## 2009 WSU HARD SPRING WHEAT TRIAL SUMMARY

**Precipitation Zone= >20"**

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1. Hard spring wheat (including red and white) grain yield across two locations, 20 hard red entries, and 10 hard white entries in the >20" precipitation zone averaged 71 bu/ac, 13 bu/ac higher than the 2008 average. These trials were analyzed as alpha lattice designs that overall helped to account for within-replication variation and reduced LSD and CV values. The highest value and other values within the LSD range are shown in bold for yield, test weight, and protein. In 2009, the highest yielding cultivars were hard white, while in 2008 the hard red and white averaged nearly the same.

2. Test weight averaged 61.1 lb/bu across locations and entries, with a range of 59.9 lb/bu to 62.9 lb/bu. Test weights averaged 1.2 lb/bu higher than last year. Grain protein averaged 14.2% with a range of 12.2% to 15.8%, 1.7% higher than last year's average.
### 2009 WSU HARD SPRING WHEAT TRIAL SUMMARY

**Precipitation Zone= 16"- 20"**

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**1.** Hard spring wheat (including red and white) grain yield across five locations, 20 hard red entries, and 10 hard white entries in the 16"- 20" precipitation zone averaged 59 bu/ac, 12 bu/ac higher than the 2008 average. These trials were analyzed as alpha lattice designs that overall helped to account for within-replication variation and reduced LSD and CV values. The highest value and other values within the LSD range are shown in bold for yield, test weight, and protein. In 2009, the highest yielding cultivars were hard white, while in 2008 the hard red and white averaged the same.

**2.** Test weight averaged 60.7 lb/bu across locations and entries, with a range of 59.4 lb/bu to 62.3 lb/bu. Test weights averaged 0.9 lb/bu higher than last year. Grain protein averaged 14.5% with a range of 12.7% to 16.3%, 0.2% higher than last year's average.
## 2009 WSU HARD SPRING WHEAT TRIAL SUMMARY

**Precipitation Zone= 12" - 16"**

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| **Hard White Spring** |        |          |        |               |
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| WA008100           | 52     | 77       | 48     | 59            |
| WA008079           | 55     | 70       | 47     | 57            |
| WA008078           | 55     | 61       | 50     | 55            |
| WA008101           | 47     | 67       | 47     | 53            |
| CLEAR WHITE        | 55     | 54       | 47     | 52            |
| MACON              | 45     | 62       | 43     | 50            |
| RSI10348W          | 47     | 56       | 44     | 49            |
| BLANCA GRANDE      | 44     | 43       | 33     | 40            |

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| **CV (%)** | 8     | 7       | 10     | 8 |
| **LSD (0.10)** | 5   | 6       | 6      | 3 |
| **Average** | 50   | 61      | 43     | 51 |
| **Highest** | 56   | 77      | 57     | 62 |
| **Lowest**  | 42   | 43      | 33     | 40 |

1. Hard spring wheat (including red and white) grain yield across three locations, 20 hard red entries, and 10 hard white entries in the 12"-16" precipitation zone averaged 51 bu/ac, 6 bu/ac higher than the 2008 average. These trials were analyzed as alpha lattice designs that overall helped to account for within-replication variation and reduced LSD and CV values. The highest value and other values within the LSD range are shown in bold for yield, test weight, and protein.

2. Test weight averaged 60.6 lb/bu across locations and entries, with a range of 59.6 lb/bu to 61.7 lb/bu. Test weights averaged 0.7 lb/bu higher than last year. Grain protein averaged 15.1% with a range of 13.1% to 17.1%, 1.2% higher than last year’s average.
## 2009 WSU HARD SPRING WHEAT TRIAL SUMMARY

Precipitation Zone= <12"

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</tr>
<tr>
<td>Lowest</td>
<td>11</td>
<td>2</td>
<td>21</td>
<td>27</td>
<td>19</td>
</tr>
</tbody>
</table>

1. Hard spring wheat grain yield across four locations, 20 hard red entries, and 10 hard white entries, in the <12" precipitation zone averaged 21 bu/ac, 2 bu/ac lower than the 2008 average. These trials were analyzed as alpha lattice designs that overall helped to account for within-replication variation and reduced LSD and CV values. The highest value and other values within the LSD range are shown in bold for yield, test weight, and protein.

2. Four of the five cultivars in the top LSD group are hard white cultivars.

3. Test weight averaged 61.1 lb/bu across locations and entries, with a range of 59.9 lb/bu to 62.8 lb/bu. Test weights averaged 1.7 lb/bu higher than last year. Grain protein averaged 15.0% with a range of 13.5% to 16.5%, 0.2% higher than last year's average.