

# Oat Variety Test

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## Materials and Methods

Thirty-three varieties were included in the 2000 oat test at Nashua. Each variety was sown in three different plots to average out the effects of soil variability. The varieties were planted March 30 at a rate of 3 bushels/acre. All oat plots were harvested on July 18.

## Results

Average oat grain yield at Nashua in 2000 was 108 bushels/acre, 7 bushels/acre less than the average yield in 1999 (Table 1). Based on three years of data (1998 - 2000), Chaps was the highest yielding variety. Jerry had the highest test weight among hulled (normal) oat varieties in 1999. Paul 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, 1997-2000," which is available from county extension offices (Pm-1645).

**Table 1. Performance of oat entries at Nashua from 1998 to 2000.**

Entry	Yield			3-yr avg	Heading date <sup>a</sup>	Lodging score <sup>b</sup>	Straw yield <sup>c</sup>	Test wt. <sup>d</sup>
	1998	1999	2000					
	----- bushels/acre-----						ton/acre	lb/bu
Belle	64	115	88	89	6/06	28	3.7	33.4
Blaze	95	115	99	103	6/02	54	3.2	33.7
Brawn	77	111	101	96	6/02	39	3.3	31.5
Burton	71	113	89	91	6/02	43	3.6	31.4
Chaps	93	107	112	104	6/01	43	3.0	32.0
Cherokee	61	76	70	69	5/29	38	3.3	31.1
Classic	92	114	91	99	6/01	42	3.1	33.0
Dane	92	107	111	103	5/26	18	3.2	29.8
Don	83	100	81	88	5/30	58	3.3	34.3
Ebeltoft	.	120	93	101	6/10	35	3.7	31.5
Gem	94	120	95	103	6/05	28	3.3	32.4
IN09201	96	112	90	99	5/30	42	3.1	32.6
Ida	80	102	71	84	6/04	47	3.1	31.7
Jay	101	114	99	104	6/01	35	4.1	34.1
Jerry	81	108	83	91	6/03	49	3.3	35.0
Jim	91	117	103	103	5/31	48	4.0	33.4
Jud	85	101	107	98	6/06	35	3.8	33.1
Killdeer	.	107	116	105	6/06	37	3.7	32.3
Loyal	.	110	82	90	6/07	27	3.4	33.1
Milton	86	113	92	97	6/05	45	3.3	31.7
Multiline E77	53	85	58	66	5/28	48	2.9	31.5
Ogle	92	108	93	98	6/01	46	3.9	30.9
Paul	30	70	59	53	6/09	27	3.7	40.9
Richard	67	110	98	92	6/03	28	3.6	31.4
Richland	54	63	61	59	6/01	56	2.5	29.5
Riser	87	108	99	98	5/24	65	3.1	33.5
Rodeo	93	119	99	104	6/04	38	3.3	31.3
Sheldon	91	104	90	95	5/30	75	3.2	32.4
Starter	78	101	82	87	5/30	65	3.0	33.7
Troy	60	109	85	84	6/09	79	3.6	32.2
Valley	69	80	85	78	6/06	60	3.8	33.3
Vista	82	121	94	99	6/04	44	3.2	32.7
Youngs	.	115	108	105	6/09	36	3.6	31.3
Mean	80	106	90	92	6/03	43	3.4	32.6
LSD(0.05) <sup>e</sup>	11	15	18	13	1	26	0.7	1.3

<sup>a</sup> Heading date at Ames, 2000

<sup>b</sup> Lodging - 1999 average from 5 sites.

<sup>c</sup> Straw yield - 2000 average from 5 sites.

<sup>d</sup> Test weight - 2000 average from 5 sites.

<sup>e</sup> 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.

## Barley Variety Test

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### Materials and Methods

Twelve barley varieties were tested. Each variety was sown in three different plots to average out the effects of soil variability. The varieties were planted March 30 at a rate of 3 bushels/acre. All barley plots were harvested on July 18.

### Results

Barley yields averaged 68.1 bushels/acre in 2000, which is 10 bushels/acre more than in 1999 (Table 1). Kewaunee was the highest yielding line based on three years of data (1998 - 2000) and MNBrite had the highest test weight across all locations for the three-year period.

Additional information on oat and barley variety tests in the state can be found in the publication, "Iowa Crop Performance Tests - Oat and Barley, 1997-2000," which is available from county extension offices (Pm-1645).

**Table 1. Performance of barley entries at Nashua from 1998 to 2000.**

Entry	Yield				3-yr avg.				
	1998	1999	2000	3-yr avg	Heading date <sup>a</sup>	Lodging score <sup>b</sup>	Straw yield <sup>c</sup>	Test wt. <sup>d</sup>	Height in. <sup>e</sup>
	----- bushels/acre-----						ton/acre	lb/bu	
Azure	42.3	79.0	70.2	63.8	5	4	3.1	45.9	27
Bonanza	45.0	80.6	76.3	67.3	7	10	2.6	46.8	31
Bowers	59.3	75.5	60.6	65.1	6	7	2.4	46.8	29
Chilten	51.1	64.0	50.5	55.2	5	3	2.4	48.9	28
Excel	44.5	92.4	77.6	71.5	5	3	2.3	48.5	26
Hazen	48.7	73.7	74.7	65.7	6	1	2.3	47.1	27
Kewaunee	55.6	90.2	74.5	73.4	5	.	2.1	46.1	28
MNBrite	51.3	77.1	76.7	68.3	7	.	2.1	49.4	27
Primus II	46.1	74.7	69.2	63.3	1	13	2.5	48.4	29
Robust	50.6	74.1	72.0	65.6	6	2	2.6	48.7	27
Royal	34.7	77.8	56.7	56.4	7	2	1.9	47.6	21
Stander	41.4	76.0	58.0	58.5	6	0	2.3	48.0	23
Mean	47.6	77.7	68.1	64.5	5	5	2.4	47.7	27
LSD(0.05) <sup>f</sup>	6.9	16.1	13.7	11.4	2	6	0.4	1.1	3

<sup>a</sup> Heading date at Ames, June.

<sup>b</sup> Lodging – 1999 average from 3 sites.

<sup>c</sup> Straw yield – average from 3 sites.

<sup>d</sup> Test weight – average from 3 sites.

<sup>e</sup> Height - Measured at Ames.

<sup>f</sup> 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.