

Barley Variety Test

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Materials and Methods

Sixteen varieties were included in the 2003 barley test at Calumet. Each variety was sown in three different plots in order to average 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 29.

Results and Discussion

Barley yields averaged 80.8 bushels/acre in 2003, which is 17.3 bushels/acre more 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 oat and 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 Calumet 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	79.2	62.0	78.4	73.2	49.5	36	38	2.9
Bowers	81.6	68.9	78.9	76.5	50.1	37	39	2.6
Conlon	74.9	60.0	83.9	72.9	51.0	35	36	2.7
Drummond	88.0	60.9	85.2	78.0	50.0	37	37	2.5
Excel	88.2	73.5	83.6	81.8	50.1	37	37	2.5
Foster	-	-	83.2	77.6	50.1	36	38	2.4
Hazen	83.9	61.6	76.9	74.1	49.2	39	39	2.7
Kewaunee	80.8	58.7	74.8	71.5	49.2	38	39	2.7
Lacey	89.1	70.4	84.1	81.2	50.8	37	36	2.5
Legacy	76.6	59.6	86.1	74.1	49.5	40	38	2.5
Logan	-	-	85.4	79.8	50.9	36	38	3.1
PrimusII	67.4	60.8	75.7	68.0	50.0	30	39	2.7
Robust	89.6	67.0	73.8	76.8	50.6	37	40	2.7
Royal	66.8	63.0	81.6	70.5	49.4	40	33	2.1
Stander	73.7	58.7	78.8	70.4	50.0	38	35	2.3
Stark	-	-	81.9	76.3	51.3	39	39	2.9
Average	80.0	63.5	80.8	75.2	50.1	37	38	2.6
LSD(0.05) ⁶	10.0	6.6	8.2	8.4	0.8	1	2	0.5

¹ Grain yields are based on 48 lb/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.