

## Winter Wheat Variety Test

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### Materials and Methods

Twenty-one varieties were included in the 2004 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 30, 2003, at a rate of 1.5 bushels/acre. The wheat plots were harvested on July 12.

### Results

Average winter wheat grain yield at Crawfordsville in 2004 was 57.7 bushels/acre, 9.4 bushels/acre less than the long-term average yield shown in Table 1. Based on the long-term data, Kaskaskia was the highest-yielding variety. Goodstreak had the highest test weight in 2004.

Additional information on oat and barley variety tests in the state can be found in the publication, "Iowa Crop Performance Tests—Winter Wheat, 1998–2004, and Winter Triticale, 2002–2004," which is available from county extension offices (AG-6) and at [www.public.iastate.edu/~jjannink/](http://www.public.iastate.edu/~jjannink/).

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

Variety	Class <sup>1</sup>	Grain Yields <sup>1</sup> (bu/A)		Head date (May) <sup>2</sup>	Lodging score <sup>3</sup>	Plant height (in.)	Test weight (lb/bu) <sup>4</sup>
		2004	Long-term				
2137	HR	59.7	73.9	22	21.6	27.2	54.4
2145	HR	59.4	78.8	25	26.9	26.2	53.8
Arapahoe	HR	51.3	67.4	24	23.1	27.6	56.0
Culver	HR	44.2	66.6	26	33.2	28.3	53.6
Custer	HR	59.5	79.0	23	22.8	25.3	53.9
Goodstreak	HR	67.1	74.8	27	28.8	32.0	57.4
Jagger	HR	58.3	62.3	21	33.7	26.0	52.9
Karl92	HR	55.0	78.5	23	36.0	27.7	55.0
Millenium	HR	62.8	76.3	29	28.2	29.2	55.6
Nekota	HR	66.2	60.3	24	25.9	26.9	53.7
Wahoo	HR	52.3	60.6	27	26.2	29.0	52.9
Wesley	HR	64.6	67.5	27	21.2	26.4	52.4
Winstar	HR	58.8	63.8	30	27.6	29.2	55.0
Heyne	HW	65.1	67.8	24	30.4	25.8	54.5
Nuplains	HW	54.8	53.2	32	39.9	27.0	53.2
Cardinal	SR	43.1	67.6	24	23.8	28.7	52.0
Ernie	SR	58.9	72.1	24	46.7	24.0	54.0
Goldfield	SR	54.1	65.4	25	26.6	27.1	55.9
Howell	SR	60.6	70.7	27	27.6	27.2	52.0
Kaskaskia	SR	51.9	84.3	24	27.9	28.7	55.3
Patterson	SR	59.8	68.8	22	27.1	25.8	54.8
Mean	-	57.7	67.1	25	28.8	27.3	54.2
LSD <sup>5</sup>	-	11.8	13.7	3	16	2	1.8

<sup>1</sup> Class – HR = hard red, HW = hard white, and SR = soft red.

<sup>2</sup> Heading date and plant height data from Ames, 2004.

<sup>3</sup> Lodging – 1999 average from five sites.

<sup>4</sup> Test weight – 2004 average from five sites.

<sup>5</sup> LSD = 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.