

Performance of hard red spring wheat cultivars with and without fungicide<sup>1</sup> near Mayville, ND, 2019.

| Cultivar              | <u>BLS Score</u> <sup>2</sup> | <u>Height</u> |      | <u>Leaf Disease</u> |      | <u>Test Weight</u> |      | <u>FHB Index</u> |      | <u>Protein</u> |      | <u>Yield</u>         |      | Avg. |
|-----------------------|-------------------------------|---------------|------|---------------------|------|--------------------|------|------------------|------|----------------|------|----------------------|------|------|
|                       | (1-9)                         | No Fung       | Fung | No Fung             | Fung | No Fung            | Fung | No Fung          | Fung | No Fung        | Fung | No Fung              | Fung |      |
|                       |                               | ----(cm)----  |      | ----(%)----         |      | ----(lb/bu)----    |      | ----(%)----      |      | ----(%)----    |      | ----- (bu/acre)----- |      |      |
| Ambush                | 5.3                           | 76.8          | 76.0 | 4.0                 | 3.7  | 58.3               | 58.6 | 0.0              | 0.3  | 15.6           | 14.6 | 53.9                 | 58.1 | 56.0 |
| Barlow                | 3.7                           | 84.2          | 81.8 | 2.7                 | 3.7  | 55.3               | 58.4 | 1.0              | 0.1  | 15.0           | 15.3 | 49.6                 | 53.2 | 51.4 |
| Bolles                | 8.3                           | 81.5          | 81.5 | 4.0                 | 3.3  | 57.8               | 58.6 | 0.2              | 0.1  | 16.0           | 15.4 | 52.1                 | 63.4 | 57.7 |
| Boost                 | 1.7                           | 83.2          | 82.8 | 2.7                 | 1.3  | 58.2               | 58.0 | 0.7              | 0.0  | 14.6           | 14.1 | 61.7                 | 73.4 | 67.5 |
| Commander             | 4.0                           | 75.3          | 77.2 | 2.7                 | 3.3  | 59.0               | 55.8 | 0.2              | 0.1  | 14.7           | 14.9 | 62.5                 | 58.4 | 60.5 |
| CP3504                | 3.7                           | 75.2          | 73.8 | 3.3                 | 3.0  | 56.4               | 57.4 | 0.5              | 0.1  | 14.7           | 12.9 | 58.0                 | 69.1 | 63.6 |
| CP3530                | 6.3                           | 89.3          | 84.7 | 4.0                 | 3.7  | 58.1               | 58.3 | 0.7              | 0.2  | 15.9           | 14.8 | 54.8                 | 61.1 | 57.9 |
| CP3616                | 7.3                           | 78.0          | 75.2 | 4.3                 | 4.0  | 55.4               | 55.5 | 1.1              | 0.3  | 16.6           | 16.1 | 43.5                 | 51.8 | 47.7 |
| CP3888                | 6.0                           | 75.7          | 77.3 | 4.0                 | 4.0  | 56.5               | 57.5 | 1.2              | 0.5  | 15.4           | 14.9 | 49.3                 | 56.0 | 52.7 |
| CP3910                | 7.7                           | 77.2          | 77.3 | 4.7                 | 4.3  | 56.0               | 58.7 | 0.1              | 0.2  | 16.1           | 15.3 | 49.0                 | 52.5 | 50.7 |
| CP3915                | 4.0                           | 77.5          | 76.8 | 3.7                 | 2.0  | 59.0               | 61.4 | 0.6              | 0.0  | 15.1           | 14.0 | 56.3                 | 71.5 | 63.9 |
| CP3939                | 5.7                           | 77.0          | 75.5 | 4.0                 | 4.3  | 56.8               | 56.7 | 0.9              | 0.1  | 15.9           | 15.4 | 48.2                 | 50.9 | 49.5 |
| Elgin-ND              | 5.7                           | 86.7          | 84.0 | 3.3                 | 4.3  | 56.5               | 56.6 | 0.5              | 0.0  | 14.9           | 14.6 | 51.1                 | 51.9 | 51.5 |
| Faller                | 4.7                           | 82.3          | 81.5 | 3.0                 | 3.0  | 58.2               | 58.5 | 0.3              | 0.1  | 14.9           | 13.9 | 56.1                 | 65.1 | 60.6 |
| Glenn                 | 3.7                           | 87.5          | 87.2 | 2.3                 | 3.7  | 59.7               | 60.1 | 0.0              | 0.3  | 15.6           | 15.3 | 51.0                 | 52.7 | 51.9 |
| Lang-MN               | 2.3                           | 85.8          | 82.5 | 3.0                 | 2.7  | 59.1               | 60.1 | 0.3              | 0.0  | 15.7           | 14.8 | 50.5                 | 61.6 | 56.0 |
| LCS Breakaway         | 7.7                           | 72.5          | 72.2 | 4.7                 | 4.0  | 58.0               | 56.5 | 0.1              | 0.1  | 15.7           | 15.6 | 47.4                 | 52.4 | 49.9 |
| LCS Cannon            | 3.3                           | 77.3          | 73.0 | 3.0                 | 3.0  | 54.1               | 60.0 | 0.0              | 0.1  | 14.9           | 14.0 | 40.3                 | 56.6 | 48.5 |
| LCS Rebel             | 2.3                           | 80.5          | 79.2 | 2.3                 | 3.3  | 58.3               | 59.4 | 0.1              | 0.0  | 15.2           | 14.8 | 56.0                 | 61.9 | 58.9 |
| LCS Trigger           | 3.7                           | 82.7          | 83.2 | 2.3                 | 3.0  | 59.4               | 58.9 | 0.0              | 0.0  | 12.4           | 12.4 | 72.2                 | 71.7 | 71.9 |
