 | 4              | 5                |
| County               | Wood             | Crawford          | Wayne             | Darke          | Pickaway         |
| Previous Crop        | Soybean          | Soybean           | Soybean           | Soybean        | Soybean          |
| Soil Type            | Hoytville        | Blount            | Canfield          | Crosby         | Miamian          |
| Tillage              | Reduced Till     | Reduced Till      | Reduced Till      | No-Till        | Reduced Till     |
| Plant Date           | Oct. 12          | Oct. 13           | Oct. 17           | Oct. 11        | Oct. 5           |
| Soil pH              |                  |                   |                   |                |                  |
| Soil Test P (ppm)    | Soil test result | ts will be posted | on our web site w | hen available. |                  |
| Soil Test K (ppm)    |                  |                   |                   |                |                  |
| Fertilizer (N, P, K) | 120-78-78        | 126-72-240        | 128-69-90         | 117-0-90       | 107-66-93        |
| Herbicides           | Stinger          | Husky             | Harmony Extra     | None           | None             |
|                      |                  |                   | Buctril           |                |                  |
| Fungicide            |                  | Prosaro           | Prosaro           | Prosaro        | Caramba          |
| Insecticide          |                  | Warrior           | Warrior           | Tombstone      | Tombstone Helios |
| Harvest Date         | July 19          | July 17           | July 16           | July 18        | July 13          |
|                      | -                | -                 | -                 | -              | -                |

**GROWING CONDITIONS** 

In fall 2012, soybean harvest was later than usual which slightly delayed wheat planting. Fall growth was above average at all test sites due to extended warm temperatures. During late January/early February, there was a lack of snow cover and most of the state experienced single digit temperatures. However, wheat survival the following spring was good. Cool temperatures this spring delayed green-up in many areas. Above average temperatures in early May accelerated plant growth and heading dates were within 1-2 days of average. June temperatures were fairly cool which resulted in an extended grain fill period. Late-season rainfall in June and early July delayed harvest and resulted in shattering at the Northwest Branch Agricultural Research Station (NWB) trial location. Grain yield at the other trial locations were fairly high.

### **RESULTS**

Results of the 2013 wheat performance test are presented in Tables 1-3. Entries in the data tables are arranged by seed source. A least significant difference (LSD) value can be used to determine if the performance of two varieties was statistically different. The yields of two varieties are expected to be significantly different 90 percent of the time if their yields differ by more than the reported LSD value. Flour yield and softness tests were performed by USDA-ARS Soft Wheat Quality Laboratory, at OARDC in Wooster, OH, Dr. Byung-Kee Baik, Director.

Test results for the 80 soft red winter wheat varieties evaluated in 2013 are presented in Table 1. Tables 2 and 3 contain multi-year variety performance data. Depending on variety and test site, yields varied between 37.7 and 107.2 bushels per acre and test weight ranged from 55.6 to 59.4 pounds per bushel. Yield differences between test sites were due primarily to the soil drainage, weather during the grain fill period, and disease level. Yield was lower at the Northwest Branch Agricultural Research Station compared to the other locations due to heavy

rainfall on July 11 which caused shattering in some varieties. Variety selection should be based on disease resistance, average yield across test sites and years (Tables 2 & 3), winter hardiness, test weight and standability. Particular emphasis should be placed on FHB as this is important in reducing vomitoxin in grain.

Table 4 contains susceptibility of winter wheat varieties to various diseases in Ohio. Table 5 contains the company contact information and seed treatments used for each variety entered in the 2013 wheat performance test.

This report can be found on the Internet at: <a href="http://hostedweb.cfaes.ohio-state.edu/perf">http://hostedweb.cfaes.ohio-state.edu/perf</a> and <a href="http://agcrops.osu.edu">http://agcrops.osu.edu</a>. Any column of data can be sorted by clicking at the top of the column, which makes it easy to arrange varieties in order by any characteristic for comparison purposes.

Inclusion of varieties in the Ohio Wheat Performance Test does not constitute an endorsement of any variety by The Ohio State University, Ohio Agriculture Research and Development Center, or Ohio State University Extension.

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Table 1. Yield and Agronomic Characteristics of Wheat Varieties Tested in Ohio, 2013.

