

FILE COPY
DO NOT REMOVE

COMING THROUGH WITH RYE

Michigan's Rye Acreage Back to Normalcy

While the rye acreage of Michigan received tremendous stimulus by the high prices of the war period, at one time nearly reaching the million mark, it is now back to its normal status. In fact, the last two crops have been about 50,000 acres short of the 1906-1916 average of 417,000 acres. This would indicate that the crop is being grown about where it ordinarily belongs, particularly with reference to its value as compared to other small grains. The Michigan rye grower's problem, therefore, has become not so much that of making a choice as to whether or not he should grow rye as it is that of how he can grow rye most profitably.

Don't Rye Your Land to Death

The ability of rye to produce fairly well under unfavorable conditions has too frequently resulted in an attitude of carelessness on the part of many rye growers as to conditions which have been provided for the growth of the crop. "Rye after rye" programs, without proper rotation with leguminous crops or sufficient application of manure and fertilizer, have eventually made lands thus handled unsuited to production of any crops, even the rye itself giving very low yields. Some growers have attributed these inferior crops to run-down seed, when the real explanation lay in the fact that the land needed a couple of tons of lime per acre, the proper use of manure, a strong application of acid phosphate or complete fertilizer, the plowing under of a good growth of sweet clover, a little vacation from continuous grain farming, and the invigorating effects of a properly handled crop of alfalfa. Sanely managed, much of this land will still produce twenty-five to thirty-five bushels of rye per acre; but it should be remembered that rye is a supplementary crop, filling its place in a rotation in which alfalfa, the clovers, sweet clover, or winter vetch, with some intertilled crop, play the leading parts.

Early Seeding a Money Maker

A valued practice in rye growing is that of early planting. This change, from the usual practice of planting rye when it gets so late no other work can be done, costs nothing and its returns are net profit. In trials conducted by

Michigan State College of Agriculture and Applied Science, Extension Division,
R. J. Baldwin, Director. {Printed and Distributed in Furtherance of the Purposes
of the Cooperative Agricultural Extension Work Provided for in Act of Congress
May 8, 1914. Michigan State College and the U. S. Department of Agriculture
Cooperating.

the Michigan Experiment Station at East Lansing, rye planted September 25, yielded 17% more than rye planted October 15; 10% more than rye planted October 25; and four times as much as that planted November 5. The most satisfactory date for Central and Southern Michigan is mid-September to early October; for the northern part of the Lower Peninsula, the first week of September; while rye in the Upper Peninsula yields best if planted before August 31st.

**Rosen Rye
Is Most
Profitable**

That Rosen Rye is the most profitable variety for a Michigan farmer to grow is no longer a matter of question. So convincingly has this variety demonstrated its superiority, in this state, that practically all of the rye grown in Michigan is Rosen of greater or lesser purity.



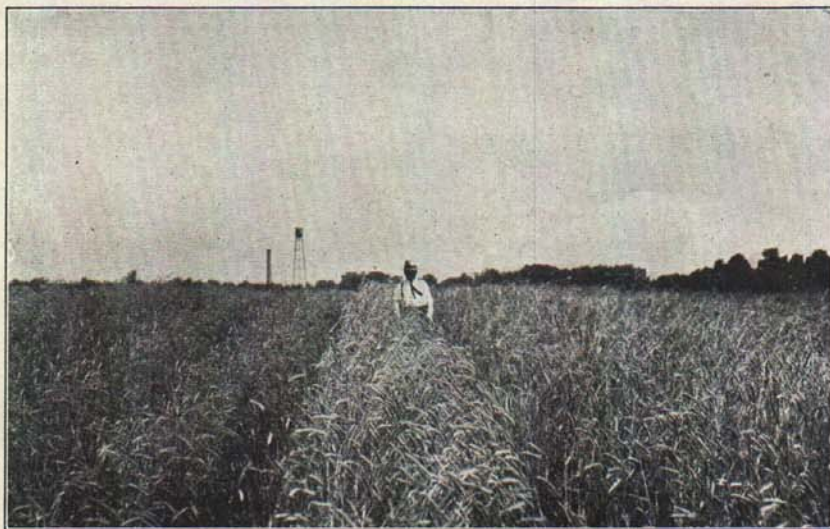
For years Rosen Rye has Demonstrated its Superiority for Michigan Conditions.

