THE EXPERIMENTAL ERROR IN FIELD TRIALS.¹

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Under the title, "Studies concerning the elimination of experimental error in comparative crop tests," