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Bowers Barley – A New Spring Barley for Feed  
Michigan State University Extension Service  
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Issued August 1979  
2 pages

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# 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.

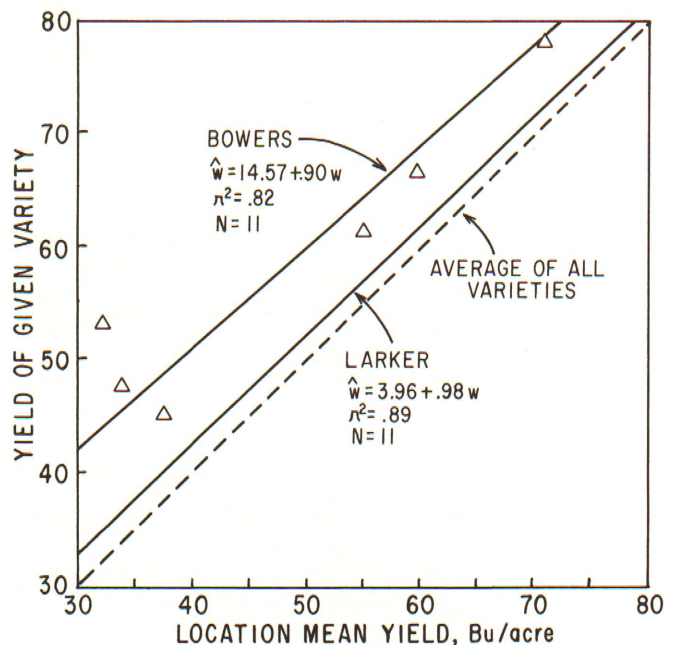


Fig. 1 Yield of Bowers compared to Larker barley and mean yield of all barley varieties in MSU tests, 1975-78.

## 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

|  |  |                  |               |  |  |        |              |  |  |         |                  |  |  |         |         |             |  |        |         |         |         |       |       |      |      |       |       |       |      |            |       |  |  |
|--|--|------------------|---------------|--|--|--------|--------------|--|--|---------|------------------|--|--|---------|---------|-------------|--|--------|---------|---------|---------|-------|-------|------|------|-------|-------|-------|------|------------|-------|--|--|
|  | <table style="width: 100%;"><tr><td style="width: 30%;">Crop and Variety</td><td colspan="3">BOWERS BARLEY</td></tr><tr><td>Vendor</td><td colspan="3">HENRY GUROSH</td></tr><tr><td>Address</td><td colspan="3">WILSON, MI 49896</td></tr><tr><td>Lot No.</td><td>F78 147</td><td>1920 LOT HG</td><td></td></tr><tr><td>Purity</td><td>99.70 %</td><td>Net Wt.</td><td>48 Lbs.</td></tr><tr><td>Inert</td><td>.28 %</td><td>Date</td><td>3-79</td></tr><tr><td>Weeds</td><td>.01 %</td><td>Germ.</td><td>95 %</td></tr><tr><td>Other Crop</td><td>.01 %</td><td></td><td></td></tr></table> | Crop and Variety | BOWERS BARLEY |  |  | Vendor | HENRY GUROSH |  |  | Address | WILSON, MI 49896 |  |  | Lot No. | F78 147 | 1920 LOT HG |  | Purity | 99.70 % | Net Wt. | 48 Lbs. | Inert | .28 % | Date | 3-79 | Weeds | .01 % | Germ. | 95 % | Other Crop | .01 % |  |  |
| Crop and Variety   | BOWERS BARLEY  |                  |               |  |  |        |              |  |  |         |                  |  |  |         |         |             |  |        |         |         |         |       |       |      |      |       |       |       |      |            |       |  |  |
| Vendor   | HENRY GUROSH   |                  |               |  |  |        |              |  |  |         |                  |  |  |         |         |             |  |        |         |         |         |       |       |      |      |       |       |       |      |            |       |  |  |
| Address  | WILSON, MI 49896   |                  |               |  |  |        |              |  |  |         |                  |  |  |         |         |             |  |        |         |         |         |       |       |      |      |       |       |       |      |            |       |  |  |
| Lot No.  | F78 147  | 1920 LOT HG      |               |  |  |        |              |  |  |         |                  |  |  |         |         |             |  |        |         |         |         |       |       |      |      |       |       |       |      |            |       |  |  |
| Purity   | 99.70 %  | Net Wt.          | 48 Lbs.       |  |  |        |              |  |  |         |                  |  |  |         |         |             |  |        |         |         |         |       |       |      |      |       |       |       |      |            |       |  |  |
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| Weeds  | .01 %  | Germ.            | 95 %          |  |  |        |              |  |  |         |                  |  |  |         |         |             |  |        |         |         |         |       |       |      |      |       |       |       |      |            |       |  |  |
| Other Crop   | .01 %  |                  |               |  |  |        |              |  |  |         |                  |  |  |         |         |             |  |        |         |         |         |       |       |      |      |       |       |       |      |            |       |  |  |

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.