|                |           |                  | _    |      | Y     | ïeld  |       | _    |             | Cha          | racteris | tics |              |     | Dise | ase* |     | Grain | Quality       |
|----------------|-----------|------------------|------|------|-------|-------|-------|------|-------------|--------------|----------|------|--------------|-----|------|------|-----|-------|---------------|
| Brand          | Variety   | Seeds/<br>ft row | Wood | Craw | Wayn  | Dark  | Pick  | Avg. | Test<br>Wt. | Seeds<br>/lb | Lodg.    | Ht.  | Head<br>Date | PM  | FHB  | SLB  | SGB | Flour | Soft-<br>ness |
| _              |           |                  |      |      | bu/   | ac    |       |      | lb/bu       | (1000)       | %        | in.  | %            |     | %    | %    | %   | %     | %             |
| AGI            | 109B      | 25               | 63.1 | 86.0 | 97.6  | 93.6  | 93.9  | 86.8 | 56.1        | 13.4         | 0        | 30   | 141          | 8.0 | 28   | 35   | 14  | 71.4  | 60.5          |
| AGI            | 206B      | 25               | 43.9 | 81.2 | 93.7  | 96.2  | 89.2  | 80.9 | 57.5        | 13.5         | 0        | 33   | 142          | 8.0 | 18   | 12   | 20  | 68.9  | 64.2          |
| AGI            | 210       | 25               | 77.7 | 91.0 | 86.2  | 90.9  | 89.5  | 87.1 | 58.4        | 12.3         | 7        | 31   | 141          | 5.0 | 18   | 15   | 26  | 67.9  | 51.7          |
| AGI            | 212B      | 25               | 63.4 | 91.2 | 96.9  | 91.6  | 96.1  | 87.9 | 57.8        | 12.6         | 0        | 32   | 143          | 8.0 | 18   | 10   | 8   | 69.2  | 60.8          |
| AGI            | 304       | 25               | 66.8 | 86.0 | 93.6  | 94.5  | 94.4  | 87.1 | 56.5        | 12.3         | 7        | 32   | 142          | 8.0 | 46   | 50   | 41  | 69.1  | 65.4          |
| AGI            | 306       | 25               | 67.0 | 89.7 | 97.3  | 97.8  | 88.9  | 88.2 | 57.6        | 12.9         | 4        | 33   | 143          | 8.0 | 53   | 16   | 6   | 72.0  | 65.8          |
| AGI            | 307       | 25               | 70.8 | 85.7 | 93.0  | 89.2  | 93.8  | 86.5 | 57.6        | 12.5         | 0        | 33   | 142          | 8.0 | 17   | 28   | 14  | 70.0  | 57.1          |
| AGI            | 308       | 25               | 55.8 | 78.4 | 89.5  | 87.1  | 83.5  | 78.9 | 58.8        | 12.8         | 0        | 32   | 142          | 5.0 | 31   | 90   | 32  | 69.2  | 61.4          |
| AgriMAXX       | 413       | 25               | 66.1 | 89.2 | 95.9  | 99.6  | 96.5  | 89.5 | 56.6        | 13.8         | 0        | 31   | 141          | 7.0 | 29   | 60   | 42  | 71.7  | 62.5          |
| AgriMAXX       | 427       | 25               | 66.1 | 81.6 | 91.7  | 94.1  | 87.0  | 84.1 | 56.6        | 11.5         | 2        | 32   | 142          | 8.0 | 32   | 60   | 42  | 68.9  | 62.9          |
| AgriMAXX       | 438       | 25               | 67.3 | 91.9 | 99.7  | 97.6  | 93.5  | 90.0 | 57.5        | 12.3         | 9        | 33   | 144          | 8.0 | 47   | 48   | 8   | 71.7  | 64.0          |
| AgriMAXX       | Exp 1348  | 25               | 71.7 | 86.0 | 94.7  | 99.4  | 94.2  | 89.2 | 57.6        | 12.2         | 2        | 34   | 144          | 9.0 | 39   | 21   | 10  | 69.6  | 58.7          |
| Beck           | 113       | 25               | 63.4 | 82.8 | 93.9  | 93.0  | 99.2  | 86.5 | 57.9        | 11.2         | 2        | 31   | 141          | 8.5 | 23   | 42   | 12  | 66.7  | 58.8          |
| Beck           | 120       | 23               | 63.7 | 89.2 | 95.6  | 89.4  | 100.2 | 87.6 | 56.2        | 13.3         | 0        | 30   | 141          | 8.0 | 17   | 52   | 46  | 71.6  | 62.7          |
| Beck           | 129       | 23               | 69.6 | 87.7 | 96.5  | 98.7  | 106.3 | 91.8 | 57.6        | 13.0         | 1        | 32   | 144          | 8.5 | 31   | 18   | 6   | 72.1  | 66.5          |
| Beck           | 135       | 23               | 69.4 | 89.2 | 98.3  | 93.7  | 93.4  | 88.8 | 58.1        | 10.8         | 0        | 32   | 143          | 6.5 | 28   | 48   | 8   | 69.4  | 61.3          |
| Buckeye        | Eddie     | 24               | 67.5 | 91.4 | 97.2  | 99.5  | 103.2 | 91.8 | 57.6        | 11.8         | 4        | 33   | 144          | 8.5 | 41   | 20   | 8   | 71.8  | 64.4          |
| Dyna-Gro       | 9042      | 26               | 59.4 | 74.3 | 88.9  | 98.5  | 87.7  | 81.8 | 57.1        | 10.2         | 0        | 29   | 142          | 6.5 | 27   | 15   | 16  | 68.3  | 59.7          |
| Dyna-Gro       | 9053      | 26               | 57.2 | 91.0 | 99.6  | 97.0  | 97.9  | 88.5 | 55.6        | 11.1         | 2        | 32   | 143          | 8.5 | 32   | 48   | 14  | 69.6  | 62.1          |
| Dyna-Gro       | 9171      | 26               | 66.3 | 88.0 | 96.1  | 98.8  | 97.4  | 89.3 | 56.4        | 13.7         | 0        | 30   | 141          | 8.0 | 22   | 46   | 10  | 72.0  | 62.1          |
| Dyna-Gro       | 9223      | 26               | 68.3 | 86.7 | 100.4 | 99.9  | 90.4  | 89.1 | 57.7        | 12.2         | 0        | 34   | 144          | 9.0 | 39   | 20   | 20  | 71.7  | 66.6          |
| Dyna-Gro       | 9343      | 26               | 74.9 | 80.7 | 93.1  | 87.8  | 92.1  | 85.7 | 57.6        | 13.0         | 0        | 33   | 142          | 8.5 | 15   | 6    | 12  | 70.9  | 62.0          |
| Ebberts        | 727       | 24               | 76.3 | 85.6 | 89.0  | 93.7  | 90.9  | 87.1 | 59.1        | 11.8         | 4        | 32   | 141          | 2.0 | 21   | 14   | 26  | 67.9  | 50.4          |
| Ebberts        | 806       | 24               | 72.9 | 89.6 | 95.5  | 94.8  | 96.8  | 89.9 | 57.7        | 12.2         | 0        | 36   | 142          | 8.0 | 31   | 12   | 16  | 71.9  | 65.6          |
| Ebberts        | 815       | 24               | 63.4 | 80.7 | 96.1  | 98.2  | 90.6  | 85.8 | 56.6        | 11.6         | 0        | 32   | 142          | 8.0 | 42   | 38   | 28  | 69.0  | 64.6          |
| Equity         | Edge      | 35               | 68.0 | 86.1 | 86.6  | 94.1  | 96.3  | 86.2 | 58.1        | 12.9         | 2        | 34   | 142          | 6.5 | 30   | 9    | 14  | 71.0  | 63.0          |
| Equity         | Guardian  | 35               | 71.8 | 88.0 | 93.3  | 93.4  | 93.2  | 88.0 | 57.8        | 13.8         | 2        | 34   | 142          | 8.5 | 19   | 25   | 42  | 71.0  | 60.9          |
| Equity         | Quest     | 35               | 69.8 | 88.2 | 94.5  | 97.4  | 90.2  | 88.0 | 56.8        | 13.2         | 5        | 33   | 144          | 8.0 | 29   | 24   | 12  | 71.2  | 67.9          |
| Equity         | Sienna    | 35               | 73.2 | 87.6 | 99.1  | 97.5  | 89.3  | 89.3 | 57.6        | 12.1         | 9        | 35   | 142          | 8.0 | 35   | 46   | 26  | 71.9  | 65.0          |
| FS Wheat       | FS 602    | 24               | 65.1 | 86.3 | 89.2  | 100.4 | 96.3  | 87.4 | 56.0        | 14.4         | 0        | 31   | 141          | 8.5 | 26   | 55   | 50  | 71.9  | 62.9          |
| FS Wheat       | FS 622    | 24               | 53.6 | 80.7 | 88.6  | 92.3  | 96.7  | 82.4 | 58.7        | 10.5         | 0        | 31   | 141          | 8.0 | 24   | 51   | 10  | 71.4  | 58.9          |
| FS Wheat       | FS 625    | 25               | 68.5 | 87.8 | 94.8  | 98.2  | 93.2  | 88.5 | 56.5        | 11.9         | 10       | 32   | 142          | 8.0 | 30   | 50   | 15  | 69.1  | 66.1          |
| FS Wheat       | FS 626    | 25               | 66.9 | 83.4 | 90.8  | 98.2  | 97.3  | 87.3 | 56.5        | 10.8         | 0        | 30   | 144          | 6.5 | 24   | 14   | 6   | 69.0  | 62.5          |
| Great Lakes CG | GLCG 1229 | 25               | 77.1 | 80.6 | 89.0  | 94.7  | 95.4  | 87.4 | 56.7        | 11.2         | 1        | 33   | 140          | 8.0 | 36   | 12   | 10  | 67.7  | 58.7          |
| Limagrain LCS  | LCS 34969 | 25               | 72.7 | 85.2 | 89.5  | 92.3  | 93.6  | 86.7 | 57.9        | 13.9         | 0        | 35   | 141          | 7.0 | 26   | 62   | 8   | 71.9  | 65.0          |
| Limagrain LCS  | LCS 38686 | 25               | 78.0 | 83.3 | 93.2  | 99.9  | 90.5  | 89.0 | 58.2        | 11.1         | 1        | 31   | 140          | 6.5 | 28   | 60   | 50  | 72.4  | 61.0          |
| OFS            | Lion      | 25               | 72.1 | 88.0 | 97.3  | 97.3  | 90.9  | 89.1 | 57.6        | 12.8         | 6        | 35   | 142          | 8.0 | 38   | 22   | 25  | 71.7  | 61.0          |

