FIELD AND LABORATORY STUDIES OF CROPS: AN ELEMENTARY MANUAL FOR STUDENTS OF AGRICULTURE

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Field and Laboratory Studies of Crops: An Elementary Manual for Students of Agriculture by A. G. McCall

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A. G. MCCALL

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No richer gift fiath Autumn poured
From out her lavish horn."
The Carn Song—Whittier,

FIELD AND LABORATORY STUDIES OF CROPS

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AN ELEMENTARY MANUAL FOR STUDENTS OF AGRICULTURE

BY

A. G. McCALL

Professor of Agronomy, Ohio State University

FIRST EDITION

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FIRST THOUSAND

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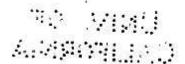
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SUGGESTIONS TO TEACHERS

There is a growing tendency in the schools toward educating children in the common things of life. In some States laws have been passed requiring the teaching of elementary agriculture in the village and rural schools. The object of this work is to interest the pupils in the practical things of country life and to give them some conception of the opportunities which surround them. A majority of the children who attend the village and rural schools will remain in the country, and it is right and proper that they should be educated in the things with which they will have to deal every day of their lives.

The success of the work will depend very largely upon the teacher. Pupils are naturally interested in those things with which they are constantly in contact, and need only the encouragement of the teacher to direct their enthusiasm. In this manual a few exercises are given to illustrate some of the fundamental principles of plant growth, but the central idea throughout is the practical application of these principles to crop production and improvement. Some of the exercises are original, but many of them have been adapted from the publications of the United States Department of Agriculture and from the bulletins of the Extension Department of the Ohio State University. The writer wishes to acknowledge his deep indebtedness to his wife, Hattie F. McCall, for helpful criticisms and suggestions.

No expensive equipment is required, but every effort should be made to induce the pupils to make use of materials on the home farm or in the school gardens. Each pupil should have at home or in the school garden a small plot of ground on which to grow some crops for which he shall be entirely responsible.

The book is expected to furnish material for two periods per week for a half year or one period per week if the work is extended over the entire school term. In order to give the teacher some choice of subjects, fifty exercises have been included. They are arranged in logical order, but it is expected that this arrangement will need to be modified in order to adapt the studies to the season.

In addition to the standard books on elementary agriculture, the school library should have the publications of the State Experiment Station, the Agricultural College, and the United States Department of Agriculture. The former can usually be obtained by direct application to the Station and College, while the latter can be secured by writing to your Senator or Representative in Congress. The Year-book and the Farmers' Bulletins are the most useful publications put out by the federal government.

At the conclusion of each exercise the pupils should be assigned reference readings bearing upon the work of the period and be required to make a written report. As far as possible, the class-room recitations and discussions should center about the field and laboratory exercises.

DEPARTMENT OF AGRONOMY, Onio State University, August, 1915.

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