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Michigan State University Extension Service

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# Odin Winter Barley

## A New Barley Variety for Michigan

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Department of Crop and Soil Sciences

Odin is an improved high yielding winter barley variety developed at Michigan State University. It is adapted to the southern portion of Michigan and other sites where winter barley is commonly grown.

**DESCRIPTION** — Odin is two days earlier than Lakeland and approximately the same height. It is more resistant to lodging than Lakeland. Odin is also resistant to mildew and has good field tolerance to scald, leaf rust and Septoria leaf blotch. Seed should be treated for prevention of smut (see Extension Bulletin E-1199, "Seed Treatment for Field Crops," free).

**PEDIGREE** — Odin is a selection from the cross Mich. (63-329 x 62-447-18) x 62-431-17.

**PERFORMANCE** — Odin consistently yields higher than the average of other varieties grown in Michigan, including Lakeland (Fig. 1). It demonstrated superior performance when grown over 56 one-year sites in the USDA Cooperative Winter Barley Nursery (Fig. 2). This performance shows a broad adaptation to a variety of environments. Its test weight is consistently superior to that of Lakeland.

**SEED QUALITY** — Varietal purity is an important factor in maintaining high yields. Certified seed is the grower's insurance that the seed is pure as to variety and is free from weed seeds and other impurities (Fig. 3).

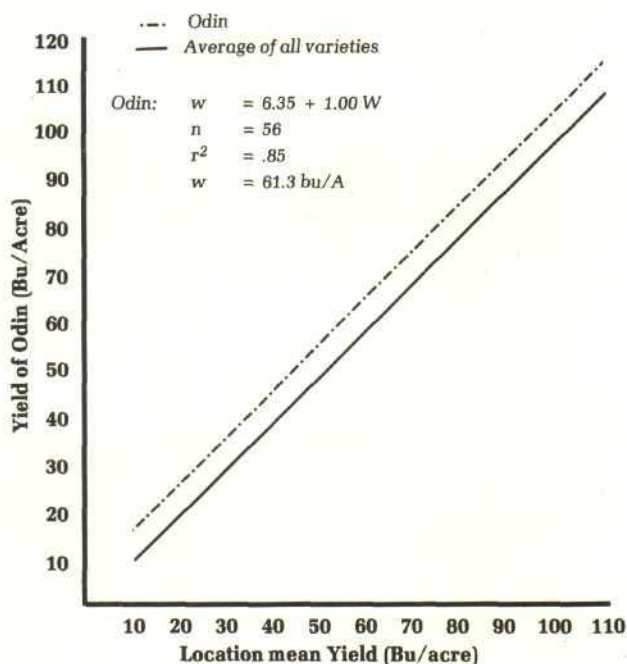


Figure 1. Yield of Odin compared to Lakeland and the mean yield of all winter barleys in MSU tests (1974-1981).

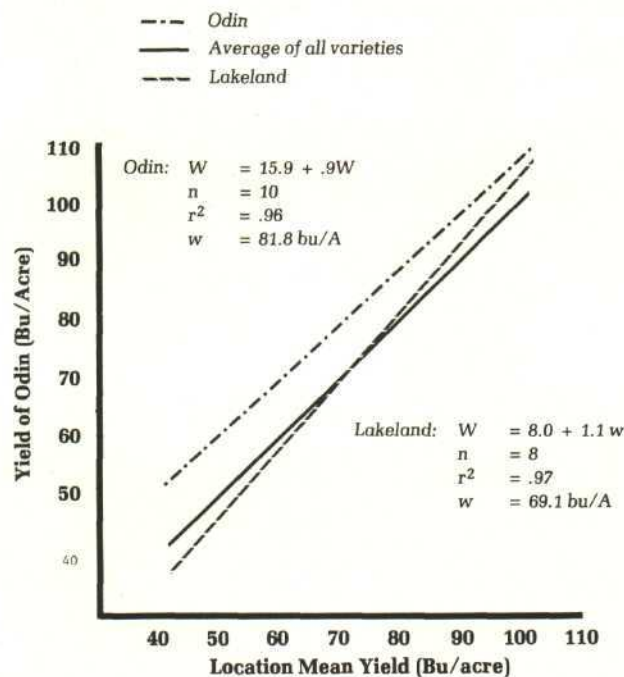


Figure 2. Yield of Odin compared to mean yield of all varieties grown in the regional USDA Uniform Winter Barley Nursery, 1978-1980.

<sup>1</sup>Deceased January 19, 1980.

Odin has been released for Michigan growers following evaluation by the MSU Dept. of Crop and Soil Sciences, Botany and Plant Pathology, and Entomology.

# 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 winter barley seed September 10-20 and spring barley 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 TREATMENT** — Seed should be treated with an effective chemical such as Vitavax 200. This prevents infection by smuts, seedling diseases and other seedborne fungi.

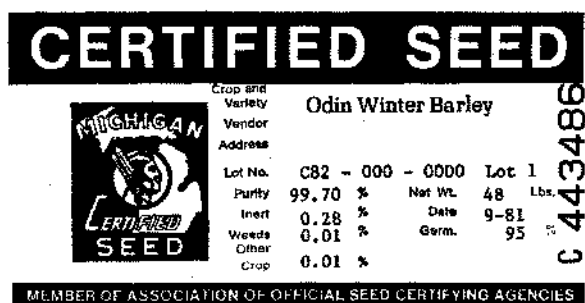


Figure 3. Certified seed provides the best assurance of varietal purity and good seed quality.

**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.

**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.



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