Michigan State College and Pedigreed Seed Growers Keep Rosen Pure The degree of purity of Rosen Rye has much to do with its quality and producing ability. Pure Rosen is known by its large heads, almost completely filled with uniformly plump, greenish kernels. The straw is of an even length, giving a field of pure Rosen a smooth, level appearance, rather than the ragged look of common rye or of Rosen which has become badly contaminated with inferior varieties by cross pollination. Common or mixed rye is also distinguished by the number of empty spikelets its heads usually carry.

Rye being an open-pollinated plant, subject to mixing by cross fertilization, the advent of the highly valued Rosen variety has brought with it the problem of keeping the seed pure. This is accomplished by the continued work conducted by the Experiment Station of the Michigan State College, where self-fertilization, and other breeding and selection work has been continued ever since the first Rosen was introduced. In addition, very careful head-selection work is carried on by expert rye growers throughout the state. These men, cooperating with the State College, annually select the most perfect Rosen heads for seed plots. These are quickly increased; so the immediate progeny from such seed is soon available for general dissemination.

**South Manitou
Island is Pure Seed
Breeding Ground**

To further assist in maintaining a pure Rosen supply, fifty bushels of the head-selected Rosen seed were planted on South Manitou Island, twelve miles off the mainland in northern Lake Michigan. This was in 1918, and ever since, in the perfect isolation of the island's forest-surrounded fields, there has been produced some of the purest and best quality of rye known. Each year representatives of the Crops Department of the Michigan State College work with island rye growers in further head-selecting Rosen rye to be increased on South Manitou for later use by growers on the mainland. Four years out of six, island rye, resulting from this careful selection work, has won sweepstakes honors at the International Grain and Hay Show, the greatest distinction which rye can achieve.



The Center Strip of Rye and that at the Extreme Left were Planted Sept. 25. Other Strips are Later Oct. Plantings.

From Time of Planting Rye experiments conducted by the Experiment Station of the Michigan State College.

**Seed Certified by
Michigan Crop
Improvement
Association Has
Unusual Merit**

Growers wishing to secure the most from their rye crop, both in quality and in yield, will do well to renew their seed very frequently from stock certified by the Michigan Crop Improvement Association. This open organization of farmers works under the supervision of the Michigan State College, and the rye it certifies comes directly from the Experiment Station from South Manitou or other parts where breeding work is maintained, or is mainland seed only a generation or two removed from the highly desirable head-selected stock. Such seed rye is grown in isolated fields, thoroughly cleaned and rogued to free them from weeds, and it conforms to very high standards of purity and vigor in order to meet the requirements for certification laid down by the Association.

Pure Rosen, thus handled, frequently yields from thirty to forty-five bushels per acre under favorable conditions, with yields of as high as fifty-four bushels per acre having been reorded. Common or mixed rye seldom

exceeds fifteen to eighteen bushels per acre, and a twenty to twenty-five bushel yield is exceptional.

**Vetch Can
Help Rye's Bank
Account**

Farmers growing rye on the lighter soils have found that the seeding with it of eighteen or twenty pounds of Hairy or Winter Vetch seed per acre added much to the profit of the crop. The yield of rye can be maintained in the combination and it handles the production costs well, while the two to five bushels of vetch per acre, readily separated from the rye, contributes its income as almost clear profit. Michigan grown winter vetch seed is in strong demand and much of the country looks to this state for a satisfactory supply.



Rye and Vetch Make a Good Combination for a Cover Crop
or for Seed.

**Fit Rye to
Right Place in
Farm Plan**

While a permanent and prosperous agriculture for Michigan has as its foundation the maintenance of a productive soil through the growing of leguminous crops for cheap fertility, and the feeding of much of the farms' products right back on those farms, the distribution of labor and the management of the soil makes desirable the growing of certain grains. Rye seems to best utilize the conditions for grain production offered by many of the lighter soils of the state. If reliance, in the farm plan, is placed upon it only as a supplementary crop, if its returns are augmented by vetch seed wherever conditions favor the combination, and if proper attention is given to the kind of seed planted and the management and nourishment of the crop, rye can offer a substantial contribution to the farm income on these lighter soils and will help to give balance to the farm's plan of business.

Howard C. Rather,
Extension Specialist in Farm Crops.

ROBERT SMITH COMPANY, LANSING, MICH.