

Oat Variety Test

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Materials and Methods

Twenty-seven varieties were included in the 2004 oat variety test at Nashua. Each variety was sown in three different plots to average the effects of soil variability. The varieties were planted on April 2 at a rate of 3 bushels/acre. The oat plots were harvested on July 27.

Results

Average oat grain yield at Nashua in 2004 was 141 bushels/acre, 27 bushels/acre more than the

long-term average yield (Table 1). Based on several years of data, Drumlin was the highest-yielding variety. Reeves had the highest test weight among hulled (normal) oat varieties in 2004. Buff and Paul are hull-less varieties 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, 1997–2004 and Barley, 1998–2004," 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
	2004	Long-term avg.						
Early								
Buff	114	91	13	36	99.1	0.1	1.2	46.2
Chaps	150	123	13	46	72.0	3.7	1.4	32.1
Cherokee	96	74	11	39	71.6	4.3	3.7	33.3
Dane	144	117	9	39	73.6	1.9	2.1	31.8
IN09201	144	122	11	28	72.6	0.4	1.6	33.2
Jim	157	126	13	37	75.3	0.7	1.4	34.2
Moraine	153	111	12	36	73.5	0.1	1.9	34.4
Reeves	151	123	12	53	71.7	0.1	1.9	37.5
Richland	100	67	13	58	72.2	4.3	2.3	30.7
Riser	135	104	8	63	74.3	0.4	2.8	35.0
Midseason								
Blaze	155	121	14	55	70.0	0.1	1.2	34.8
Brawn	149	128	17	41	71.6	4.6	1.2	33.2
Classic	134	122	15	39	68.0	0.4	0.7	32.3
Gem	137	121	15	47	72.4	0.1	1.9	33.3
Jay	130	124	15	32	68.7	0.1	1.2	33.5
Jerry	133	117	15	46	72.6	1.6	2.3	35.8
Ogle	135	120	15	41	69.5	3.4	1.2	30.3
Richard	130	103	15	27	68.0	1.3	2.6	32.4
Spurs	135	126	14	45	72.4	0.1	1.6	33.8
Wabasha	138	117	16	35	73.7	0.1	1.2	32.7
Late								
Belle	132	111	19	33	74.0	0.1	1.6	31.9
Drumlin	152	129	18	51	74.0	0.4	1.4	31.1
Jud	137	117	17	42	71.9	1.0	1.6	33.0
Killdeer	142	120	17	48	72.9	1.3	1.9	34.0
Leonard	125	110	20	20	69.0	0.1	1.4	30.7
Paul	109	71	20	20	99.1	0.1	1.9	42.0
Sesqui	144	117	19	19	68.4	0.1	1.4	33.1
Average	141	114	14	42	73.4	1.1	1.7	34.3
LSD ⁶	16	16	2	29	4.4	1.6	1.0	1.8

¹ Heading date at Ames, 2004.

² Lodging from Lewis, 2004.

³ Groat % – 2004 average from two sites.

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

⁵ Test weight – 2004 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.