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Heritage Oat a New Oat Variety for Michigan

Michigan State University Extension Service

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Heritage Oat

A New Oat Variety for Michigan

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Department of Crop and Soil Sciences

Heritage is a widely adapted, high yielding oat variety developed by Michigan State University. It is named in honor of the late Dr. John E. Grafius for his contributions to pure and applied oat research.

DESCRIPTION — Heritage is two days later than Korwood and approximately two inches shorter. Its lodging resistance is equal to, or slightly less, than Korwood. Heritage has field resistance to red leaf (barley yellow dwarf virus) and is resistant to halo blight and black stem. Since Heritage is susceptible to smut, a seed treatment program is recommended. (See Extension Bulletin E-1199, "Seed Treatment for Field Crops," free.)

PEDIGREE — Heritage is a selection from the cross MI 1689 x Marino².

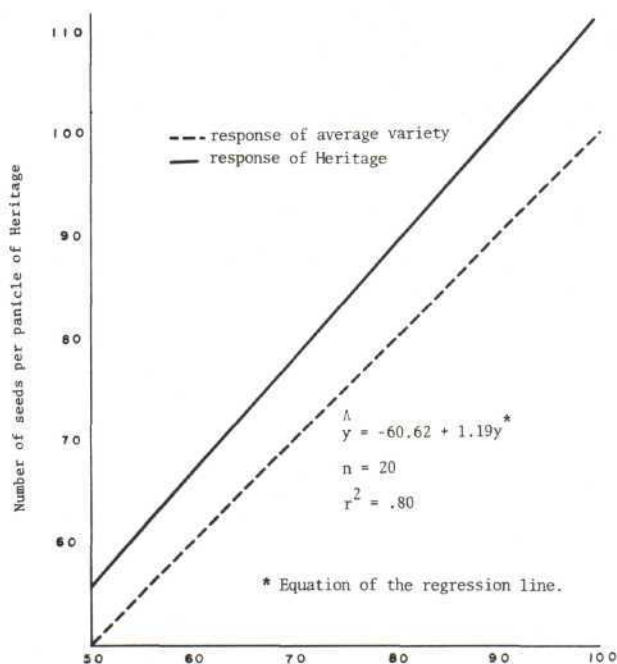


Figure 1. Mean number of seeds per panicle of Heritage compared to the number of seeds per panicle of all varieties at a given location or management level.

¹Deceased January 19, 1980.

PERFORMANCE — Heritage yields consistently higher than the average oat variety because it has more seeds per panicle, in all environments, compared with average oat varieties (Fig. 1). This superiority is even greater in improved environments (Fig. 2). Heritage has average test weight in all locations.

OATS CAN BE PROFITABLE — Oats can be profitable if grown for high yields. Oats should be seeded in early spring as soon as the soil can be worked without risk of compaction. Early seeding, combined with proper fertilization, will help maximize yields. High yields provide the grower with a quick return on his investment.

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).

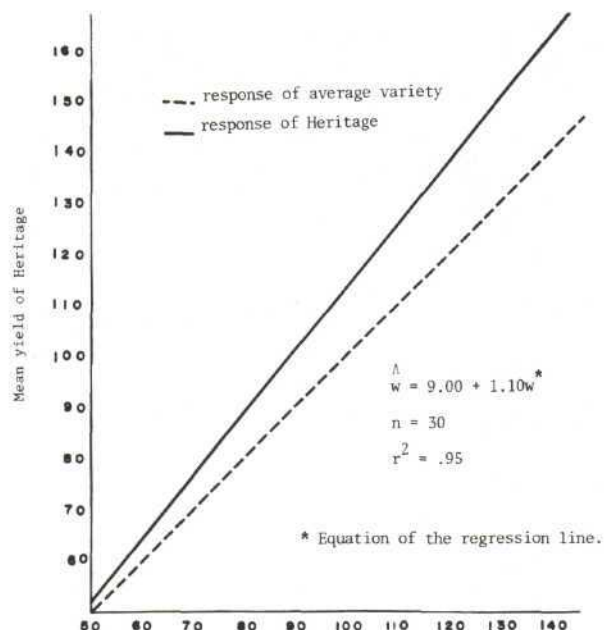


Figure 2. Yield of Heritage compared to mean yield of all varieties at a given location or management level.

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

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.

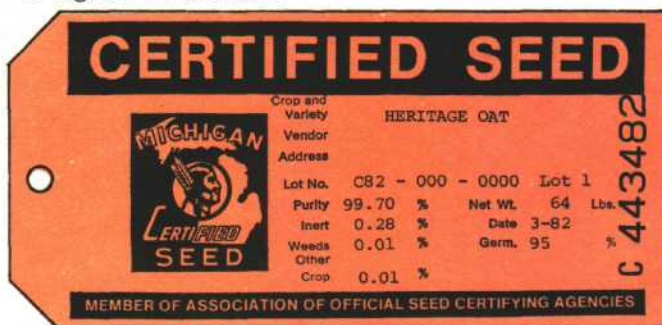


Figure 3. Certified seed provides the best assurance of varietal purity and good seed quality.

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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