

Barley Variety Test

Ron Skrdla, ag research specialist
Jean-Luc Jannink, assistant professor
Department of Agronomy

Materials and Methods

Twenty varieties were included in the 2001 barley test at Calumet, Iowa. Each variety was sown in three different plots in order to average soil variability effects. The varieties were planted April 18 at a rate of 2 bushels/acre. All barley plots were harvested on July 30.

Results

Barley yields averaged 77.5 bushels/acre in 2001, which is 33 bushels/acre more than in 2000 (Table 1). Robust was the highest yielding line based on three years of data (1999-2001) and also had the highest test weight across all locations for lines 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 and Barley, 1998–2001," available from county extension offices (Pm-1645).

Table 1. Performance of spring barley varieties tested at Calumet, IA, 1999–2001.

Variety	Yield ¹			3-yr. avg.	Test weight ² (lbs/bu)	Heading date ³ (June)	Plant height ⁴ (in.)	Straw yield ⁵ (T/A)	1999 lodging %
	1999	2000	2001						
Azure	92.5	48.1	79.2	73.3	55.6	9	35.8	3.1	4
Bonanza	66.4	41.5	74.7	60.9	55.9	12	29.0	2.4	10
Bowers	88.1	40.4	81.6	70.0	55.8	11	32.8	2.5	7
Chilten	80.6	35.9	78.5	65.0	58.2	10	35.7	2.3	3
Conlon	-	-	74.9	-	59.6	8	35.6	2.6	-
Drummond	-	-	88.0	-	57.1	10	34.5	2.1	-
Excel	96.2	48.9	88.2	77.8	57.9	11	36.7	2.4	3
Finaska	-	-	43.2	-	50.6	10	34.9	2.0	-
Hazen	89.0	42.5	83.9	71.8	56.3	12	35.7	2.8	1
Kewaunee	65.6	40.8	80.8	62.4	56.5	11	32.5	3.1	-
Lacey	-	-	89.1	-	58.3	11	37.9	2.7	-
Legacy	-	-	76.6	-	55.7	13	33.2	2.5	-
MNBrite	89.8	44.7	65.9	66.8	57.7	11	36.6	3.5	-
Mahigan	-	-	82.5	-	54.3	9	32.9	1.9	-
PrimusII	85.6	40.4	67.4	64.5	56.7	7	35.0	2.1	13
Robust	91.7	51.6	89.6	77.7	58.3	11	38.3	2.6	2
Royal	78.0	42.5	66.8	62.4	55.9	11	35.0	2.3	2
Seebe	-	-	89.1	-	56.9	19	35.3	3.4	-
Stander	85.4	49.5	73.7	69.5	56.3	12	35.3	2.4	0
Vivar	-	-	75.9	-	55.1	14	32.9	2.8	-
Average	84.1	44.0	77.5	68.5	56.4	11	34.8	2.6	5
LSD(0.05) ⁶	12.9	7.0	10.0	10.8	0.5	1.0	4.7	0.9	6

¹ Grain yields are based on 48lb/bushel-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 with 95% certainty to be in different classes.