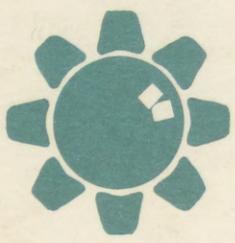


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Conducted by
MINNESOTA EXTENSION SPECIALISTS
IN AGRONOMY, ENTOMOLOGY,
PLANT PATHOLOGY, AND SOILS
AGRICULTURAL EXTENSION SERVICE ✓
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1

TABLE OF CONTENTS

	<u>Page</u>
Field Crop Recommendations for 1971--Harley J. Otto	1
Herbicides--Gerald Miller.	5
Corn and Soybean Weed Control Demonstration Results--1970-- Oliver Strand and Gerald Miller	15
Survey Methods and Determining Need for Control of Crop Insects--J. A. Lofgren.	25
Insecticide News Items in 1970--Phillip K. Harein	30
Corn Rootworm Control in 1970--J. A. Lofgren	33
Suggestions for the Use of Insecticides to Control Insect Pests of Field Crops in 1971--J. A. Lofgren	37
Livestock and Poultry Recommendations for 1971--David M. Noetzel	54
Crop Diseases and Problems in Minnesota in 1970 (Corn)-- Herbert G. Johnson and Howard L. Bissonnette	62
Crop Diseases and Problems in Minnesota in 1970-- Herbert G. Johnson and Howard L. Bissonnette	67
Another Look At An Old Problem--Charles A. Simkins	71
The Pursuit of High Corn Yields--C. J. Overdahl and W. E. Fenster	77
Cation Exchange Capacity of Soils (C. E. C.)--C. A. Simkins, John Grava, C. J. Overdahl and W. E. Fenster	81

Mention of trade names in this publication does not imply endorsement nor does failure to mention a name imply criticism by the Minnesota Agricultural Extension Service.

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FIELD CROP RECOMMENDATIONS FOR 1971

Harley J. Otto, extension agronomist

For complete information on "recommended," "not adequately tested" and "other" varieties, see University of Minnesota Miscellaneous Report 24, Varietal Trials of Farm Crops.

The following changes in crop variety recommendations have been made for 1971:

Barley--There are no changes in the list of recommended varieties for 1971 compared with 1970.

Paragon, a blue aleurone variety from Canada, will not be recommended in Minnesota. Compared to Conquest in Minnesota tests, Paragon has been about equal in yield, but slightly later in heading, has lodged slightly more, and has produced a lower percent of plump kernels.

Oats--A new variety, Otter, was released by the Minnesota Experiment Station in 1970 and is recommended in the state. Otter is similar to Garland in maturity and plant height but is equal to Lodi (superior to Garland) in lodging resistance. It is susceptible to the prevalent race of stem rust, 6AF and is moderately resistant to crown rust. Otter test weight has been equal to Lodi but lower than Garland in Minnesota tests the past 3 years.

Three new varieties from other states were included in 1970 Minnesota tests but have not yet been adequately tested. These varieties are:

Diana--an early variety from Indiana.

Froker--a late variety from Wisconsin.

Cayuse--a late variety released by the Washington Agricultural Experiment Station from a cross made in New York.

Hard Red Spring Wheat--Two new semidwarf varieties, Era and Fletcher, were released by the Minnesota Experiment Station in 1970 and are recommended in the state. From 1968 to 1970, Era yielded 120.7 percent as much as Chris while Fletcher yielded 97.4 percent of Chris. Both have good lodging resistance, are resistant to stem and leaf rust, and tolerant to septoria, bunt, and ergot. These varieties have high test weight and satisfactory milling characteristics. Era and Fletcher are lower in protein content and bake absorption than Chris, but Fletcher is better than Era in these baking characteristics.

World Seeds 1809 was added to the recommended list. This is an early semidwarf with good lodging resistance and resistance to leaf and stem rust. It has yielded 117.5 percent of Chris during the past 2 years. It has lower protein content and bake absorption than Chris, but higher than Era.

Waldron, a standard-height variety from North Dakota, was added to the recommended list. It is an early heading variety with good straw strength, rust resistance, and quality. In 3 years of testing in Minnesota, it yielded about 108.6 percent of Chris. Waldron is susceptible to ergot and this caused problems in several seed production fields in 1969.

World Seeds 1812 and Inia 66 were placed in the "other varieties category." World Seeds 1812 has low protein content, bake absorption, and mixing properties and has produced relatively low yields in Minnesota tests. Inia 66 is a semidwarf wheat variety from the Mexican breeding program. It is susceptible to leaf rust and has low bake absorption and protein content.

The varieties Bonanza, from DeKalb Agricultural Research, and Bounty 208, from Cargill, Inc., have not been tested sufficiently to determine whether to recommend them in the state.

Durum Wheat--The variety Hercules, from Canada, was placed in the "other varieties" category. It is susceptible to leaf rust and has not yielded better than other durum varieties in the state.

Winter Wheat--The Montana variety, Froid, was placed in the "other varieties" category because it offers no advantage over Minter and has decidedly lower test weight.

Rye--Cougar was added to the recommended list while Frontier and Pearl were dropped from the list. Cougar has yielded more than Frontier and Pearl at most Minnesota locations and is more resistant to lodging than either.

Soybeans--The Iowa variety, Wirth, was placed in the "other varieties" category because it did not offer any advantages over Chippewa 64 in most respects and is susceptible to Phytophthora root rot.

Dunn, a variety from Wisconsin, similar to Chippewa 64 in maturity, and Morsoy, an early Canadian variety, must be tested further before decisions on recommendations can be made.

Sunflowers--No changes in recommendations were made. Several hybrid varieties have been tested in Minnesota but no specific recommendations for them will be made. Success in producing hybrid seed depends on roguing about 50 percent of the plants from the female parent in the crossing field when the plants begin to bloom. Unless a good roguing job is done, the seed lots will vary in percent of hybrid plants produced. When a high percent of hybrid seed has been attained, yields of some of the hybrids have yielded more than the open-pollinated varieties.

Dry, Edible Beans--For the first time, a pinto bean variety is recommended in Minnesota. The variety, UI 114, is recommended where pinto beans will be grown. This variety has exceeded all others in Minnesota yield tests. It was released in 1965 by the Idaho Experiment Station.

The complete list of recommended varieties for 1971 follows:

Barley: Conquest, Dickson, Larker, Primus II.