

## **MSU Extension Publication Archive**

Archive copy of publication, do not use for current recommendations. Up-to-date information about many topics can be obtained from your local Extension office.

Bowers Barley – A New Spring Barley for Feed  
Michigan State University Extension Service  
R.H.Leep, L.O. Copeland, and J.E. Grafius, Crop and Soil Sciences  
Issued November 1981  
2 pages

The PDF file was provided courtesy of the Michigan State University Library

**Scroll down to view the publication.**

# BOWERS BARLEY

## A New Spring Barley for Feed

By R. H. LEEP, L. O. COPELAND and J. E. GRAFIUS

*Department of Crop and Soil Sciences*

BOWERS is a high yielding feed barley developed at Michigan State University. It is adapted to the Upper Peninsula and the northern part of lower Michigan. The name Bowers recognizes the outstanding work of the late Gail Bowers, former County Extension Director of Menominee County.

### Description

The new variety is slightly later than Larker, about two inches shorter, has more lodging resistance and better resistance to mildew, spot blotch and net blotch. Both varieties are resistant to stem rust.

### Pedigree

The new variety came from the cross of X969-3<sup>2</sup> x B130 and combines high tiller number with large heads giving a high yield.

**Bowers is not a malting barley and hence is not recommended for the Thumb area of Michigan.**

### Performance

In tests from 1975-78 in Michigan, Bowers has coupled high yield with yield stability. It has been No. 1 in yield in recent tests over a wide range of conditions. Comparisons with Larker, our best standard variety, are given in Figure 1.

### BARLEY CAN BE PROFITABLE

Barley can be grown profitably on many farms if high yields are obtained. Barley contains approximately the same feeding value as corn. In addition, barley usually has a high protein percentage, the average value being about 14 contrasted to about 10 for corn.

Barley responds well to good management, producing over 1.5 tons of grain per acre. High yields require close attention to the following production factors:

### Time and Rate of Seeding

Plant as early in the spring as the soil can be worked without causing soil compaction. Early planting allows the flowers to pollinate and the kernels to form before hot summer weather. Barley responds better to nitrogen fertilizer when planted early. Using a grain drill,

plant 1½ bushels of seed per acre in moist soil at a depth of about 1 to 2 inches. Compaction of soil over the rows with presswheels will result in more uniform stands.

### Seed Quality

Varietal purity is important in getting the benefits of improved varieties. Certified seed gives you the best assurance of varietal purity. Good seed is high in germination and free of impurities such as weed seeds or other crop seeds. The use of high quality seed is a good investment.

### Seed Treatment

Seed should be treated with an effective chemical such as Vitavax 200. This prevents infection by smuts, seedling diseases and other seedborne fungi.

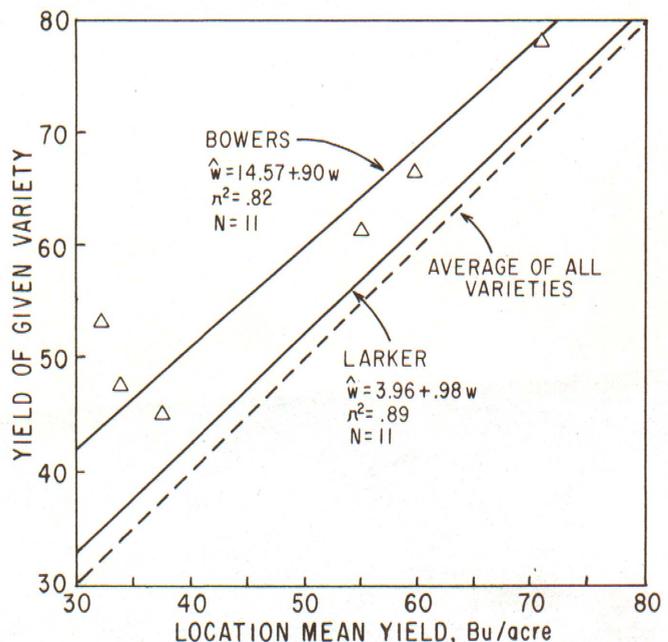


Fig. 1 Yield of Bowers compared to Larker barley and mean yield of all barley varieties in MSU tests, 1975-78.

## Weed Control

A good, vigorous stand of barley will help keep weeds under control.

Chemicals such as 2,4-D, 2,4-DB or MCP will control most broad-leaved weeds. Roundup (glyphosate) is registered and labeled for control of quackgrass and other perennial weeds as a nonselective herbicide for fall application prior to the spring planting of barley and oats.

Further information on weed control is available in MSU Bulletin 434, "Weed Control in Field Crops."

## Fertilization

A soil test will determine the best rate and grade of fertilizer needed.

If a soil test calls for high rates of fertilizer, it may be better to broadcast a portion of the fertilizer and drill the remainder at sowing time.

Provide adequate nitrogen. Following a plowed-down legume and/or manure, 10 to 15 pounds of nitrogen may be adequate, but 50 to 60 pounds per acre of nitrogen is recommended where no legume or manure is plowed down.

Phosphate and potash are most efficiently used when banded one inch below the seed. Banded fertilizer will help develop a vigorous plant even when the soils are somewhat cold in spring.

If legumes are to be seeded, fertilizer rates must satisfy the legume requirements as well.

# CERTIFIED SEED



Crop and Variety	BOWERS BARLEY		
Vendor	HENRY GUROSH		
Address	WILSON, MI 49896		
Lot No.	F78 147 1920	LOT	48 HG
Purity	99.70 %	Net Wt.	48 Lbs.
Inert	.28 %	Date	3-79
Weeds	.01 %	Germ.	95 %
Other	.01 %		
Crop			

MEMBER OF ASSOCIATION OF OFFICIAL SEED CERTIFYING AGENCIES

The Certified seed tag, **printed in blue**, provides assurance of varietal purity and high seed quality.

## Harvesting

Barley is ready to harvest at about 13 to 14 percent moisture. Higher moisture reduces storability unless the seed is artificially dried or the crop is to be used as silage. Another method practiced by several dairy farmers in northern Michigan is harvesting at a high moisture content—25 to 30 percent—and ensiling in a properly sealed silo or using acid preservatives. This method greatly reduces the potential of harvest losses. Follow the recommendations in the combine owner's manual regarding cylinder speed, clearance and operating procedures.

This publication contains pesticide recommendations based on research and pesticide regulations. However, changes in pesticide regulations occur constantly. Some pesticides mentioned may no longer be available, and some uses may no longer be legal. If you have questions about the legality and/or registration status for using pesticides, contact your county Cooperative Extension Service office.

**To protect yourself and others and the environment, always read the label before applying any pesticide.**

MICHIGAN STATE UNIVERSITY

**ES**

**COOPERATIVE  
EXTENSION  
SERVICE**

MSU is an Affirmative Action/Equal Opportunity Institution. Cooperative Extension Service programs are open to all without regard to race, color, national origin, or sex.

Issued in furtherance of cooperative extension work in agriculture and home economics, acts of May 8, and June 30, 1914, in cooperation with the U.S. Department of Agriculture. Gordon E. Guyer, Director, Cooperative Extension Service, Michigan State University, E. Lansing, MI 48824.

This information is for educational purposes only. Reference to commercial products or trade names does not imply endorsement by the Cooperative Extension Service or bias against those not mentioned. This bulletin becomes public property upon publication and may be reprinted verbatim as a separate or within another publication with credit to MSU. Reprinting cannot be used to endorse or advertise a commercial product or company.

O-13244

2P-4M-11:81-DG-UP. Price 15 cents. Single copy free to Michigan residents.