Table 1, continued

|                  |           |        |      |      | Υ     | 'ield |       |      |       | Cha    | racteris | tics |      |     | Dise | ase* |     | Grain | Quality |
|------------------|-----------|--------|------|------|-------|-------|-------|------|-------|--------|----------|------|------|-----|------|------|-----|-------|---------|
|                  |           | Seeds/ |      |      |       |       |       |      | Test  | Seeds  |          |      | Head |     |      |      |     |       | Soft-   |
| Brand            | Variety   | ft row | Wood | Craw | Wayn  | Dark  | Pick  | Avg. | Wt.   | /lb    | Lodg.    | Ht.  | Date | PM  | FHB  | SLB  | SGB | Flour | ness    |
|                  |           |        |      |      | bu/   | ac    |       |      | lb/bu | (1000) | %        | in.  | %    |     | %    | %    | %   | %     | %       |
| Pioneer Brand    | 25R34     | 25     | 64.9 | 87.4 | 101.6 | 101.0 | 98.0  | 90.6 | 57.8  | 11.4   | 4        | 33   | 143  | 5.0 | 66   | 45   | 12  | 70.8  | 61.3    |
| Pioneer Brand    | 25R39     | 25     | 69.3 | 89.9 | 94.1  | 94.0  | 90.3  | 87.5 | 57.0  | 12.1   | 0        | 31   | 144  | 8.0 | 35   | 12   | 11  | 67.5  | 55.6    |
| Pioneer Brand    | 25R40     | 25     | 63.7 | 91.2 | 93.3  | 99.5  | 97.3  | 89.0 | 57.0  | 10.2   | 0        | 29   | 143  | 6.5 | 42   | 55   | 6   | 69.9  | 64.3    |
| Pro. Certified   | Bravo     | 25     | 57.5 | 83.4 | 86.8  | 82.2  | 87.9  | 79.5 | 58.0  | 11.2   | 0        | 34   | 140  | 7.5 | 29   | 62   | 34  | 68.9  | 54.8    |
| Pro. Certified   | Sunburst  | 25     | 70.7 | 95.1 | 93.4  | 93.2  | 88.3  | 88.1 | 59.3  | 13.0   | 0        | 28   | 143  | 5.0 | 57   | 31   | 30  | 65.4  | 57.4    |
| Pub. Certified   | Bromfield | 25     | 58.6 | 81.5 | 85.5  | 84.4  | 88.0  | 79.6 | 57.5  | 14.1   | 2        | 35   | 144  | 4.0 | 29   | 18   | 29  | 68.8  | 55.7    |
| Pub. Certified   | Freedom   | 25     | 63.6 | 82.4 | 81.4  | 84.4  | 84.5  | 79.3 | 56.5  | 13.6   | 2        | 34   | 144  | 6.5 | 45   | 44   | 30  | 68.4  | 55.2    |
| Pub. Certified   | Hopewell  | 25     | 63.1 | 78.2 | 83.8  | 85.2  | 89.5  | 80.0 | 56.0  | 11.3   | 1        | 34   | 143  | 5.5 | 39   | 49   | 11  | 67.8  | 64.1    |
| Pub. Certified   | Malabar   | 25     | 39.0 | 70.2 | 70.1  | 82.4  | 80.3  | 68.4 | 57.0  | 12.7   | 0        | 35   | 144  | 7.0 | 34   | 38   | 40  | 70.2  | 59.2    |
| Pub. Certified   | Roane     | 25     | 61.3 | 78.2 | 85.3  | 81.9  | 81.9  | 77.7 | 59.4  | 13.4   | 10       | 30   | 144  | 8.0 | 52   | 50   | 15  | 67.1  | 63.1    |
| Rupp             | RS 907    | 25     | 64.1 | 87.1 | 93.6  | 94.5  | 91.3  | 86.1 | 58.8  | 12.3   | 0        | 31   | 142  | 8.0 | 21   | 38   | 14  | 69.5  | 57.9    |
| Rupp             | RS 972    | 25     | 67.5 | 90.2 | 92.8  | 96.0  | 102.9 | 89.9 | 57.6  | 12.8   | 0        | 33   | 144  | 8.5 | 47   | 18   | 15  | 71.9  | 66.5    |
| Rupp             | RS 979    | 25     | 66.2 | 79.7 | 96.2  | 95.5  | 87.3  | 85.0 | 56.6  | 12.2   | 5        | 32   | 142  | 8.5 | 36   | 52   | 26  | 69.1  | 63.6    |
| Seed Consultants | SC 1302   | 27     | 76.2 | 79.6 | 89.1  | 89.9  | 95.6  | 86.1 | 59.2  | 11.7   | 4        | 31   | 140  | 5.0 | 18   | 28   | 30  | 68.4  | 54.3    |
| Seed Consultants | SC 1321   | 27     | 64.7 | 82.1 | 98.2  | 98.0  | 103.6 | 89.3 | 56.6  | 14.2   | 0        | 30   | 141  | 8.5 | 22   | 62   | 48  | 71.8  | 61.7    |
| Seed Consultants | SC 1341   | 27     | 60.8 | 81.4 | 94.4  | 97.6  | 107.2 | 88.3 | 56.9  | 13.4   | 0        | 30   | 142  | 9.5 | 32   | 58   | 11  | 69.4  | 64.0    |
| Seed Consultants | SC 1342   | 27     | 66.3 | 91.0 | 96.0  | 95.1  | 103.0 | 90.3 | 57.6  | 11.9   | 0        | 34   | 144  | 7.5 | 43   | 78   | 18  | 72.0  | 66.5    |
| Shur Grow        | SG-1542   | 22.5   | 73.7 | 84.9 | 87.9  | 93.0  | 93.1  | 86.5 | 58.6  | 11.8   | 4        | 32   | 140  | 6.0 | 17   | 52   | 59  | 68.2  | 54.7    |
| Shur Grow        | SG-1549   | 21.5   | 74.3 | 77.4 | 89.0  | 90.5  | 84.3  | 83.1 | 58.5  | 11.8   | 6        | 32   | 141  | 6.5 | 13   | 22   | 46  | 68.4  | 54.7    |
| Shur Grow        | SG-1552   | 24.3   | 69.2 | 91.4 | 100.2 | 99.1  | 104.0 | 92.8 | 57.8  | 11.6   | 2        | 33   | 144  | 8.5 | 33   | 35   | 28  | 71.8  | 64.4    |
| Shur Grow        | SG-1563   | 22.5   | 63.3 | 81.7 | 93.8  | 98.0  | 102.1 | 87.8 | 58.7  | 11.8   | 0        | 32   | 142  | 8.0 | 20   | 48   | 12  | 68.7  | 61.0    |
| Stewart          | SW485     | 25     | 77.6 | 94.3 | 100.5 | 99.9  | 88.6  | 92.2 | 57.7  | 11.5   | 2        | 37   | 142  | 7.5 | 33   | 56   | 26  | 71.8  | 63.6    |
| Stewart          | SW490     | 25     | 72.1 | 91.0 | 94.6  | 98.7  | 92.2  | 89.7 | 57.3  | 12.3   | 0        | 33   | 143  | 8.5 | 30   | 18   | 12  | 69.3  | 61.2    |
| Stewart          | SW500     | 25     | 71.6 | 84.8 | 97.1  | 92.6  | 96.5  | 88.5 | 57.6  | 12.8   | 0        | 34   | 142  | 8.0 | 20   | 6    | 12  | 70.5  | 60.0    |
| Steyer           | Heilman   | 25     | 75.4 | 90.5 | 98.6  | 91.1  | 88.7  | 88.9 | 57.5  | 11.7   | 1        | 36   | 142  | 8.0 | 29   | 42   | 16  | 71.5  | 63.0    |
| Steyer           | Hunker    | 25     | 71.1 | 90.0 | 93.3  | 94.4  | 95.1  | 88.8 | 57.6  | 12.8   | 2        | 33   | 144  | 8.0 | 35   | 20   | 13  | 72.0  | 66.1    |
| Steyer           | Pierson   | 25     | 75.1 | 86.1 | 92.2  | 90.2  | 90.3  | 86.8 | 57.7  | 13.2   | 0        | 34   | 142  | 7.0 | 16   | 9    | 11  | 70.7  | 63.3    |
| Strike           | 215       | 25     | 67.3 | 84.4 | 95.1  | 92.0  | 101.4 | 88.0 | 56.8  | 12.5   | 2        | 32   | 141  | 7.5 | 24   | 80   | 45  | 69.3  | 64.5    |
| Strike           | 220       | 25     | 67.2 | 90.8 | 94.7  | 96.9  | 100.6 | 90.0 | 57.5  | 12.1   | 4        | 34   | 144  | 8.0 | 48   | 20   | 4   | 72.2  | 66.4    |
| Sunstar          | S-1100    | 25     | 68.4 | 86.6 | 93.0  | 98.2  | 89.1  | 87.1 | 56.6  | 12.0   | 7        | 32   | 141  | 7.0 | 27   | 62   | 45  | 69.3  | 65.4    |
| Sunstar          | S-1200    | 25     | 64.9 | 82.1 | 95.9  | 97.0  | 94.5  | 86.9 | 56.2  | 14.2   | 2        | 31   | 141  | 8.0 | 23   | 58   | 10  | 72.1  | 62.8    |
| Syngenta         | SY 474    | 24.2   | 65.5 | 85.9 | 89.8  | 85.0  | 91.2  | 83.5 | 58.6  | 12.2   | 0        | 35   | 142  | 6.5 | 37   | 18   | 18  | 69.5  | 60.3    |
| Syngenta         | SY 483    | 24.2   | 65.6 | 93.8 | 94.5  | 99.1  | 94.7  | 89.5 | 56.4  | 12.1   | 0        | 31   | 144  | 7.0 | 55   | 32   | 25  | 69.8  | 63.0    |
| Syngenta         | SY 1526   | 24.2   | 54.5 | 71.9 | 83.5  | 84.3  | 84.5  | 75.7 | 57.4  | 10.5   | 0        | 32   | 140  | 8.5 | 18   | 24   | 18  | 69.9  | 57.9    |
| Syngenta         | W1104     | 22.5   | 42.4 | 84.5 | 90.3  | 88.1  | 83.8  | 77.8 | 55.9  | 12.8   | 18       | 31   | 142  | 7.0 | 33   | 52   | 46  | 70.0  | 60.5    |
| Wellman          | W 123     | 25     | 60.6 | 77.3 | 91.0  | 93.5  | 81.8  | 80.8 | 57.3  | 11.9   | 2        | 37   | 140  | 8.0 | 37   | 41   | 33  | 71.7  | 64.1    |

