

## 2023 WSU Variety Testing Hard Red Spring Wheat Trial, Almira

|   |                    |               | 2023     |         |          |      |         | 3 Year  | 4 Year  |
|---|--------------------|---------------|----------|---------|----------|------|---------|---------|---------|
| Released Varieties           CP3055         68         58.8         11.4         33         178         55           CP3119A         66         58.0         11.8         34         178           Net CL+         65         64.2         12.2         33         174         51         40         40           WB9623         63         62.3         12.0         33         172         49         38         40         39           Alum         62         63.3         11.7         34         174         52         40         39           Kelse         62         62.7         12.5         33         172         49         38         40           CP3322         69         61.9         11.4         32         178         178         178         184         39         39         39         39         61e         66         62.9         12.2         33         171         45         37         38         62         18         12.2         33         171         45         37         38         62         17         2.2         33         171         45         37         38         62 <th>Variety Name</th> <th>Yield</th> <th>Test WT</th> <th>Protein</th> <th>Plant HT</th> <th>Head</th> <th>Average</th> <th>Average</th> <th>Average</th>   | Variety Name       | Yield         | Test WT  | Protein | Plant HT | Head | Average | Average | Average |
| CP3055         68         58.8         11.4         33         178         55           CP3119A         66         58.0         11.8         34         178           Net CL+         65         64.2         12.2         33         174         51         40         40           WB9623         63         62.3         12.0         33         172         49         38         40           Alum         62         63.3         11.7         34         174         52         40         39           Kelse         62         62.7         12.5         33         172         49         38         40           CP33222         59         61.9         11.4         32         178         48         39         39         39         Gelee         66         62.9         12.2         33         171         45         37         38         40           CP3322         59         61.9         12.7         41         171         49         38         39         39         Gelee         66.0         62.7         12.7         41         171         49         38         39         39         38   |                    | (Bu/A)        | (Lbs/Bu) | (%)     | (ln)     | Date | (Bu/A)  | (Bu/A)  | (Bu/A)  |
| CP3119A         66         58.0         11.8         34         178           Net CL+         65         64.2         12.2         33         174         51         40         40           WB9623         63         62.3         12.0         33         172         49         40         39           Kelse         62         62.7         12.5         33         172         49         38         40           CP3322         59         61.9         11.4         32         178         48         39         39         39         61.9         11.4         32         170         48         39         39         39         61.9         11.4         32         170         48         39         39         39         61.9         11.4         32         170         48         39         39         39         61.0         61.2         12.2         33         171         45         37         38         39         49         62         62.2         13.7         30         176         43         34         36         60         62.8         14.9         30         166         46         39         38         62   | Released Varieties |               |          |         |          |      |         |         |         |
| Net CL+         65         64.2         12.2         33         174         51         40         40           WB9623         63         62.3         12.0         33         172         49           Alum         62         63.3         11.7         34         174         52         40         39           Kelse         62         63.3         11.7         34         174         52         40         39           CP3222         59         61.9         11.4         32         176         48         39         39           Glee         56         62.9         12.2         33         171         45         37         38           Chet         56         62.9         12.2         33         171         45         37         38           Chet         56         63.7         12.7         41         171         49         38         39           AP Renegade         53         62.2         13.7         30         176         43         34         36           WB9303         50         61.8         12.9         34         175         39         38           CP3530  | CP3055             | 68            | 58.8     | 11.4    | 33       | 178  | 55      |         |         |
