

**Table 3. Wheat flour quality parameters for hard winter wheat varieties tested in the 2015-2016 Oklahoma Wheat Variety Performance Tests. Shaded values are below target for the respective performance attribute. Except for mixograph and farinograph peak time, the top 25 percent of observations within a performance attribute are signified in boldface.**

| Variety         | Flour quality   |                 |                               |                        |                     |                           |                         |                           |                          |
|-----------------|-----------------|-----------------|-------------------------------|------------------------|---------------------|---------------------------|-------------------------|---------------------------|--------------------------|
|                 | Flour protein % | SDS Sediment mL | Mixograph tolerance score 0-6 | Mixograph bandwidth mm | Mixograph stability | Farinograph stability min | Mixograph peak time min | Farinograph peak time min | Farinograph absorption % |
| 1863            | 10.6            | 6.8             | 3.0                           | 15.8                   | 8.2                 | <b>12.1</b>               | 3.9                     | 6.0                       | 58.0                     |
| AG Robust       | 10.3            | 7.2             | <b>4.0</b>                    | 17.2                   | <b>4.5</b>          | 6.7                       | 4.0                     | 4.6                       | 58.7                     |
| Avery           | 10.0            | <b>8.4</b>      | 3.0                           | 17.6                   | 4.7                 | <b>12.0</b>               | 4.6                     | 5.1                       | 54.8                     |
| Bentley         | <b>11.2</b>     | <b>7.8</b>      | 3.0                           | <b>20.5</b>            | 10.7                | 9.8                       | 3.5                     | 6.4                       | <b>58.8</b>              |
| <b>Billings</b> | <b>11.1</b>     | <b>7.1</b>      | <b>4.0</b>                    | <b>18.8</b>            | <b>7.5</b>          | <b>5.4</b>                | <b>3.6</b>              | <b>3.7</b>                | <b>61.2</b>              |
| Brawl CL Plus   | <b>11.4</b>     | 7.4             | 3.0                           | <b>19.8</b>            | 7.7                 | 10.2                      | 4.0                     | 6.1                       | 57.2                     |
| Byrd            | 10.1            | <b>8.0</b>      | 3.5                           | <b>19.0</b>            | 4.7                 | 10.3                      | 6.2                     | 2.6                       | 54.4                     |
| Doublestop      |                 |                 |                               |                        |                     |                           |                         |                           |                          |
| CL Plus         | 10.9            | <b>7.9</b>      | 3.0                           | <b>18.8</b>            | 6.2                 | 7.1                       | 3.2                     | 4.9                       | <b>60.4</b>              |
| Duster          | 10.4            | 6.3             | 3.5                           | <b>19.4</b>            | 5.7                 | 6.0                       | 3.4                     | 3.1                       | 58.7                     |
| Endurance       | 10.1            | 6.9             | 3.0                           | 14.3                   | 6.0                 | 5.5                       | 3.6                     | 4.5                       | 57.3                     |
| Everest         | 10.7            | 6.3             | 2.8                           | 14.6                   | 7.1                 | 5.4                       | 3.1                     | 4.2                       | 58.9                     |
| Gallagher       | 10.4            | 5.7             | 3.5                           | 17.6                   | <b>4.6</b>          | 7.8                       | 3.9                     | 5.9                       | <b>60.7</b>              |
| Iba             | 10.1            | 7.3             | <b>4.0</b>                    | 14.1                   | <b>4.4</b>          | 9.0                       | 3.8                     | 4.5                       | 57.6                     |
| Joe (hw)        | 10.3            | 6.8             | 1.5                           | 13.9                   | 6.5                 | 6.3                       | 3.6                     | 5.1                       | 56.9                     |
| KanMark         | 10.6            | 7.0             | 3.0                           | 16.8                   | <b>4.4</b>          | <b>12.7</b>               | 5.3                     | 7.5                       | 56.4                     |
| Larry           | 10.8            | 5.7             | 1.0                           | 11.1                   | 7.7                 | 6.4                       | 3.3                     | 5.7                       | 58.7                     |
| LCS Chrome      | <b>11.4</b>     | 6.4             | 3.0                           | <b>21.4</b>            | 10.1                | 6.3                       | 3.3                     | 4.7                       | 58.9                     |
| LCS Mint        | 10.4            | <b>7.4</b>      | <b>4.0</b>                    | 16.4                   | <b>4.0</b>          | 8.9                       | 4.6                     | 4.1                       | 56.3                     |
| LCS Pistol      | 11.1            | <b>7.5</b>      | 3.0                           | 16.9                   | 7.2                 | 9.1                       | 3.8                     | 6.9                       | 55.3                     |
| LCS Wizard      | 10.7            | 6.7             | 2.0                           | 18.2                   | 10.1                | 3.5                       | 2.6                     | 3.6                       | 57.9                     |
| Long Branch     | 11.0            | 7.0             | 3.0                           | 15.4                   | 6.1                 | 7.4                       | 3.6                     | 5.0                       | <b>59.7</b>              |
| NF 101          | 10.9            | 6.5             | 3.0                           | 17.6                   | 8.1                 | 5.3                       | 3.1                     | 5.2                       | 58.4                     |
| Oakley CL       | 10.9            | <b>7.9</b>      | 4.0                           | 17.6                   | <b>2.9</b>          | <b>11.6</b>               | 5.2                     | 5.8                       | 56.9                     |