Table 1, continued

|         |             |                  | _    |      | \     | /ield |       |      |             | Cha          | racteris | tics |              |     | Dise | ase* |      | Grain | Quality       |
|---------|-------------|------------------|------|------|-------|-------|-------|------|-------------|--------------|----------|------|--------------|-----|------|------|------|-------|---------------|
| Brand   | Variety     | Seeds/<br>ft row | Wood | Craw | Wayn  | Dark  | Pick  | Avg. | Test<br>Wt. | Seeds<br>/lb | Lodg.    | Ht.  | Head<br>Date | PM  | FHB  | SLB  | SGB  | Flour | Soft-<br>ness |
|         |             |                  |      |      | bu    | /ac   |       |      | lb/bu       | (1000)       | %        | in.  | %            |     | %    | %    | %    | %     | %             |
| Wellman | W 125       | 25               | 70.4 | 87.3 | 100.1 | 96.8  | 92.9  | 89.5 | 57.4        | 11.8         | 1        | 36   | 142          | 6.5 | 49   | 42   | 49   | 71.8  | 62.0          |
| Wellman | W 205       | 25               | 69.7 | 88.6 | 91.7  | 103.5 | 91.0  | 88.9 | 57.7        | 12.2         | 0        | 33   | 143          | 8.5 | 48   | 8    | 25   | 69.6  | 58.9          |
| Wellman | W 206       | 25               | 67.7 | 94.2 | 95.8  | 100.9 | 99.4  | 91.6 | 58.4        | 13.1         | 0        | 32   | 142          | 8.0 | 19   | 5    | 5    | 69.4  | 62.2          |
| Wellman | W 207       | 25               | 63.6 | 87.9 | 99.1  | 97.0  | 104.7 | 90.5 | 57.7        | 12.0         | 0        | 33   | 144          | 8.5 | 38   | 44   | 6    | 71.8  | 63.7          |
| Wellman | W 208       | 25               | 74.2 | 85.4 | 93.4  | 91.2  | 93.4  | 87.5 | 57.4        | 13.7         | 0        | 34   | 142          | 7.0 | 17   | 8    | 28   | 71.1  | 60.5          |
| Yerks   | Y2201       | 24               | 37.7 | 79.8 | 86.5  | 88.9  | 79.4  | 74.4 | 57.8        | 13.6         | 0        | 29   | 142          | 8.0 | 21   | 14   | 12   | 68.5  | 63.1          |
| Yerks   | Y2313       | 25               | 63.3 | 84.7 | 94.4  | 96.6  | 92.7  | 86.3 | 57.6        | 12.7         | 6        | 33   | 144          | 8.0 | 43   | 48   | 18   | 72.0  | 67.3          |
|         | High        | 35.0             | 78.0 | 95.1 | 101.6 | 103.5 | 107.2 | 92.8 | 59.4        | 14.4         | 18       | 37   | 144          | 9.5 | 66.1 | 90.0 | 59.0 | 72.4  | 67.9          |
|         | Average     | 25.3             | 66.2 | 85.6 | 93.1  | 94.3  | 93.2  | 86.5 | 57.5        | 12.4         | 2        | 33   | 142          | 7.5 | 31.5 | 35.6 | 22.1 | 70.1  | 61.7          |
|         | Low         | 21.5             | 37.7 | 70.2 | 70.1  | 81.9  | 79.4  | 68.4 | 55.6        | 10.2         | 0        | 28   | 140          | 2.0 | 12.8 | 5.0  | 4.5  | 65.4  | 50.4          |
|         | LSD (P=0.1) |                  | 4.2  | 4.4  | 4.1   | 4.4   | 7.9   | 4.7  | 0.6         |              | NS       | 1.7  | 0.9          |     |      |      |      |       |               |
|         | CV          |                  | 5.5  | 3.9  | 3.8   | 4.0   | 7.3   | 5.2  | 1.1         |              | 305      | 3.1  | 0.4          |     |      |      |      |       |               |

<sup>\*</sup> Scores are based on data from an inoculated, mist-irrigated screening nursery.