| WB9623         63         62.3         12.0         33         172         49           Alum         62         63.3         11.7         34         174         52         40         39           Kelse         62         62.7         12.5         33         172         49         38         40           CP3322         59         61.9         11.4         32         178         Hale         57         63.1         12.9         35         170         48         39         39           Glee         56         62.9         12.2         33         171         45         37         38           Chet         56         63.7         12.7         41         171         49         38         39           AP Renegade         53         62.2         13.7         30         176         43         34         36           WB9303         50         62.8         14.9         34         175         39         38           CP3530         50         61.8         12.9         34         175         39         38           MB9668         61.9         12.6         34  | CP3119A            | 66            | 58.0     | 11.8    | 34       | 178  |         |         |         |
| Alum         62         63.3         11.7         34         174         52         40         39           Kelse         62         62.7         12.5         33         172         49         38         40           CP3322         59         61.9         11.4         32         178   | Net CL+            | 65            | 64.2     | 12.2    | 33       | 174  | 51      | 40      | 40      |
| Kelse         62         62.7         12.5         33         172         49         38         40           CP3322         59         61.9         11.4         32         178         Transport of the colspan="8">Transport of the colsp | WB9623             | 63            | 62.3     | 12.0    | 33       | 172  | 49      |         |         |
| CP3322         59         61.9         11.4         32         178           Hale         57         63.1         12.9         35         170         48         39         39           Glee         56         62.9         12.2         33         171         45         37         38           Chet         56         63.7         12.7         41         171         49         38         39           AP Renegade         53         62.2         13.7         30         176         43         34         36           WB9303         50         62.8         14.9         30         176         43         34         36           WB9668         49         62.8         14.9         30         176         43         34         36           Experimental Lines           MT1809         68         61.9         12.6         34         171         171         171         171         172         172         173         174         174         174         174         174         174         174         174         174         174         174         174         174         174         174   | Alum               | 62            | 63.3     | 11.7    | 34       | 174  | 52      | 40      | 39      |
| Hale         57         63.1         12.9         35         170         48         39         39           Glee         56         62.9         12.2         33         171         45         37         38           Chet         56         63.7         12.7         41         171         49         38         39           AP Renegade         53         62.2         13.7         30         176         43         34         36           WB9303         50         62.8         14.9         30         166         46         39         38           CP3530         50         61.8         12.9         34         175         39         WB9668         49         62.8         14.3         26         166         46         39         38           WB9668         49         62.8         14.3         26         168         42         36         37           Experimental Lines         49         62.8         61.9         12.6         34         171           IDO2105S         66         62.9         11.8         33         170         50           WR831CL+         61         63.6 <th< th=""><th>Kelse</th><th>62</th><th>62.7</th><th>12.5</th><th>33</th><th>172</th><th>49</th><th>38</th><th>40</th></th<>  | Kelse              | 62            | 62.7     | 12.5    | 33       | 172  | 49      | 38      | 40      |
| Glee         56         62.9         12.2         33         171         45         37         38           Chet         56         63.7         12.7         41         171         49         38         39           AP Renegade         53         62.2         13.7         30         176         43         34         36           WB9303         50         62.8         14.9         30         166         46         39         38           CP3530         50         61.8         12.9         34         175         39         7           WB99668         49         62.8         14.3         26         168         42         36         37           Experimental Lines           MT1809         68         61.9         12.6         34         171         171         172         172         173         174   | CP3322             | 59            | 61.9     | 11.4    | 32       | 178  |         |         |         |
