

Barley Variety Test

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Materials and Methods

Sixteen varieties were included in the 2003 barley test at Nashua. Each variety was sown in three different plots to average out the effects of soil variability. The varieties were planted April 2 at a rate of 2 bushels/acre. All barley plots were harvested on July 28.

Results

Barley yields averaged 72.7 bushels/acre in 2003, which is 32.1 bushels/acre less than in

2002 (Table 1). Excel was the highest yielding line based on three years of data (2001–2003) whereas Conlon had the highest test weight across all locations for the lines that were tested during the three-year period.

Additional information on barley variety tests in the state can be found in the publication, "Iowa Crop Performance Tests—Oat, 2001–2003; Barley, 1999–2003; and Spring Triticale, 2003," which is available from county extension offices (PM-1645) and at www.public.iastate.edu/~jjannink/.

Table 1. Performance of spring barley varieties tested at Nashua from 2001–2003.

Variety	Yield ¹			3-yr avg	Test weight ² (lbs/bu)	Heading date ³ (June)	Plant height ⁴ (in.)	Straw yield ⁵ (T/A)
	2001	2002	2003					
Azure	104.0	97.4	59.7	87.0	49.5	36	38	2.9
Bowers	96.5	105.9	77.3	93.3	50.1	37	39	2.6
Conlon	101.0	106.2	75.8	94.3	51.0	35	36	2.7
Drummond	95.8	102.5	69.1	89.2	50.0	37	37	2.5
Excel	110.4	112.9	73.6	99.0	50.1	37	37	2.5
Foster	-	-	76.8	97.2	50.1	36	38	2.4
Hazen	99.5	100.2	67.4	89.0	49.2	39	39	2.7
Kewaunee	110.0	104.2	75.2	96.5	49.2	38	39	2.7
Lacey	100.0	115.3	71.6	95.7	50.8	37	36	2.5
Legacy	101.3	109.9	74.3	95.2	49.5	40	38	2.5
Logan	-	-	76.9	97.3	50.9	36	38	3.1
PrimusII	90.8	102.3	78.3	90.5	50.0	30	39	2.7
Robust	95.5	107.3	73.7	92.2	50.6	37	40	2.7
Royal	97.6	96.4	70.7	88.2	49.4	40	33	2.1
Stander	95.8	101.9	66.1	87.9	50.0	38	35	2.3
Stark	-	-	76.4	96.8	51.3	39	39	2.9
Average	99.9	104.8	72.7	93.1	50.1	37	38	2.6
LSD(0.05) ⁶	10.3	9.8	16.2	8.2	0.8	1	2	0.5

¹ Grain yields are based on 48lb/bu test weight.

² Test weight – average from three sites.

³ Data collected at Ames only.

⁴ Height – Measured at Ames.

⁵ Straw Yield – average from three 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.