Table 2. Yield and Agronomic Characteristics of Wheat Varieties Tested in Ohio, 2012 and 2013.

|                  |           |      |       | Yie   | ld   |      |      |       | Cha   | racteris | stics |     |
|------------------|-----------|------|-------|-------|------|------|------|-------|-------|----------|-------|-----|
|                  |           |      |       |       |      |      |      | Test  |       |          | Head  |     |
| Brand            | Variety   | Wood | Craw  | Wayn  | Dark | Pick | Avg. | Wt.   | Lodg. | Ht.      | Date  | FHB |
|                  |           |      |       | bu/   | ac   |      |      | lb/bu | %     | in.      |       | %   |
| AGI              | 109B      | 61.1 | 96.1  | 101.3 | 90.1 | 89.2 | 87.6 | 57.2  | 1     | 29       | 135   | 18  |
| AGI              | 206B      | 53.7 | 89.5  | 102.9 | 88.9 | 85.6 | 84.1 | 58.9  | 0     | 32       | 135   | 15  |
| AGI              | 304       | 67.4 | 99.7  | 103.7 | 89.6 | 91.6 | 90.4 | 57.3  | 6     | 31       | 135   | 35  |
| AgriMAXX         | 413       | 67.6 | 97.5  | 105.4 | 95.1 | 92.6 | 91.6 | 57.4  | 0     | 30       | 134   | 21  |
| AgriMAXX         | 427       | 64.6 | 98.1  | 104.3 | 91.1 | 88.5 | 89.3 | 57.4  | 2     | 31       | 135   | 24  |
| Beck             | 113       | 66.4 | 94.4  | 103.0 | 89.0 | 95.1 | 89.6 | 59.0  | 1     | 30       | 134   | 17  |
| Beck             | 120       | 63.5 | 97.4  | 106.2 | 88.0 | 95.2 | 90.0 | 57.2  | 0     | 29       | 135   | 17  |
| Beck             | 135       | 69.0 | 99.2  | 102.3 | 90.1 | 87.7 | 89.7 | 59.0  | 2     | 32       | 137   | 23  |
| Dyna-Gro         | 9042      | 62.8 | 93.6  | 103.2 | 92.7 | 87.0 | 87.8 | 58.2  | 2     | 29       | 135   | 26  |
| Dyna-Gro         | 9053      | 64.1 | 100.0 | 108.9 | 92.7 | 92.9 | 91.7 | 56.7  | 1     | 31       | 137   | 26  |
| Dyna-Gro         | 9171      | 64.9 | 100.1 | 104.6 | 95.6 | 93.6 | 91.8 | 57.4  | 0     | 30       | 135   | 17  |
| Dyna-Gro         | 9223      | 67.6 | 100.4 | 110.4 | 98.7 | 88.8 | 93.2 | 58.2  | 2     | 33       | 137   | 25  |
| Ebberts          | 727       | 72.6 | 93.8  | 100.8 | 86.8 | 88.6 | 88.5 | 59.2  | 2     | 31       | 134   | 16  |
| Equity           | Edge      | 65.5 | 96.3  | 95.2  | 86.7 | 89.2 | 86.6 | 58.7  | 1     | 33       | 135   | 22  |
| Equity           | Quest     | 69.3 | 98.3  | 97.9  | 87.2 | 86.3 | 87.8 | 57.1  | 3     | 32       | 137   | 19  |
| Equity           | Sienna    | 70.6 | 99.5  | 106.0 | 89.7 | 86.9 | 90.5 | 57.7  | 4     | 35       | 135   | 24  |
| OFS              | Lion      | 71.8 | 100.2 | 103.7 | 88.7 | 89.6 | 90.8 | 57.9  | 3     | 35       | 136   | 28  |
| Pioneer Brand    | 25R34     | 65.5 | 95.7  | 107.8 | 97.7 | 93.4 | 92.0 | 58.4  | 3     | 32       | 137   | 45  |
| Pioneer Brand    | 25R39     | 72.1 | 102.2 | 105.1 | 90.2 | 90.9 | 92.1 | 58.3  | 1     | 31       | 137   | 30  |
| Pioneer Brand    | 25R40     | 67.6 | 101.9 | 104.3 | 92.2 | 90.0 | 91.2 | 58.4  | 2     | 28       | 136   | 50  |
| Pro. Certified   | Sunburst  | 70.0 | 96.8  | 103.4 | 87.8 | 86.5 | 88.9 | 60.5  | 0     | 28       | 136   | 41  |
| Pub. Certified   | Bromfield | 64.6 | 94.2  | 94.7  | 83.2 | 84.4 | 84.2 | 58.3  | 2     | 34       | 137   | 21  |
| Pub. Certified   | Freedom   | 60.1 | 88.8  | 91.8  | 76.8 | 82.0 | 79.9 | 56.8  | 2     | 33       | 138   | 31  |
| Pub. Certified   | Hopewell  | 64.9 | 94.4  | 91.8  | 77.2 | 81.3 | 81.9 | 57.1  | 0     | 33       | 137   | 23  |
| Pub. Certified   | Malabar   | 50.3 | 91.3  | 85.5  | 79.5 | 79.2 | 77.2 | 57.7  | 3     | 35       | 138   | 22  |
| Rupp             | RS 972    | 70.0 | 105.5 | 107.1 | 93.1 | 97.5 | 94.6 | 58.2  | 2     | 32       | 137   | 38  |
| Rupp             | RS 979    | 67.8 | 94.7  | 103.6 | 92.8 | 85.9 | 88.9 | 57.3  | 3     | 31       | 135   | 25  |
| Seed Consultants | SC 1302   | 71.0 | 91.2  | 99.8  | 87.5 | 89.0 | 87.7 | 59.3  | 3     | 31       | 134   | 18  |
| Seed Consultants | SC 1321   | 64.9 | 98.3  | 103.8 | 90.6 | 97.3 | 91.0 | 57.4  | 1     | 29       | 134   | 15  |
| Seed Consultants | SC 1341   | 63.9 | 95.1  | 103.0 | 91.4 | 95.3 | 89.8 | 57.7  | 0     | 29       | 136   | 19  |
| Seed Consultants | SC 1342   | 67.0 | 107.0 | 107.9 | 94.7 | 96.7 | 94.6 | 58.3  | 1     | 33       | 137   | 28  |
| Shur Grow        | SG-1542   | 68.5 | 98.5  | 100.4 | 88.5 | 90.7 | 89.3 | 59.1  | 2     | 31       | 134   | 16  |
| Shur Grow        | SG-1549   | 70.3 | 91.9  | 99.5  | 83.1 | 85.6 | 86.1 | 58.9  | 4     | 32       | 135   | 11  |
| Shur Grow        | SG-1552   | 69.9 | 103.6 | 111.0 | 92.1 | 96.1 | 94.6 | 58.3  | 4     | 33       | 137   | 27  |

Table 2, continued

|          |         |      |       | Yie   | eld  |      |      |       | Cha   | racteris | stics |     |
|----------|---------|------|-------|-------|------|------|------|-------|-------|----------|-------|-----|
|          |         |      |       |       |      |      |      | Test  |       |          | Head  |     |
| Brand    | Variety | Wood | Craw  | Wayn  | Dark | Pick | Avg. | Wt.   | Lodg. | Ht.      | Date  | FHB |
|          |         |      |       | bu/   | ac   |      |      | lb/bu | %     | in.      |       | %   |
| Steyer   | Heilman | 72.4 | 103.4 | 103.6 | 89.3 | 87.3 | 91.2 | 57.8  | 3     | 35       | 135   | 27  |
| Steyer   | Hunker  | 72.8 | 106.5 | 105.7 | 90.7 | 90.9 | 93.3 | 58.1  | 1     | 32       | 137   | 29  |
| Strike   | 215     | 68.4 | 99.4  | 105.9 | 89.7 | 96.1 | 91.9 | 57.5  | 4     | 31       | 135   | 25  |
| Strike   | 220     | 68.5 | 103.3 | 106.9 | 93.6 | 92.4 | 93.0 | 58.2  | 2     | 33       | 137   | 35  |
| Syngenta | SY 483  | 69.3 | 102.7 | 105.3 | 94.2 | 93.8 | 93.1 | 57.7  | 1     | 31       | 137   | 36  |
| Syngenta | SY 1526 | 58.2 | 85.1  | 91.9  | 79.0 | 80.9 | 79.0 | 58.5  | 0     | 33       | 134   | 14  |
| Syngenta | W1104   | 55.1 | 98.8  | 104.5 | 88.8 | 85.8 | 86.6 | 57.1  | 14    | 31       | 137   | 21  |
| Wellman  | W 123   | 62.7 | 92.0  | 99.2  | 86.5 | 85.4 | 85.2 | 57.9  | 2     | 35       | 134   | 26  |
| Wellman  | W 125   | 68.3 | 94.8  | 106.6 | 88.3 | 89.1 | 89.4 | 57.8  | 1     | 35       | 135   | 32  |
| Wellman  | W 206   | 68.1 | 97.9  | 109.0 | 94.4 | 91.9 | 92.2 | 58.5  | 1     | 32       | 135   | 22  |
| Wellman  | W 208   | 72.0 | 96.1  | 103.1 | 90.8 | 90.2 | 90.4 | 58.2  | 0     | 33       | 136   | 12  |
| Yerks    | Y2201   | 49.0 | 96.0  | 99.7  | 86.3 | 82.4 | 82.7 | 59.1  | 0     | 30       | 135   | 15  |
|          | High    | 72.8 | 107.0 | 111.0 | 98.7 | 97.5 | 94.6 | 60.5  | 14    | 35       | 138   | 50  |
|          | Average | 66.0 | 97.4  | 102.6 | 89.4 | 89.5 | 89.0 | 58.1  | 2     | 32       | 136   | 24  |
|          | Low     | 49.0 | 85.1  | 85.5  | 76.8 | 79.2 | 77.2 | 56.7  | 0     | 28       | 134   | 11  |

