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Oat Variety Test

Ronald Skrdla
Iowa State University

Lance R. Gibson
Iowa State University

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Abstract
Twenty-three varieties were included in the 2007 oat variety test at Sutherland. Each variety was sown in three different plots to average the effects of soil variability. The varieties were planted April 16 at a rate of 3 bushels/acre. The oat plots were harvested on July 18.

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Ron Skrdla, ag research specialist
Lance Gibson, associate professor
Department of Agronomy

Materials and Methods

Twenty-three varieties were included in the 2007 oat variety test at Sutherland. Each variety was sown in three different plots to average the effects of soil variability. The varieties were planted April 16 at a rate of 3 bushels/acre. The oat plots were harvested on July 18.

Results and Discussion

Average oat grain yield at Sutherland in 2007 was 118 bushels/acre, 2 bushels/acre less than the long-term average yield (Table 1). Based on several years of data, Stallion was the highest yielding variety. Reeves had the highest test weight among hulled (normal) oat varieties in 2007. 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, 2007," which is available from county extension offices (Pm-1645) and at www.croptesting.iastate.edu/.

Table 1. Performance of oat varieties tested at Sutherland.

	Grain yield bushel/acre						
Variety	2007	Long-term avg.	Head date (June)[1]	Height (in.)	Lodging score[2]	Groat %[3]	Test weight[5]
Baker	141	131	16	34.4	59.2	71.0	33.2
Blaze	123	122	16	34.3	67.1	72.7	34.1
Buff	96	96	16	33.7	43.4	100.0	44.9
Chaps	121	119	16	34.7	51.3	74.0	32.3
Cherokee	70	76	13	33.3	19.7	72.7	32.4
Drumlin	118	121	19	34.3	80.3	71.5	33.2
Esker	127	123	15	35.0	51.3	74.0	32.5
Excel	143		15	35.0	30.2	71.6	33.3
Hi-Fi	108	116	19	34.8	40.8	70.5	33.0
IN09201	124	128	14	33.7	24.9	71.3	33.1
Jay	124	124	18	32.9	38.1	69.7	34.1
Jerry	119	110	17	36.2	19.7	73.0	35.1
Jim	119	124	14	34.4	48.7	73.7	34.0
Kame	121	116	14	34.3	17.0	72.8	32.3
Ogle	128	119	17	34.8	23.6	72.5	31.5
Reeves	127	124	15	35.2	80.3	74.4	36.8
Richland	84	88	16	34.0	56.6	72.0	31.1
Robust	134	129	19	33.3	17.0	72.1	35.4
Spurs	125	123	16	33.9	27.6	71.6	35.5
Stallion	134	132	18	36.2	80.3	71.8	35.7
Wabasha	119	123	17	35.8	38.1	72.3	33.8
Winona	115	118	14	35.5	18.4	73.8	34.1
Woodburn	127	126	13	35	53.9	73.0	34.7
Average	118	120	15	34.4	43.6	72.7	34.1
LSD (0.05)[5]	19	21	2	2.3	28.4	2.8	1.5

[1]Heading date at Ames, 2007.
[2]Lodging from Crawfordsville where significant lodging occurred in 2006. This number therefore does not reflect average lodging across environments but only worst-case lodging.
[3]Groat % – 2007 average from two sites.
[4]Test weight – 2007 average from four sites.
[5]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.