| Chet         56         63.7         12.7         41         171         49         38         39           AP Renegade         53         62.2         13.7         30         176         43         34         36           WB9303         50         62.8         14.9         30         166         46         39         38           CP3530         50         61.8         12.9         34         175         39         170         18 <th>Hale</th> <th>57</th> <th>63.1</th> <th>12.9</th> <th>35</th> <th>170</th> <th>48</th> <th>39</th> <th>39</th>   | Hale               | 57            | 63.1     | 12.9    | 35       | 170  | 48      | 39      | 39      |
| AP Renegade       53       62.2       13.7       30       176       43       34       36         WB9303       50       62.8       14.9       30       166       46       39       38         CP3530       50       61.8       12.9       34       175       39       39       38         Experimental Lines         MT1809       68       61.9       12.6       34       171       171       171       172 <th< th=""><th>Glee</th><th>56</th><th>62.9</th><th>12.2</th><th>33</th><th>171</th><th>45</th><th>37</th><th>38</th></th<>  | Glee               | 56            | 62.9     | 12.2    | 33       | 171  | 45      | 37      | 38      |
| WB9303         50         62.8         14.9         30         166         46         39         38           CP3530         50         61.8         12.9         34         175         39         Section 10           WB9668         49         62.8         14.3         26         168         42         36         37           Experimental Lines           MT1809         68         61.9         12.6         34         171         171         172         <  | Chet               | 56            | 63.7     | 12.7    | 41       | 171  | 49      | 38      | 39      |
| CP3530       50       61.8       12.9       34       175       39         WB9668       49       62.8       14.3       26       168       42       36       37         Experimental Lines         MT1809       68       61.9       12.6       34       171         IDO2105S       66       62.9       11.8       33       170         MT1939       64       62.9       12.6       33       171         WA8342R       63       63.1       11.8       31       174         WA8356 CL+       61       63.6       12.5       33       170       50         WA8411       60       63.6       12.7       33       169       48       40         WA8358 CL+       57       63.9       12.9       33       171       51         IDO2202 CL2+       56       63.1       12.3       32       170         C.V.       7       0.9       5.5       3       0       12       14       14         LSD       6       0.8       1.0       1       1       6       NS       NS   | AP Renegade        | 53            | 62.2     | 13.7    | 30       | 176  | 43      | 34      | 36      |
| WB9668       49       62.8       14.3       26       168       42       36       37         Experimental Lines         MT1809       68       61.9       12.6       34       171         IDO2105S       66       62.9       11.8       33       170         MT1939       64       62.9       12.6       33       171         WA8342R       63       63.1       11.8       31       174         WA8387 CL+       61       63.6       12.5       33       170       50         WA8356       61       62.6       12.8       31       169       48       40         WA8412       60       63.0       13.0       35       169         WA8358 CL+       57       63.9       12.9       33       171       51         IDO2202 CL2+       56       63.1       12.3       32       170         C.V.       7       0.9       5.5       3       0       12       14       14         LSD       6       0.8       1.0       1       1       6       NS       NS         Average       60       62.5       12.6       33 </th <th>WB9303</th> <th>50</th> <th>62.8</th> <th>14.9</th> <th>30</th> <th>166</th> <th>46</th> <th>39</th> <th>38</th>  | WB9303             | 50            | 62.8     | 14.9    | 30       | 166  | 46      | 39      | 38      |
| Experimental Lines         MT1809       68       61.9       12.6       34       171         IDO2105S       66       62.9       11.8       33       170         MT1939       64       62.9       12.6       33       171         WA8342R       63       63.1       11.8       31       174         WA8387 CL+       61       63.6       12.5       33       170       50         WA8356       61       62.6       12.8       31       169       48       40         WA8412       60       63.0       13.0       35       169         WA8411       60       63.6       12.7       33       164         WA8358 CL+       57       63.9       12.9       33       171       51         IDO2202 CL2+       56       63.1       12.3       32       170         C.V.       7       0.9       5.5       3       0       12       14       14         LSD       6       0.8       1.0       1       1       6       NS       NS         Average       60       62.5       12.6       33       172       48       38<  | CP3530             | 50            | 61.8     | 12.9    | 34       | 175  | 39      |         |         |