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Table 3. Yield and Agronomic Characteristics of Wheat Varieties Tested in Ohio, 2011 - 2013.

|                  |           |        |       | Yie   | eld  |      |      |             | Cha   | racteris | stics        |      |
|------------------|-----------|--------|-------|-------|------|------|------|-------------|-------|----------|--------------|------|
| Brand            | Variety   | Wood * | Craw  | Wayn  | Dark | Pick | Avg. | Test<br>Wt. | Lodg. | Ht.      | Head<br>Date | FHB  |
|                  |           |        |       | bu/   | ac   |      |      | lb/bu       | %     | in.      |              | %    |
| AGI              | 206B      |        | 93.9  | 97.1  | 83.9 | 82.2 | 89.3 | 59.4        | 0     | 34       | 138          | 13   |
| Beck             | 113       |        | 96.6  | 97.9  | 81.6 | 87.1 | 90.8 | 59.4        | 1     | 33       | 138          | 22   |
| Beck             | 135       |        | 100.2 | 97.5  | 83.1 | 81.4 | 90.6 | 59.1        | 1     | 35       | 140          | 20   |
| Dyna-Gro         | 9042      |        | 96.3  | 98.1  | 83.5 | 79.7 | 89.4 | 58.4        | 1     | 32       | 138          | 24   |
| Dyna-Gro         | 9053      |        | 99.6  | 100.4 | 85.2 | 87.4 | 93.2 | 57.0        | 1     | 34       | 140          | 25   |
| Equity           | Quest     |        | 99.5  | 92.8  | 81.0 | 82.8 | 89.0 | 57.4        | 2     | 35       | 140          | 19   |
| Equity           | Sienna    |        | 101.6 | 100.7 | 83.0 | 81.4 | 91.7 | 58.2        | 3     | 38       | 138          | 24   |
| Pioneer Brand    | 25R34     |        | 99.1  | 100.7 | 90.0 | 85.9 | 93.9 | 58.6        | 2     | 34       | 139          | 31   |
| Pioneer Brand    | 25R39     |        | 102.1 | 99.1  | 82.9 | 85.4 | 92.4 | 58.7        | 1     | 34       | 140          | 23   |
| Pro. Certified   | Sunburst  |        | 96.4  | 95.1  | 80.3 | 82.1 | 88.5 | 60.8        | 0     | 30       | 139          | 29   |
| Pub. Certified   | Bromfield |        | 94.4  | 89.6  | 74.5 | 77.0 | 83.9 | 58.9        | 1     | 36       | 140          | 15   |
| Pub. Certified   | Freedom   |        | 89.6  | 85.6  | 71.6 | 74.4 | 80.3 | 57.0        | 5     | 36       | 141          | 24   |
| Pub. Certified   | Hopewell  |        | 93.8  | 86.1  | 73.2 | 76.7 | 82.4 | 57.8        | 0     | 36       | 140          | 21   |
| Pub. Certified   | Malabar   |        | 92.4  | 77.8  | 77.5 | 74.9 | 80.6 | 58.3        | 2     | 38       | 141          | 17   |
| Seed Consultants | SC 1321   |        | 99.2  | 97.5  | 82.4 | 90.5 | 92.4 | 57.5        | 0     | 31       | 137          | 12   |
| Seed Consultants | SC 1341   |        | 94.8  | 96.2  | 82.6 | 88.3 | 90.5 | 57.7        | 0     | 31       | 139          | 14   |
| Shur Grow        | SG-1549   |        | 93.8  | 91.6  | 77.2 | 81.9 | 86.1 | 59.4        | 4     | 34       | 138          | 9    |
| Syngenta         | SY 1526   |        | 89.3  | 88.1  | 74.9 | 78.1 | 82.6 | 58.5        | 0     | 35       | 137          | 12   |
| Syngenta         | W 1104    |        | 100.0 | 98.8  | 84.3 | 82.0 | 91.2 | 57.6        | 10    | 33       | 139          | 16   |
| Wellman          | W 123     |        | 95.4  | 94.5  | 81.0 | 81.0 | 88.0 | 57.8        | 2     | 36       | 137          | 22   |
| Yerks            | Y2201     |        | 97.4  | 94.9  | 80.7 | 79.7 | 88.2 | 59.6        | 0     | 33       | 138          | 11   |
|                  | High      |        | 102.1 | 100.7 | 90.0 | 90.5 | 93.9 | 60.8        | 10    | 38       | 141          | 31.5 |
|                  | Average   |        | 96.5  | 94.3  | 80.7 | 81.9 | 88.3 | 58.4        | 2     | 34       | 139          | 19.2 |
|                  | Low       |        | 89.3  | 77.8  | 71.6 | 74.4 | 80.3 | 57.0        | 0     | 30       | 137          | 9.3  |

<sup>\*</sup> Hoytville, Wood Co. results were not published in 2011.

Table 4. Reaction of winter wheat varieties to various diseases in Ohio.