| Linkert               | 6.3                           | 75.2          | 71.2 | 2.7                 | 3.7  | 54.2               | 58.3 | 1.0              | 0.4  | 16.1           | 15.4 | 49.6                 | 52.6 | 51.1 |
| MN-Washburn           | 5.3                           | 76.5          | 78.0 | 3.7                 | 4.0  | 57.5               | 58.4 | 0.7              | 0.1  | 15.7           | 14.9 | 54.6                 | 59.8 | 57.2 |
| MS Barracuda          | 7.3                           | 73.2          | 71.2 | 4.7                 | 4.7  | 54.7               | 56.0 | 0.3              | 0.0  | 16.0           | 14.7 | 40.8                 | 41.2 | 41.0 |
| MS Camaro             | 6.7                           | 71.3          | 70.7 | 4.0                 | 4.0  | 54.6               | 57.3 | 1.4              | 0.1  | 15.7           | 14.9 | 33.9                 | 46.5 | 40.2 |
| MS Chevelle           | 7.3                           | 74.0          | 74.3 | 3.3                 | 4.0  | 56.5               | 58.2 | 0.2              | 0.2  | 14.7           | 13.4 | 46.8                 | 55.1 | 51.0 |
| ND VitPro             | 3.3                           | 80.5          | 78.2 | 2.7                 | 2.3  | 59.1               | 60.6 | 0.5              | 0.1  | 15.6           | 14.9 | 51.1                 | 53.7 | 52.4 |
| Shelly                | 7.7                           | 74.8          | 75.5 | 4.7                 | 3.3  | 55.8               | 57.2 | 0.6              | 0.1  | 14.9           | 14.2 | 41.8                 | 57.3 | 49.5 |
| Surpass               | 2.3                           | 79.7          | 77.8 | 2.7                 | 2.0  | 58.3               | 58.7 | 0.1              | 0.0  | 15.0           | 14.6 | 41.8                 | 58.2 | 50.0 |
| SY 611CL              | 7.3                           | 70.8          | 70.8 | 2.7                 | 3.0  | 57.6               | 59.3 | 0.1              | 0.0  | 14.8           | 14.7 | 52.3                 | 61.4 | 56.8 |
| SY Ingmar             | 6.0                           | 72.8          | 72.2 | 3.3                 | 2.0  | 59.0               | 59.2 | 0.6              | 0.0  | 15.7           | 15.2 | 49.4                 | 58.8 | 54.1 |
| SY Longmire           | 6.3                           | 75.8          | 77.5 | 2.3                 | 2.0  | 58.9               | 60.2 | 1.6              | 0.4  | 14.6           | 14.2 | 47.6                 | 63.2 | 55.4 |
| SY McCloud            | 6.0                           | 76.7          | 75.7 | 3.3                 | 3.3  | 58.4               | 60.4 | 0.3              | 0.4  | 15.2           | 15.0 | 49.6                 | 62.9 | 56.2 |
| SY Rockford           | 9.0                           | 78.7          | 79.2 | 5.0                 | 5.0  | --                 | 50.5 | 0.3              | 0.4  | 16.4           | 16.0 | 22.0                 | 28.6 | 25.3 |
| SY Soren              | 7.7                           | 72.8          | 75.2 | 3.0                 | 3.7  | 54.9               | 59.2 | 0.1              | 0.0  | 15.8           | 15.3 | 40.7                 | 55.1 | 47.9 |
| SY Valda              | 5.3                           | 73.5          | 74.7 | 2.3                 | 3.0  | 58.3               | 59.0 | 0.2              | 0.0  | 14.4           | 13.8 | 58.0                 | 65.3 | 61.6 |
| TCG-Climax            | 4.7                           | 79.5          | 81.8 | 3.0                 | 4.0  | 58.5               | 60.1 | 0.1              | 0.0  | 15.8           | 15.5 | 50.3                 | 57.8 | 54.0 |
| TCG-Heartland         | 6.3                           | 73.3          | 72.0 | 3.0                 | 3.7  | 59.5               | 58.7 | 1.0              | 0.0  | 15.5           | 15.2 | 53.9                 | 58.3 | 56.1 |
| TCG-Spitfire          | 4.3                           | 79.3          | 78.2 | 2.3                 | 3.3  | 57.2               | 58.1 | 0.5              | 0.0  | 14.4           | 13.7 | 58.5                 | 69.3 | 63.9 |
| TCG-Stalwart          | 9.0                           | 74.8          | 73.0 | 5.0                 | 5.0  | 50.6               | 54.2 | 1.8              | 0.0  | 17.1           | 16.6 | 25.7                 | 35.4 | 30.5 |
| Mean                  | 5.5                           | 77.9          | 77.2 | 3.4                 | 3.4  | 57.2               | 58.2 | 0.5              | 0.1  | 15.3           | 14.8 | 49.5                 | 57.3 | 53.4 |
| CV                    |                               | 3.2           |      | 25.0                |      | 2.9                |      | 134.2            |      | 3.6            |      |                      |      | 3.2  |
| LSD 0.05 <sup>3</sup> |                               | 2.9           |      | 0.9                 |      | 1.9                |      | 0.5              |      | 0.6            |      |                      |      | 7.5  |

<sup>1</sup>Fungicide consisted of Prosaro™ at 6.5 fl oz/acre + NIS 2 pt/100 gal at Feekes 10.51.<sup>2</sup>Bacterial Leaf Streak ratings are an average of the response of the genotypes in other locations in 2019.<sup>3</sup>LSD value is for comparing means within and between fungicide treatments except for average yield, when the value is for comparing difference within the average column.