# Oat Variety Test

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## Materials and Methods

Twenty-two varieties were included in the 2006 oat test at Lewis. Each variety was sown in three different plots to average the effects of soil variability. The varieties were planted April 5 at a rate of 3 bushels/acre. The oat plots were harvested on July 20.

## Results

Average oat grain yield at Lewis in 2006 was 117 bushels/acre, 24 bushels/acre less than the long-term average yield (Table 1). Based on several years of data, Esker was the highest yielding variety. Reeves had the highest test weight among hulled (normal) oat varieties in 2006. Buff is a hull-less variety and thus had a higher test weight.

Additional information on oat and barley variety tests in the state can be found in the publication, "Iowa Crop Performance Tests—Oat and Barley, 2006," which is available from county extension offices (Pm-1645) and at www.public.iastate.edu\~jjannink\.

**Table 1. Performance of oat varieties tested at Lewis.**

| Variety | Grain Yield bu/A 2006 | Long-term avg. | Head date (June)[1] | Lodging score[2] | Groat %[3] | CR[4] | BYD[4] | Test weight[5] |
|---|---|---|---|---|---|---|---|---|
| Baker | 117 | 143 | 12 | 59.2 | 73.7 | 2.0 | 3.8 | 32.5 |
| Blaze | 117 | 145 | 12 | 67.1 | 73.5 | 1.8 | 3.2 | 33.4 |
| Buff | 84 | 109 | 11 | 43.4 | 100.0 | 5.1 | 3.4 | 43.8 |
| Chaps | 107 | 138 | 13 | 51.3 | 73.5 | 2.0 | 3.6 | 31.3 |
| Cherokee | 76 | 91 | 8 | 19.7 | 72.8 | 3.5 | 3.3 | 31.7 |
| Drumlin | 110 | 140 | 13 | 80.3 | 72.7 | 5.5 | 6.5 | 32.8 |
| Esker | 124 | 158 | 10 | 51.3 | 74.8 | 2.2 | 2.7 | 32.7 |
| Hi-Fi | 112 | 137 | 16 | 40.8 | 72.7 | 2.7 | 4.3 | 32.1 |
| IN09201 | 112 | 137 | 8 | 24.9 | 72.7 | 2.2 | 3.7 | 33.3 |
| Jay | 134 | 145 | 11 | 38.1 | 71.5 | 2.0 | 4.3 | 34.5 |
| Jerry | 110 | 137 | 11 | 19.7 | 75.9 | 0.9 | 3.7 | 34.3 |
| Jim | 131 | 143 | 9 | 48.7 | 76.8 | 2.4 | 3.5 | 33.9 |
| Kame | 122 | 143 | 8 | 17.0 | 77.6 | 1.2 | 3.4 | 31.6 |
| Ogle | 124 | 146 | 12 | 23.6 | 75.1 | 2.8 | 4.3 | 30.8 |
| Reeves | 105 | 141 | 9 | 80.3 | 74.8 | 3.4 | 3.7 | 35.1 |
| Richland | 87 | 99 | 10 | 56.6 | 73.3 | 1.5 | 3.6 | 31.0 |
| Robust | 108 | 139 | 13 | 17.0 | 72.8 | 2.0 | 3.8 | 34.6 |
| Spurs | 123 | 146 | 10 | 27.6 | 74.6 | 3.3 | 3.9 | 34.5 |
| Stallion | 105 | 142 | 14 | 80.3 | 74.0 | 1.5 | 3.8 | 34.5 |
| Wabasha | 107 | 133 | 13 | 38.1 | 74.5 | 4.4 | 3.5 | 32.9 |
| Winona | 127 | 150 | 8 | 18.4 | 76.3 | 1.6 | 3.4 | 33.5 |
| Woodburn | 124 | 153 | 8 | 53.9 | 74.6 | 6.0 | 5.9 | 34.1 |
| Average | 117 | 141 | 11 | 43.6 | 75.2 | 3.0 | 4.0 | 33.7 |
| LSD[6] | 20 | 19 | 2 | 28.4 | 3.7 | 2.5 | 1.5 | 1.2 |

[1]Heading date at Ames, 2006.
[2]Lodging from Crawfordsville where significant lodging occurred in 2006.
This number does not reflect average lodging across environments but only worst-case lodging.
[3]Groat % is a 2006 average from two sites.
[4]CR, crown rust and SR data from 2005, 0=resistant, 9=highly infected; BYD, barley yellow dwarf virus data from 2004.
[5]Test weight is a 2006 average from five sites.
[6]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.