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Oat Variety Test

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Abstract
Twenty-eight varieties were included in the 2005 oat variety test at Sutherland. Each variety was sown in three different plots to average the effects of soil variability. The varieties were planted on March 29 at a rate of 3 bushels/acre. The oat plots were harvested on July 22.

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Oat Variety Test

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Materials and Methods

Twenty-eight varieties were included in the 2005 oat variety test at Sutherland. Each variety was sown in three different plots to average the effects of soil variability. The varieties were planted on March 29 at a rate of 3 bushels/acre. The oat plots were harvested on July 22.

Results

Average oat grain yield at Sutherland in 2005 was 166 bushels/acre, 49 bushels/acre more than the long-term average yield (Table 1). Based on several years of data, Woodburn was the highest-yielding variety. Reeves had the highest test weight among hulled (or normal) oat varieties in 2005. Buff, however, 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, 2005," which is available from county extension offices (Pm-1645) and at www.public.iastate.edu\~jjannink\.

Table 1. Performance of oat varieties tested at Sutherland.

	Grain Yield (bushels/acre)							
Variety	2005	Long-term avg.	Head date (June)[1]	Lodging score[2]	Groat %[3]	CR[4]	BYD[4]	Test weight[5]
Baker	178	128	8	43.3	74.3	2.0	3.8	34.1
Blaze	161	125	9	40.9	75.9	1.8	3.2	34.4
Brawn	162	125	10	32.0	74.7	5.1	3.4	32.5
Buff	127	93	7	30.4	91.0	2.0	3.6	44.3
Chaps	166	121	8	35.7	74.3	3.5	3.3	32.7
Cherokee	90	79	4	42.9	71.9	5.5	6.5	33.7
Classic	155	115	10	32.4	70.3	2.2	2.7	34.0
Dane	150	112	2	36.7	73.1	2.7	4.3	31.8
Drumlin	170	122	12	50.8	74.7	2.2	3.7	33.7
Esker	176	126	6	41.8	74.7	2.0	4.3	33.5
Gem	167	118	9	32.5	70.3	0.9	3.7	33.6
IN09201	173	122	5	32.1	71.1	2.4	3.5	34.6
Jay	168	122	8	30.2	72.3	1.2	3.4	34.4
Jerry	146	114	9	36.5	74.3	2.8	4.3	35.9
Jim	175	123	5	39.7	74.3	3.4	3.7	34.8
Jud	164	118	11	31.9	71.5	1.5	3.6	34.2
Kame	162	114	6	30.7	73.1	2.0	3.8	32.4
Killdeer	164	123	11	33.8	71.9	3.3	3.9	33.2
Moraine	167	117	6	34.0	75.1	1.5	3.8	34.5
Ogle	158	122	10	38.7	74.7	4.4	3.5	31.3
Reeves	165	111	6	51.5	73.9	1.6	3.4	36.9
Richland	109	79	8	59.0	68.7	6.0	5.9	31.6
Robust	172	123	11	22.8	71.9	0.1	1.4	35.1
Sesqui	179	124	12	38.3	71.5	1.4	3.9	34.2
Spurs	169	130	6	41.2	73.9	1.9	3.7	35.3
Wabasha	177	118	10	29.4	73.1	1.4	3.1	33.3
Winona	170	124	4	38.3	73.1	2.2	4.0	34.8
Woodburn	181	125	5	31.6	72.7	0.1	0.9	35.5
Average	166	117	8	39.0	73.6	3.0	4.0	34.5
LSD[3]	17	15	2	20.3	4.9	2.5	1.5	1.2

[1]Heading date at Ames, 2005.
[2]Lodging from Lewis, 2004.
[3]Groat % – 2005 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–2005 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.