| MT1809 68 61.9 12.6 34 171  IDO2105S 66 62.9 11.8 33 170  MT1939 64 62.9 12.6 33 171  WA8342R 63 63.1 11.8 31 174  WA8387 CL+ 61 63.6 12.5 33 170 50  WA8356 61 62.6 12.8 31 169 48 40  WA8412 60 63.0 13.0 35 169  WA8411 60 63.6 12.7 33 164  WA8358 CL+ 57 63.9 12.9 33 171 51  IDO2202 CL2+ 56 63.1 12.3 32 170  C.V. 7 0.9 5.5 3 0 12 14 14  LSD 6 0.8 1.0 1 1 6 NS NS  Average 60 62.5 12.6 33 172 48 38 39  Highest 68 64.2 14.9 41 178 55 40 40   | WB9668             | 49            | 62.8     | 14.3    | 26       | 168  | 42      | 36      | 37      |
| IDO2105S   66   62.9   11.8   33   170  | Experimental Lines |               |          |         |          |      |         |         |         |
| MT1939       64       62.9       12.6       33       171         WA8342R       63       63.1       11.8       31       174         WA8387 CL+       61       63.6       12.5       33       170       50         WA8356       61       62.6       12.8       31       169       48       40         WA8412       60       63.0       13.0       35       169         WA8411       60       63.6       12.7       33       164         WA8358 CL+       57       63.9       12.9       33       171       51         IDO2202 CL2+       56       63.1       12.3       32       170         C.V.       7       0.9       5.5       3       0       12       14       14         LSD       6       0.8       1.0       1       1       6       NS       NS         Average       60       62.5       12.6       33       172       48       38       39         Highest       68       64.2       14.9       41       178       55       40       40  | MT1809             | 68            | 61.9     | 12.6    | 34       | 171  |         |         |         |
| WA8342R       63       63.1       11.8       31       174         WA8387 CL+       61       63.6       12.5       33       170       50         WA8356       61       62.6       12.8       31       169       48       40         WA8412       60       63.0       13.0       35       169         WA8411       60       63.6       12.7       33       164         WA8358 CL+       57       63.9       12.9       33       171       51         IDO2202 CL2+       56       63.1       12.3       32       170         C.V.       7       0.9       5.5       3       0       12       14       14         LSD       6       0.8       1.0       1       1       6       NS       NS         Average       60       62.5       12.6       33       172       48       38       39         Highest       68       64.2       14.9       41       178       55       40       40   | IDO2105S           | 66            | 62.9     | 11.8    | 33       | 170  |         |         |         |
| WA8387 CL+       61       63.6       12.5       33       170       50         WA8356       61       62.6       12.8       31       169       48       40         WA8412       60       63.0       13.0       35       169         WA8411       60       63.6       12.7       33       164         WA8358 CL+       57       63.9       12.9       33       171       51         IDO2202 CL2+       56       63.1       12.3       32       170         C.V.       7       0.9       5.5       3       0       12       14       14         LSD       6       0.8       1.0       1       1       6       NS       NS         Average       60       62.5       12.6       33       172       48       38       39         Highest       68       64.2       14.9       41       178       55       40       40   | MT1939             | 64            | 62.9     | 12.6    | 33       | 171  |         |         |         |
| WA8356       61       62.6       12.8       31       169       48       40         WA8412       60       63.0       13.0       35       169         WA8411       60       63.6       12.7       33       164         WA8358 CL+       57       63.9       12.9       33       171       51         IDO2202 CL2+       56       63.1       12.3       32       170         C.V.       7       0.9       5.5       3       0       12       14       14         LSD       6       0.8       1.0       1       1       6       NS       NS         Average       60       62.5       12.6       33       172       48       38       39         Highest       68       64.2       14.9       41       178       55       40       40   | WA8342R            | 63            | 63.1     | 11.8    | 31       | 174  |         |         |         |
| WA8412       60       63.0       13.0       35       169         WA8411       60       63.6       12.7       33       164         WA8358 CL+       57       63.9       12.9       33       171       51         IDO2202 CL2+       56       63.1       12.3       32       170         C.V.       7       0.9       5.5       3       0       12       14       14         LSD       6       0.8       1.0       1       1       6       NS       NS         Average       60       62.5       12.6       33       172       48       38       39         Highest       68       64.2       14.9       41       178       55       40       40  | WA8387 CL+         | 61            | 63.6     | 12.5    | 33       | 170  | 50      |         |         |
