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MENOMINEE OATS

A New High Yielding Oat Variety for Michigan's Upper Peninsula

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MENOMINEE is a medium-maturity white oat variety from Michigan State University released for Michigan's Upper Peninsula.

Description

A medium-tall oat, Menominee has a white kernel color and a high test weight. It produces a rather heavy, uniform straw which has fair resistance to lodging. Menominee has field resistance to Red Leaf and Septoria black stem, the most common diseases of oats in Michigan. It is susceptible to crown rust, some races of stem rust and false loose smut. However, loose smut can be controlled by proper seed treatment.

Pedigree

Menominee, tested as Mi 64-151-123, originated as a cross between Coachman × Marino[2].

Performance

In nine years of Michigan tests, Menominee has coupled high yields with yield stability. It has performed especially well in the Upper Peninsula. Figure 1 shows the yield of Menominee compared with the mean yield of 25 to 30 varieties from throughout the Upper Great Lakes Region.

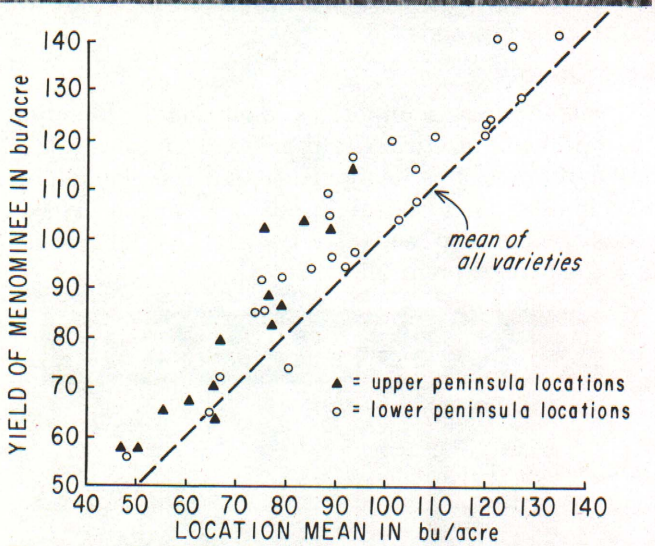


Figure 1—Comparison of Menominee (triangles and open dots) with the mean value of all varieties (the dashed line) in the test period 1968-1975. From 25 to 30 varieties from surrounding states and Canada are represented in each test. Most Menominee points lie above the mean value.

Seed Availability

Certified seed of Menominee is being produced in Menominee and Delta counties and will be available to farmers in 1978. Quality standards for Certified

[1] *Menominee County Extension Director.*

seed are administered by the Michigan Crop Improvement Association (MCIA). All Certified seed fields are inspected by MCIA representatives prior to harvest. After processing, Certified seed must meet high MCIA standards of germination and purity.

Six Steps to Better Oat Yields

Oats can be raised at a profit in Michigan. While not the highest income crop, there are a number of good reasons for raising oats. They fit into a rotation, serve an important function as a companion crop, help distribute labor and supply the farmer with an important feed grain and straw for bedding. Oats may be used for silage or hay. When fed in these forms, nearly twice as much TDN per acre is realized as compared with feeding only the grain. Oats can be produced on land unsuitable for corn or other high value crops.

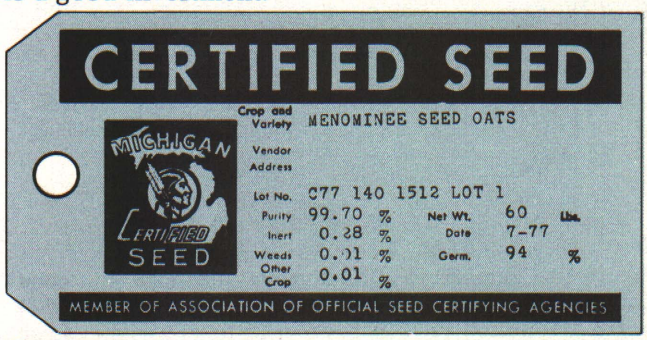
With high-yielding varieties and improved cultural practices, yields in excess of 125 bushels are not uncommon on good land in Michigan.

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 weather begins in the summer. Using a grain drill, plant 2 to 2½ bushels of seed/acre in moist soil at a depth of 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.



The blue certified seed tag provides assurance of varietal purity and high seed quality.

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.

Weed Control

A good vigorous stand of oats 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 non-selective herbicide prior to planting oats.

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

Fertilization

A soil test should be taken to 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.

Provide adequate nitrogen. Following a plowed-down legume and/or manure, 10 pounds of total nitrogen fertilizer may be adequate, but 40 pounds per acre of total nitrogen is recommended where no legume or manure is plowed down.

Phosphorus and potassium are most efficiently used when banded with the fertilizer attachment on the grain drill 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 with oats, fertilizer rates must satisfy the legume requirements as well.

Harvesting

Oats are 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. Follow the recommendations in the combine owner's manual regarding cylinder speed, clearance, and operating procedures.

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