

Winter Wheat Variety Test

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Materials and Methods

Twenty-two varieties were included in the 2005 winter wheat variety test at Crawfordsville. Each variety was sown in three different plots to average the effects of soil variability. The varieties were planted September 21, 2004, at a rate of 1 1/2 bushels/acre. The wheat plots were harvested on July 7.

Results and Discussion

Average winter wheat grain yield at Crawfordsville in 2005 was 73.9 bushels/acre, 1.2 bushels/acre more than the long-term

average yield (Table 1). Based on the long-term data, 2145 was the highest-yielding variety among the hard red winter wheat class, Nuplains in the hard white wheat class, and Kaskaskia in the soft red winter wheat class. Infinity had the highest test weight in 2005 in the hard red winter wheat class, Nuplains in the hard white winter wheat class, and Kaskaskia in the soft red winter wheat class.

Additional information on winter wheat variety tests in the state can be found in the publication "Iowa Crop Performance Tests—Winter Wheat and Winter Triticale, 2005," which is available from county extension offices (AG-6) and at www.public.iastate.edu/~jjannink/.

Table 1. Performance of winter wheat varieties tested at Crawfordsville.

| Variety | Class ¹ | Grain yields ¹ | | Head date (May) ² | Lodging score ³ | Plant height (in.) ² | Test weight (lb/bu) ⁴ |
|------------------|--------------------|---------------------------|-----------|------------------------------|----------------------------|---------------------------------|----------------------------------|
| | | 2005 (bu/acre) | Long Term | | | | |
| 2137 | HR | 71.6 | 75.8 | 20 | . | 34.0 | 57.4 |
| 2145 | HR | 75.2 | 77.7 | 22 | . | 33.7 | 57.8 |
| 2174 | HR | 71.4 | . | 21 | . | 34.9 | 58.9 |
| Jagger | HR | 59.0 | 65.5 | 18 | . | 32.9 | 56.9 |
| Karl92 | HR | 70.6 | 71.4 | 18 | . | 34.1 | 58.6 |
| Overley | HR | 74.1 | . | 18 | . | 33.5 | 58.9 |
| Arapahoe | HR | 63.5 | 67.8 | 22 | . | 35.7 | 56.5 |
| Culver | HR | 58.5 | 65.2 | 23 | . | 36.8 | 57.1 |
| Hallam | HR | 79.6 | . | 21 | . | 38.6 | 56.2 |
| Infinity | HR | 82.4 | . | 24 | . | 37.0 | 59.1 |
| Millenium | HR | 70.2 | 71.2 | 25 | . | 37.5 | 58.6 |
| Wahoo | HR | 65.6 | 73.6 | 23 | . | 37.7 | 56.7 |
| Wesley | HR | 65.3 | 68.7 | 23 | . | 35.2 | 57.2 |
| Custer | HR | 82.3 | 77.3 | 20 | . | 35.8 | 58.2 |
| Expedition | HR | 69.0 | . | 19 | . | 35.4 | 58.6 |
| Wendy | HW | 87.9 | . | 18 | . | 32.2 | 59.2 |
| Heyne | HW | 63.4 | 67.7 | 22 | . | 34.2 | 58.2 |
| Nuplains | HW | 69.6 | 70.9 | 27 | . | 34.1 | 58.7 |
| Kaskaskia | SR | 90.2 | 81.3 | 23 | . | 37.5 | 58.6 |
| Truman | SR | 81.0 | . | 25 | . | 35.3 | 57.4 |
| Cardinal | SR | 68.0 | 70.0 | 24 | . | 36.5 | 56.3 |
| Mean | - | 73.9 | 72.7 | 22 | . | 35.2 | 57.9 |
| LSD ⁵ | - | 10.4 | 14.1 | 2 | . | 2.7 | 1.5 |

¹Class – HR=hard red, HW=hard white, and SR=soft red.

²Heading date and plant height data from Ames, 2005.

³Lodging–no lodging data recorded in 2005; all plots were standing at harvest.

⁴Test weight–2005 average from three sites.

⁵LSD=least significant difference. When entries differ by an amount equal to one LSD or more, they are considered to be in different classes with 95% certainty.