

9. That the research committee undertake as a long time project, either by compilation of available data or by actual investigation, a study of the following problems:

- a. Optimum conditions for the maximum germination of each species or kind of seed.
- b. Effect of such factors as light, temperature, substrata, moisture, oxygen supply, pathogenic organisms, and seed disinfectants, both individually and collectively, on the germination of types of seeds.
- c. Factors responsible for abnormal seedlings, together with descriptions and illustrations of abnormal seedlings among types of crop plants.
- d. Agricultural value of hard seeds.

#### ACKNOWLEDGMENT

Without the encouragement and support of the President of our Association, official and commercial analysts, the regional chairmen, and many members of the seed trade, the work of this committee would have been less extensive and less valuable, if not impossible.—R. H. PORTER, *Chairman*.

#### REPORT ON THE HANDBOOK

E. BROWN

*For the Research Committee*

Your sub-committee on Handbook distributed in September, 1936, a mimeographed annotated table of contents of the proposed handbook.

Two of the analysts who are preparing chapters on special subjects have not been able to finish them up to the present time.

It is believed that after the revised Rules for Seed Testing have been acted upon, your next year's committee on the handbook will be better able to proceed with its preparation.

#### REPORT OF THE SUB-COMMITTEE ON REVISION OF THE RULES

At the last meeting your committee submitted a proposed revision of the "Rules for Seed Testing" with an explanation of the reasons for the arrangement, the material included, and the material left out.

A number of analysts have been kind enough to send in criticisms and suggestions for changes. These suggestions have been gratefully received and carefully considered.

There are presented at this time several changes and additions in the hopes of clarifying the presentation, but without changing the general plan of the original revision.

The sections dealing with the purity separation and varietal determination have been largely rewritten. In order to make clear what is to be separated and reported and to avoid past confusion between purity percentage and varietal purity, the term "pure seed" has not been used. These suggestions are not intended to change in any way the procedure in making a purity analysis, but it is hoped they will clear up any possible misunder-

standing of the results of the analysis. A form of report is presented, which it is believed will help to explain the intent of this portion of the rules.

There has been inserted under definitions of weed seed and of inert matter a provision that "undeveloped and badly injured weed seeds (including noxious weed seeds), which on visual examination are clearly incapable of growth" are to be considered inert matter and not weed seed.

It has not been found possible to follow all the suggestions that have been made and yet maintain a unity of presentation of the material. It may seem to many of you that various questions should have been treated more fully but, as stated last year, it is felt that these rules and recommendations should be a general guide, brief enough for ready reference, and that more extended treatment might better be reserved for the handbook. Numerous editorial changes have been made that do not change the meaning of the Rules.—E. H. TOOLE, *Chairman*, M. T. MUNN, W. H. WRIGHT.

*Suggested Form of Report to Conform to Proposed Revision of Rules*

Test Number	Sender's Mark	Name Under Which Submitted
0000	X Y Z	White sweetclover Atlas sorgo

*Result of Analysis*

Kind of seed (Name)	(Per cent)	Other crop seed (Per cent)	Weed seed (Per cent)	Inert matter (Per cent)
Sweet clover	95.0	2.2	2.2	0.6
Sorghum	98.0	0.0	2.0	0.0

*Identification and Varietal Determination.*

2% mottled seed present, indicating slight admixture of yellow sweetclover. Sample is not Atlas sorgo—appears to be mainly Hegari, or No attempt has been made to check the variety.

Weed seeds present			Other crop seeds present		
Kind	Number in grams examined	Per cent by weight	kind	Number in grams examined	Per cent by weight
A	5	—	X	1	—
B	25	2.0	Y	30	2.4
C	1	—			

Noxious Weed Seeds—rate of occurrence based on examination of 49 grams (entire sample).

Name	No. per pound	Name	No. per pound
Dodder.....	20		
Canada thistle.....	100		

or  
Sample not examined for noxious weed seed content.