

Oat Variety Test

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Materials and Methods

Twenty-two varieties were included in the 2006 oat variety test at Nashua. Each variety was sown in three different plots to average out the effects of soil variability. The varieties were planted March 29 at a rate of 3 bushels/acre. The oat plots were harvested on July 25.

Results and Discussion

Average oat grain yield at Nashua in 2006 was 119 bushels/acre, 8 bushels/acre less than the

long-term average yield (Table 1). Based on several years of data, Hi-Fi and Woodburn were the highest yielding varieties. 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 Nashua.

Variety	Grain Yield bu/A		Head date (June) ¹	Lodging score ²	Groat % ³	CR ⁴	BYD ⁴	Test weight ⁵
	2006	Long-term avg.						
Baker	124	139	12	59.2	73.7	2.0	3.8	32.5
Blaze	114	132	12	67.1	73.5	1.8	3.2	33.4
Buff	90	96	11	43.4	100.0	5.1	3.4	43.8
Chaps	122	133	13	51.3	73.5	2.0	3.6	31.3
Cherokee	67	75	8	19.7	72.8	3.5	3.3	31.7
Drumlin	125	131	13	80.3	72.7	5.5	6.5	32.8
Esker	125	137	10	51.3	74.8	2.2	2.7	32.7
Hi-Fi	136	140	16	40.8	72.7	2.7	4.3	32.1
IN09201	110	128	8	24.9	72.7	2.2	3.7	33.3
Jay	117	127	11	38.1	71.5	2.0	4.3	34.5
Jerry	106	121	11	19.7	75.9	0.9	3.7	34.3
Jim	116	133	9	48.7	76.8	2.4	3.5	33.9
Kame	130	134	8	17.0	77.6	1.2	3.4	31.6
Ogle	126	135	12	23.6	75.1	2.8	4.3	30.8
Reeves	109	126	9	80.3	74.8	3.4	3.7	35.1
Richland	91	88	10	56.6	73.3	1.5	3.6	31.0
Robust	133	130	13	17.0	72.8	2.0	3.8	34.6
Spurs	127	134	10	27.6	74.6	3.3	3.9	34.5
Stallion	135	139	14	80.3	74.0	1.5	3.8	34.5
Wabasha	118	127	13	38.1	74.5	4.4	3.5	32.9
Winona	119	130	8	18.4	76.3	1.6	3.4	33.5
Woodburn	127	140	8	53.9	74.6	6.0	5.9	34.1
Average	119	127	11	43.6	75.2	3.0	4.0	33.7
LSD ⁶	15	15	2	28.4	3.7	2.5	1.5	1.2

¹Heading date at Ames, 2006.

²Lodging from Crawfordsville where significant lodging occurred in 2006. This number therefore does not reflect average lodging across environments but only worst-case lodging.

³Groat %—2006 average from two sites.

⁴CR, crown rust and SR data from 2005: 0=resistant; 9=highly infected; BYD, barley yellow dwarf virus data from 2004.

⁵Test weight—2006 average from five sites.

⁶LSD=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.