Oat Variety Test

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Materials and Methods

Twenty-eight varieties were included in the 2005 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 16 at a rate of 3 bushels/acre. The oat plots were harvested on July 13.

Results and Discussion

Average oat grain yield at Lewis in 2005 was 169 bushels/acre, 48 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 (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 Lewis.

Variety	Grain Yield bu/acre 2005	Long-term avg.	Head date (June)[1]	Lodging score[2]	Groat (%)[3]	CR[4]	BYD[4]	Test weight[5]
Baker	174	127	8	43.3	74.3	2.0	3.8	34.1
Blaze	181	129	9	40.9	75.9	1.8	3.2	34.4
Brawn	187	135	10	32.0	74.7	5.1	3.4	32.5
Buff	141	94	7	30.4	91.0	2.0	3.6	44.3
Chaps	173	128	8	35.7	74.3	3.5	3.3	32.7
Cherokee	136	80	4	42.9	71.9	5.5	6.5	33.7
Classic	161	126	10	32.4	70.3	2.2	2.7	34.0
Dane	166	122	2	36.7	73.1	2.7	4.3	31.8
Drumlin	154	126	12	50.8	74.7	2.2	3.7	33.7
Esker	188	145	6	41.8	74.7	2.0	4.3	33.5
Gem	166	126	9	32.5	70.3	0.9	3.7	33.6
IN09201	170	127	5	32.1	71.1	2.4	3.5	34.6
Jay	168	129	8	30.2	72.3	1.2	3.4	34.4
Jerry	167	123	9	36.5	74.3	2.8	4.3	35.9
Jim	157	129	5	39.7	74.3	3.4	3.7	34.8
Jud	159	122	11	31.9	71.5	1.5	3.6	34.2
Kame	160	126	6	30.7	73.1	2.0	3.8	32.4
Killdeer	180	127	11	33.8	71.9	3.3	3.9	33.2
Moraine	166	118	6	34.0	75.1	1.5	3.8	34.5
Ogle	181	127	10	38.7	74.7	4.4	3.5	31.3
Reeves	167	127	6	51.5	73.9	1.6	3.4	36.9
Richland	139	74	8	59.0	68.7	6.0	5.9	31.6
Robust	169	126	11	22.8	71.9	0.1	1.4	35.1
Sesqui	171	123	12	38.3	71.5	1.4	3.9	34.2
Spurs	176	132	6	41.2	73.9	1.9	3.7	35.3
Wabasha	160	121	10	29.4	73.1	1.4	3.1	33.3
Winona	169	133	4	38.3	73.1	2.2	4.0	34.8
Woodburn	169	139	5	31.6	72.7	0.1	0.9	35.5
Average	169	121	8	39.0	73.6	3.0	4.0	34.5
LSD[6]	22	16	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.