| OK Rising       | <b>11.1</b>     | 6.9             | 3.0                           | 18.3                   | 9.4                 | 8.6                       | 4.1                     | 5.3                       | <b>59.6</b>              |
| OK09915C-1      | <b>11.2</b>     | 7.1             | <b>4.0</b>                    | 18.5                   | 8.2                 | 9.2                       | 4.1                     | 6.2                       | <b>59.7</b>              |
| OK12912C        | 10.8            | <b>7.5</b>      | <b>4.0</b>                    | 17.6                   | 6.6                 | 8.3                       | 3.3                     | 4.4                       | <b>60.0</b>              |
| Ruby Lee        | <b>11.2</b>     | <b>8.1</b>      | <b>4.0</b>                    | <b>20.8</b>            | 5.9                 | <b>11.1</b>               | 5.1                     | 4.6                       | 58.7                     |
| Smith's Gold    | <b>11.1</b>     | 6.1             | 3.3                           | <b>19.6</b>            | 5.5                 | 9.4                       | 4.8                     | 5.3                       | 58.4                     |
| SY Drifter      | 10.8            | 7.0             | <b>4.0</b>                    | 16.6                   | 5.6                 | <b>11.7</b>               | 4.3                     | 4.9                       | 58.1                     |
| SY Flint        | 10.3            | 6.6             | 3.3                           | 17.2                   | 4.8                 | 7.1                       | 3.5                     | 3.9                       | 58.2                     |
| SY Grit         | 10.5            | 6.1             | 2.0                           | 14.6                   | 5.1                 | 6.5                       | 3.5                     | 5.0                       | 56.0                     |
| SY Llano        | 10.1            | 7.0             | 4.0                           | 15.5                   | <b>2.9</b>          | 10.1                      | 5.3                     | 3.5                       | 57.3                     |
| SY Monument     | 10.6            | <b>7.8</b>      | <b>5.0</b>                    | <b>20.3</b>            | <b>3.2</b>          | 10.5                      | 6.5                     | 4.8                       | 57.3                     |
| SY Razor        | <b>11.3</b>     | 6.6             | 3.0                           | <b>19.5</b>            | 8.0                 | <b>10.9</b>               | 3.7                     | 7.0                       | <b>62.4</b>              |
| SY Wolf         | 10.6            | 5.3             | 1.0                           | 10.3                   | 7.8                 | 10.4                      | 4.5                     | 7.7                       | 58.1                     |
| T158            | 10.1            | 7.2             | <b>4.0</b>                    | 14.0                   | <b>3.6</b>          | 7.9                       | 3.8                     | 4.9                       | 55.9                     |
| TAM 112         | 10.4            | <b>8.0</b>      | <b>4.0</b>                    | 16.7                   | <b>4.4</b>          | <b>10.6</b>               | 4.6                     | 3.9                       | <b>60.0</b>              |
| TAM 114         | 10.6            | <b>8.4</b>      | <b>4.0</b>                    | <b>18.6</b>            | <b>1.8</b>          | <b>12.4</b>               | 8.3                     | 2.8                       | 56.2                     |
| TAM 204         | 10.8            | 7.0             | 1.0                           | 16.8                   | 10.3                | 3.9                       | 2.7                     | 3.7                       | 57.5                     |
| Tatanka         | 10.2            | 7.1             | 3.0                           | 16.4                   | 5.5                 | 9.1                       | 4.9                     | 5.5                       | 56.7                     |
| WB4303          | 10.9            | 6.7             | 3.0                           | 16.5                   | 6.8                 | <b>11.7</b>               | 4.0                     | 7.6                       | <b>60.2</b>              |
| WB4458          | <b>11.2</b>     | 6.4             | 1.5                           | 15.8                   | 13.0                | 9.3                       | 2.9                     | 5.9                       | <b>59.6</b>              |
| WB4515          | <b>11.7</b>     | 7.0             | 3.0                           | 17.9                   | 6.6                 | <b>12.1</b>               | 4.7                     | 6.7                       | 56.0                     |
| WB4721          | <b>11.7</b>     | 6.8             | 3.0                           | 16.2                   | 7.2                 | 8.0                       | 3.9                     | 5.3                       | 57.0                     |
| WB-Cedar        | 10.7            | 6.8             | <b>4.0</b>                    | 14.9                   | <b>4.1</b>          | <b>11.0</b>               | 3.9                     | 6.0                       | <b>60.0</b>              |
| WB-Grainfield   | <b>11.2</b>     | 6.8             | 3.0                           | 15.0                   | 6.0                 | 10.2                      | 4.2                     | 6.6                       | 58.1                     |
| Winterhawk      | 10.0            | 7.3             | 3.0                           | 15.8                   | 5.7                 | 7.5                       | 3.5                     | 5.0                       | 58.3                     |
| Zenda           | 10.7            | <b>7.4</b>      | <b>4.0</b>                    | 17.1                   | 7.6                 | 7.9                       | 3.1                     | 5.7                       | <b>60.8</b>              |
| Mean            | 10.7            | 7.0             | 3.2                           | 16.9                   | 6.3                 | 8.7                       | 4.1                     | 5.1                       | 58.1                     |
| LSD (0.05)      | 0.6             | 0.6             | 0.3                           | 4.0                    | 3.2                 | 4.9                       | 0.8                     | 2.3                       | 1.6                      |
| CV              | 10.3            | 11.2            | 28.6                          | 20.5                   | 50.2                | 38.9                      | 31.9                    | 34.4                      | 3.1                      |
| Target range    | ≥10.3           | ≥6.5            | ≥3.0                          | ≥12.0                  | ≤10.0               | ≥7.0                      | 3.0-6.0                 | 4.0-8.0                   | ≥57.0                    |

hw=white wheat variety