|                         |           |               |                 | Leaf    |       |        |      | НВ     |
|-------------------------|-----------|---------------|-----------------|---------|-------|--------|------|--------|
|                         |           | <u>Powder</u> | <u>y Mildew</u> | Blotch* | Glume | Blotch | Head | Scab** |
| Brand                   | Cultivar  | 2011          | 2013            | 2013    | 2012  | 2013   | 2012 | 2013   |
| AGI                     | 109B      |               | S               | MR      | R     | MR     | MR   | MR     |
|                         | 206B      | MS            | S               | R       | R     | MR     | MR   | MR     |
|                         | 210       |               | MR              | R       |       | MS     |      | R      |
|                         | 212B      |               | S               | R       |       | R      |      | R      |
|                         | 304       |               | S               | MS      | R     | MS     | MS   | MS     |
|                         | 306       |               | S               | R       |       | R      |      | S      |
|                         | 307       |               | S               | MR      |       | MR     |      | R      |
|                         | 308       |               | MR              | S       |       | MS     |      | MR     |
| AgriMAXX                | 413       |               | MS              | MS      |       | MS     | MR   | MR     |
|                         | 427       |               | S               | MS      | S     | MS     | MR   | MR     |
|                         | 438       |               | S               | MS      |       | R      |      | MS     |
|                         | Exp 1348  |               | S               | MR      |       | MR     |      | MR     |
| Beck                    | 113       | MS            | S               | MS      | R     | MR     | MS   | MS     |
|                         | 120       |               | S               | MR      | R     | MS     | MR   | MR     |
|                         | 129       |               | S               | R       |       | R      |      | MR     |
|                         | 135       | MR            | MS              | MS      | MR    | R      | MR   | MR     |
| Buckeye                 | Eddie     |               | S               | MR      |       | R      |      | MR     |
| Certified - Proprietary | Bravo     | MS            | MS              | MS      |       | MS     |      | MR     |
|                         | Sunburst  | MR            | MR              | MR      | MR    | MS     | MS   | S      |
| Certified - Public      | Bromfield | MR            | MR              | R       | MR    | MS     | MR   | MR     |
|                         | Freedom   | MR            | MS              | MR      | MS    | MS     | MR   | MR     |
|                         | Hopewell  | MR            | MR              | MS      | MR    | MR     | MS   | MS     |
|                         | Malabar   | MR            | MS              | MR      | MR    | MS     | MR   | MR     |
|                         | Roane     | S             | S               | MS      |       | MR     |      | S      |
| Dyna-Gro                | 9042      | MR            | MS              | R       | R     | MR     | MS   | MS     |
|                         | 9053      | MS            | S               | MS      | MR    | MR     | MS   | MS     |
|                         | 9171      |               | S               | MS      | MR    | MR     | MR   | MR     |
|                         | 9223      |               | S               | MR      | MS    | MR     | MR   | MR     |
|                         | 9343      |               | S               | R       |       | MR     |      | R      |
| Ebberts                 | 727       |               | R               | R       | MS    | MS     | MR   | MR     |
|                         | 806       |               | S               | R       |       | MR     |      | MR     |
|                         | 815       |               | S               | MR      |       | MS     |      | MR     |
| Equity                  | Edge      |               | MS              | R       | R     | MR     | MR   | MR     |
|                         | Guardian  |               | S               | MR      |       | MS     |      | R      |
|                         | Quest     | S             | S               | MR      |       | MR     | MR   | MR     |
|                         | Sienna    | MS            | S               | MS      | MR    | MS     | MR   | MR     |
| FS Wheat                | FS 602    |               | S               | MS      |       | S      |      | MR     |
|                         | FS 622    |               | S               | MS      |       | R      |      | MR     |
|                         | FS 625    |               | S               | MS      |       | MR     |      | MR     |
|                         | FS 626    |               | MS              | R       |       | R      |      | MR     |
| Great Lakes CG          | GLCG 1229 |               | S               | R       |       | MR     |      | MR     |
| Limagrain LCS           | LCS 34969 | <u> </u>      | MS              | MS      |       | R      |      | MR     |
|                         | LCS 38686 |               | MS              | MS      |       | S      |      | MR     |
| OFS                     | Lion      |               | S               | MR      | R     | MS     | MR   | MR     |
| Pioneer Brand           | 25R34     | S             | MS              | MR      | MS    | MR     | MS   | S      |
|                         | 25R39     | MS            | S               | R       | MR    | MR     | MS   | MS     |
|                         | 25R40     |               | MS              | MS      | MR    | MR     | S    | S      |

Table 4, continued

|                  |          |               |                 | Leaf    |              |        |             | НВ     |
|------------------|----------|---------------|-----------------|---------|--------------|--------|-------------|--------|
|                  |          | <u>Powder</u> | <u>y Mildew</u> | Blotch* | <u>Glume</u> | Blotch | <u>Head</u> | Scab** |
| Brand            | Cultivar | 2011          | 2013            | 2013    | 2012         | 2013   | 2012        | 2013   |
| Rupp             | RS 907   |               | S               | MR      |              | MR     |             | R      |
|                  | RS 972   |               | S               | R       | R            | MR     | MS          | MS     |
|                  | RS 979   |               | S               | MS      | R            | MS     | MR          | MR     |
| Seed Consultants | SC 1302  |               | MR              |         | R            | MS     | MR          | MR     |
|                  | SC 1321  | MS            | S               | MS      | MR           | MS     | MR          | MR     |
|                  | SC 1341  | S             | S               | MS      | MR           | MR     | R           | MR     |
|                  | SC 1342  |               | MS              | S       | MR           | MR     | MR          | MR     |
| Shur Grow        | SG-1542  |               | MS              | MS      | MR           | S      | MR          | MR     |
|                  | SG-1549  | MR            | MS              | MR      | MS           | MS     | MR          | MR     |
|                  | SG-1552  |               | S               | MR      | MR           | MS     | MS          | MS     |
|                  | SG-1563  |               | S               | MS      |              | MR     |             | R      |
| Stewart          | SW485    |               | MS              | MS      |              | MS     |             | MR     |
|                  | SW490    |               | S               | R       |              | MR     |             | MR     |
|                  | SW500    |               | S               | R       |              | MR     |             | R      |
| Steyer           | Heilman  |               | S               | MR      | MR           | MR     | MS          | MS     |
|                  | Hunker   |               | S               | MR      | MS           | MR     | MS          | MS     |
|                  | Pierson  |               | MS              | R       |              | MR     |             | R      |
| Strike           | 215      |               | MS              | S       | MR           | MS     | MS          | MR     |
|                  | 220      |               | S               | MR      | MS           | MR     | MS          | MS     |
| Sunstar          | S-1100   |               | MS              | MS      |              | MS     |             | MR     |
|                  | S-1200   |               | S               | MS      |              | R      |             | MR     |
| Syngenta         | SY 474   |               | MS              | R       |              | MR     |             | MR     |
|                  | SY 483   |               | MS              | MR      | MR           | MS     | MR          | S      |
|                  | SY 1526  | MS            | S               | MR      | MS           | MR     | MR          | MR     |
|                  | W1104    | MS            | MS              | MS      | S            | MS     | MR          | MR     |
| Wellman          | W 123    | MR            | S               | MR      | S            | MS     | MR          | MR     |
|                  | W 125    |               | MS              | MR      | MR           | MS     | MR          | MS     |
|                  | W 205    |               | S               | R       |              | MS     |             | MS     |
|                  | W 206    |               | S               | R       | S            | MS     | MS          | MS     |
|                  | W 207    |               | S               | MR      |              | R      |             | MR     |
|                  | W 208    |               | MS              | R       | MR           | MS     | MR          | MR     |
| Yerks            | Y2201    | MS            | S               | R       | R            | MR     | MR          | MR     |
|                  | Y2313    |               | S               | MS      |              | MR     |             | MR     |

R = resistant; MR = moderately resistant; MS = moderately susceptible; S = susceptible; Blank spaces = no data

Reactions scored during 2011-2013. Obtain new information each year due to expected changes in reactions over time.

