VARIATIONS IN SEED TESTS RESULTING FROM ERRORS IN SAMPLING.

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INTRODUCTION.

Little attention appears to have been given to careful study of the accuracy of seed testing. Some experiments have been made during the past few years by sending to different laboratories samples drawn from a common bulk. The results of one of these has been published (Stone, 1913), but so far as the writer could find from available literature no attempt had been made to analyze the fundamental factors to which variations are due. In this paper the results are presented of some investigations conducted during 1914 and 1915 when routine duties were not pressing.

CAUSES OF VARIATION.

Variations in the results of seed testing are fundamentally of two kinds, and are to a great extent impossible to avoid. One is purely mathematical, the other personal or to a large extent economic. The direct causes may be listed as follows:

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