

Oat Variety Test

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Materials and Methods

Twenty-seven varieties were included in the 2004 Oat Variety Test at Lewis. Each variety was sown in three different plots to average the effects of soil variability. The varieties were planted on March 26 at a rate of 3 bushels/acre. The oat plots were harvested on July 26.

Results

Average oat grain yield at Lewis in 2004 was 139 bushels/acre, 25 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 Lewis.

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	116	91	13	36	99.1	0.1	1.2	46.2
Chaps	138	123	13	46	72.0	3.7	1.4	32.1
Cherokee	68	74	11	39	71.6	4.3	3.7	33.3
Dane	138	117	9	39	73.6	1.9	2.1	31.8
IN09201	137	122	11	28	72.6	0.4	1.6	33.2
Jim	149	126	13	37	75.3	0.7	1.4	34.2
Moraine	143	111	12	36	73.5	0.1	1.9	34.4
Reeves	156	123	12	53	71.7	0.1	1.9	37.5
Richland	80	67	13	58	72.2	4.3	2.3	30.7
Riser	144	104	8	63	74.3	0.4	2.8	35.0
Midseason								
Blaze	153	121	14	55	70.0	0.1	1.2	34.8
Brawn	138	128	17	41	71.6	4.6	1.2	33.2
Classic	137	122	15	39	68.0	0.4	0.7	32.3
Gem	154	121	15	47	72.4	0.1	1.9	33.3
Jay	135	124	15	32	68.7	0.1	1.2	33.5
Jerry	129	117	15	46	72.6	1.6	2.3	35.8
Ogle	144	120	15	41	69.5	3.4	1.2	30.3
Richard	126	103	15	27	68.0	1.3	2.6	32.4
Spurs	137	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	129	111	19	33	74.0	0.1	1.6	31.9
Drumlin	169	129	18	51	74.0	0.4	1.4	31.1
Jud	151	117	17	42	71.9	1.0	1.6	33.0
Killdeer	155	120	17	48	72.9	1.3	1.9	34.0
Leonard	142	110	20	20	69.0	0.1	1.4	30.7
Paul	105	71	20	20	99.1	0.1	1.9	42.0
Sesqui	138	117	19	19	68.4	0.1	1.4	33.1
Average	139	114	14	42	73.4	1.1	1.7	34.3
LSD ⁶	20	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.