For additional disease information and wheat varieties, please visit our web site: www.oardc.ohio-state.edu/ohiofieldcropdisease

<sup>\*</sup> Leaf Blotch due to Stagonospora nodorum, Bipolaris sorokinianum and/or Pyrenophora tiritici-repentis

Table 5. Ohio Wheat Performance Test, 2013 - Seed Source & Seed Treatment.

| <u>Brand</u>   | <u>Producer</u>  | <u>Variety</u>                                   | Seed Treatment   |
|----------------|--|--|--|
| AGI            | Advanced Genetics, Inc.<br>11491 Foundation Rd.<br>Croton, OH 43013<br>740-893-2501<br>advancedgeneticsinc.com | 109B<br>206B<br>210<br>212B<br>304<br>306<br>307 |  |
| AgriMAXX       | AgriMAXX Wheat Company<br>7167 Highbanks Rd.<br>Mascoutah, IL 62258<br>855-629-9432<br>agrimaxxwheat.com       | 413<br>427<br>438<br>Exp. 1348                   | Dividend Extreme / Cruiser<br>Dividend Extreme / Cruiser<br>Dividend Extreme / Cruiser<br>Dividend Extreme / Cruiser                               |
| Beck           | Beck's Hybrids<br>6767 E. 276 <sup>th</sup> St.<br>Atlanta, IN 46031<br>800-937-2325<br>beckshybrids.com       | 113<br>120<br>129<br>135                         | Escalate<br>Escalate<br>Escalate<br>Escalate   |
| Buckeye        | Powell Seeds<br>6300 CR 65<br>Ada, OH 45810<br>419-634-0762<br>buckeyehybrids.com                              | Eddie  | Dividend Extreme / Cruiser   |
| Certified      | Ohio Seed Improvement Assn.<br>6150 Avery Rd., Box 477<br>Dublin, OH 43017<br>614-889-1136<br>ohseed.org       | Bravo<br>Sunburst                                | Athena<br>Athena   |
| Dyna-Gro       | Dyna-Gro Seed<br>6221 Riverside Dr., Suite One<br>Dublin, OH 43017<br>614-761-4110<br>dunagroseed.com          | 9042<br>9053<br>9171<br>9223<br>9343             | Foothold Extra / Awaken ST<br>Foothold Extra / Awaken ST<br>Foothold Extra / Awaken ST<br>Foothold Extra / Awaken ST<br>Foothold Extra / Awaken ST |
| Ebberts        | Ebberts Field Seeds, Inc.<br>6840 N. SR 48<br>Covington, OH 45318<br>937-473-2521<br>ebbertsseeds.com          | 727<br>806<br>815                                | Dividend Extreme / SabrEx<br>Dividend Extreme / SabrEx<br>Dividend Extreme / SabrEx  |
| Equity<br>Seed | Equity Seed<br>16545 Southpark Dr.<br>Westfield, IN 46074<br>317-910-2140                                      | Edge<br>Guardian<br>Quest<br>Sienna              | Rancona / Metastar / Macho Rancona / Metastar / Macho Rancona / Metastar / Macho   |
| FS Wheat       | GROWMARK<br>1701 Towanda Ave.<br>Bloomington, IL 61702<br>309-557-6399<br>fsseed.com                           | FS 602<br>FS 622<br>FS 625<br>FS 626             | Dividend Extreme / Cruiser<br>Dividend Extreme / Cruiser<br>Dividend Extreme / Cruiser<br>Dividend Extreme / Cruiser                               |
| GLCG           | Great Lakes Cereal Grains<br>6126 Kelly Beth Court<br>Loveland, CO 80537<br>920-328-8955                       | GLCG 1229  | Dividend Extreme   |

# Table 5, continued

| <u>Brand</u>        | Producer   | <u>Variety</u>                                       | Seed Treatment   |
|---------------------|--|--|--|
| Limagrain<br>LCS    | Limagrain Cereal Seeds<br>2040 SE Frontage Rd.<br>Fort Collins, CO 80525<br>309-569-0008<br>limagraincerealseeds.com | LCS 34969<br>LCS 38686                               | Dividend Extreme / Cruiser<br>Dividend Extreme / Cruiser   |
| OFS                 | Ohio Foundation Seed, Inc.<br>11491 Foundation Rd.<br>Croton, OH 43013<br>740-893-2501                               | Lion   | Athena   |
| Pioneer             | Pioneer Hi-Bred Int'l<br>59 Greif Parkway, Ste 200<br>Delaware, OH 43015<br>740-657-6120<br>pioneer.com              | 25R34<br>25R39<br>25R40                              | Dividend Extreme / Gaucho<br>Dividend Extreme / Gaucho<br>Dividend Extreme / Gaucho                                |
| Public              | Ohio Seed Improvement Assn.<br>6150 Avery Rd, Box 477<br>Dublin, OH 43017<br>614-889-1136<br>ohseed.org              | Bromfield<br>Freedom<br>Hopewell<br>Malabar<br>Roane | Rancona / Metastar ST<br>Raxil - Thiram<br>Rancona / Metastar ST<br>Rancona / Metastar ST<br>Rancona / Metastar ST |
| Rupp                | Rupp Seeds, Inc.<br>17919 County Rd. B<br>Wauseon, OH 43567<br>877-591-7333<br>ruppseeds.com                         | RS 907<br>RS 972<br>RS 979                           | Dividend Extreme / Cruiser<br>Dividend Extreme / Cruiser<br>Dividend Extreme / Cruiser                             |
| Seed<br>Consultants | Seed Consultants<br>648 Miami Trace Rd. SW<br>Washington C.H., OH 43160<br>800-708-2676<br>seedconsultants.com       | SC 1302<br>SC 1321<br>SC 1341<br>SC 1342             | Dividend Extreme / Gaucho<br>Dividend Extreme / Gaucho<br>Dividend Extreme / Gaucho<br>Dividend Extreme / Gaucho   |
| Shur Grow           | Heritage Cooperative, Inc.<br>6239 SR 187<br>Mechanicsburg, OH 43044<br>800-231-7333<br>heritagecooperative.com      | SG-1542<br>SG-1549<br>SG-1552<br>SG-1563             | Warden Cereals Incentive RTA Dividend Extreme Dividend Extreme / Cruiser   |
| Stewart             | Stewart Seeds<br>2230 East CR 300 North<br>Greensburg, IN 47240<br>800-365-SEED<br>stewartseeds.com                  | SW 485<br>SW 490<br>SW 500                           | PolyKote / SecureKote<br>PolyKote / SecureKote<br>PolyKote / SecureKote  |
| Steyer              | Steyer Seeds<br>6154 N. CR. 33<br>Tiffin, OH 44883<br>800-231-4274<br>steyerseeds.com                                | Heilman<br>Hunker<br>Pierson                         | Dividend Extreme / Macho<br>Dividend Extreme / Macho<br>Dividend Extreme / Macho                                   |
| Strike<br>Genetics  | Burtch Seed Company, Inc.<br>4742 Tama Rd.<br>Celina, OH 45822<br>419-363-3713<br>burtchseed.com                     | 215<br>220   | Dividend Dividend Extreme / Cruiser  |

# Table 5, continued

| <u>Brand</u>       | <u>Producer</u>  | <u>Variety</u>                                     | Seed Treatment   |
|--------------------|--|--|--|
| Sunstar<br>Hybrids | Sunstar Hybrids<br>14993 SR 17<br>Culver, IN 46511<br>877-238-7333<br>sunstarhybrids.com                   | S-1100<br>S-1200                                   | Dividend Extreme Dividend Extreme  |
| Syngenta           | Syngenta<br>520 E. 1050 S.<br>Brookston, IN 47923<br>260-248-1700<br>agriprowheat.com                      | SY 483<br>SY 474<br>SY 1526<br>W1104               | Dividend Extreme / Cruiser<br>Dividend Extreme / Cruiser<br>Dividend Extreme / Cruiser<br>Dividend Extreme / Cruiser |
| Wellman            | Wellman Seeds, Inc.<br>23778 Delphos Jennings Rd.<br>Delphos, OH 45833<br>800-717-7333<br>wellmanseeds.com | W 123<br>W 125<br>W 205<br>W 206<br>W 207<br>W 208 | Encase for Wheat                |
| Yerks              | Yerks Seed, Inc.<br>20202 Notestine Rd.<br>Woodburn, IN 46797<br>260-657-5127                              | Y 2201<br>Y 2313                                   | Dividend Extreme / Cruiser<br>Dividend Extreme / Cruiser   |

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