| WA8411       60       63.6       12.7       33       164         WA8358 CL+       57       63.9       12.9       33       171       51         IDO2202 CL2+       56       63.1       12.3       32       170         C.V.       7       0.9       5.5       3       0       12       14       14         LSD       6       0.8       1.0       1       1       6       NS       NS         Average       60       62.5       12.6       33       172       48       38       39         Highest       68       64.2       14.9       41       178       55       40       40   | WA8356             | 61            | 62.6     | 12.8    | 31       | 169  | 48      | 40      |         |
| WA8358 CL+         57         63.9         12.9         33         171         51           IDO2202 CL2+         56         63.1         12.3         32         170           C.V.         7         0.9         5.5         3         0         12         14         14           LSD         6         0.8         1.0         1         1         6         NS         NS           Average         60         62.5         12.6         33         172         48         38         39           Highest         68         64.2         14.9         41         178         55         40         40  | WA8412             | 60            | 63.0     | 13.0    | 35       | 169  |         |         |         |
| IDO2202 CL2+         56         63.1         12.3         32         170           C.V.         7         0.9         5.5         3         0         12         14         14           LSD         6         0.8         1.0         1         1         6         NS         NS           Average         60         62.5         12.6         33         172         48         38         39           Highest         68         64.2         14.9         41         178         55         40         40  | WA8411             | 60            | 63.6     | 12.7    | 33       | 164  |         |         |         |
| C.V.       7       0.9       5.5       3       0       12       14       14         LSD       6       0.8       1.0       1       1       6       NS       NS         Average       60       62.5       12.6       33       172       48       38       39         Highest       68       64.2       14.9       41       178       55       40       40   | WA8358 CL+         | 57            | 63.9     | 12.9    | 33       | 171  | 51      |         |         |
| LSD       6       0.8       1.0       1       1       6       NS       NS         Average       60       62.5       12.6       33       172       48       38       39         Highest       68       64.2       14.9       41       178       55       40       40   | IDO2202 CL2+       | 56            | 63.1     | 12.3    | 32       | 170  |         |         |         |
| Average         60         62.5         12.6         33         172         48         38         39           Highest         68         64.2         14.9         41         178         55         40         40   | С                  | .V. 7         | 0.9      | 5.5     | 3        | 0    | 12      | 14      | 14      |
| <b>Highest</b> 68 64.2 14.9 41 178 55 40 40   | LS                 | <b>SD</b> 6   | 0.8      | 1.0     | 1        | 1    | 6       | NS      | NS      |
| •   | Avera              | <b>ge</b> 60  | 62.5     | 12.6    |          | 172  | 48      | 38      | 39      |
| Lewest 40 50.0 44.4 00 46.4 00 04 00  | Highe              | est 68        | 64.2     | 14.9    | 41       | 178  | 55      | 40      | 40      |
| <b>LOWEST</b> 49 58.0 11.4 26 164 39 34 36  | Lowe               | <b>est</b> 49 | 58.0     | 11.4    | 26       | 164  | 39      | 34      | 36      |

| Agronomic Information                             |              |
|---|--------------|
| Planting Date:                                    | 4/26/2023    |
| Harvest Date:                                     | 8/21/2023    |
| Seeding Rate (seeds/ac):                          | 870,000      |
| Previous Crop:                                    | Spring Wheat |
| Spring soil test:                                 |              |
| N (lb/ac) 4-ft sample                             | 69           |
| P <sub>2</sub> O <sub>5</sub> (lb/ac) 1-ft sample | 108          |
| S (lb/ac) 2-ft sample                             | 19           |
| nH (ton 6 inches)                                 | 53           |

## **Trial Notes:**

- 1. The nursery was located approximately 6.5 miles southeast of Grand Coulee, WA.
- 2. The nursery was fertilized at seeding at a rate of 16N, 40P, 19K, 10S, and 15Cl. An additional 77N was applied on May 6, 2023.
- 3. Yield was 54% greater and test weight was 4.7 lb/bu more compared to 2022.

Cooperator: Dan McKay

Herbicides: Axial (16oz), Talinor (16oz), Miravis Ace (7oz), and Tilt (2oz) were applied on May 18, 2023.