

Winter Wheat Variety Test

Ron Skrdla, ag research specialist
Jean-Luc Jannink, assistant professor
Department of Agronomy

Materials and Methods

Twenty-two varieties were included in the 2005 winter wheat variety test at Lewis. Each variety was sown in three different plots to average the effects of soil variability. The varieties were planted September 22, 2004, at a rate of 1 1/2 bushels/acre. The wheat plots were harvested on July 6.

Results and Discussion

Average winter wheat grain yield at Lewis in 2005 was 66.9 bushels/acre, slightly less than

the long-term average yield shown in 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, Wendy in the hard white winter wheat class, and Kaskaskia in the soft red winter wheat class.

Additional information on oat and barley 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 Lewis.

Grain Yields (bu/acre)							
Variety	Class ¹	2005	Long term	Head date (May) ²	Lodging score ³	Plant height (in.) ²	Test weight lb/bu ⁴
2137	HR	56.4	71.5	20	.	34.0	57.4
2145	HR	72.2	77.3	22	.	33.7	57.8
2174	HR	64.0	.	21	.	34.9	58.9
Jagger	HR	55.7	63.7	18	.	32.9	56.9
Karl92	HR	69.3	69.1	18	.	34.1	58.6
Overlay	HR	79.3	.	18	.	33.5	58.9
Arapahoe	HR	51.0	61.8	22	.	35.7	56.5
Culver	HR	60.4	65.6	23	.	36.8	57.1
Hallam	HR	72.7	.	21	.	38.6	56.2
Infinity	HR	77.5	.	24	.	37.0	59.1
Millenium	HR	77.2	72.3	25	.	37.5	58.6
Wahoo	HR	63.2	61.8	23	.	37.7	56.7
Wesley	HR	78.1	72.6	23	.	35.2	57.2
Custer	HR	65.9	67.8	20	.	35.8	58.2
Expedition	HR	70.7	.	19	.	35.4	58.6
Wendy	HW	70.8	.	18	.	32.2	59.2
Heyne	HW	75.9	71.8	22	.	34.2	58.2
Nuplains	HW	38.4	56.8	27	.	34.1	58.7
Kaskaskia	SR	67.4	68.4	23	.	37.5	58.6
Truman	SR	77.7	.	25	.	35.3	57.4
Cardinal	SR	70.3	69.5	24	.	36.5	56.3
Mean	-	66.9	67.8	22	.	35.2	57.9
LSD ⁵	-	14.4	17.1	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.