

**FARM CROPS
LABORATORY MANUAL
AND NOTE BOOK**

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Farm Crops Laboratory Manual and Note Book by F. W. Lathrop

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F. W. LATHROP

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AND NOTE BOOK**

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INTRODUCTORY NOTES

These notes are written to suggest some of the methods of teaching farm crops and also to suggest to the instructor how he may use the exercises in this manual most effectively. The plan is to discuss some of the more important types of laboratory exercises used in teaching farm crops.

1. **Identification of Plants and Seeds.**—Several methods may be used in order to fix the identity of plants and seeds in the student's mind.

(a) *Drawing.*—Drawing seeds and plants necessitates the observation of certain characters which might otherwise escape attention. In the case of seeds a minimum size or standard should be set because the natural tendency of the student is to make the drawings too small. Correct labeling is essential.

(b) *The Use of a Key.*—Keys are in printed form for the identification of such crops as oats, barley, grasses and clovers. Many of these keys should be simplified for use in secondary schools.

(c) *Descriptive Outlines.*—Describing specimens according to a set outline is a useful method but has serious limitations. The student should have a set of definite descriptive terms of which he knows the meaning. This method should always be supplemented by one of the other methods in order to bring out the differences in the specimens described. When literature on variety or type description is available it may be used to supplement the study of the specimens at first hand.

(d) *The Identification of Numbered Specimens Unlabeled.*—This method is valuable because of the interest it arouses. Its purpose, however, is not to teach but to test and drill. The student should know what mistakes he has made and should correct them.

(e) *Class Discussion.*—Contrasts between specimens may be brought out by class discussion.

2. **Judging.**—The most common error in judging exercises consists of scoring and judging by the student before he has a real acquaintance with the score card. To avoid this error and for the sake of thoroughness judging work may well consist of three steps.

Step 1.—Let the instructor explain the score card. Then have the student examine specimens which illustrate the score card points as in Exercise 9.

Step 2.—In the case of potatoes, for example, have the student take several samples which are later to be judged and place them in the order of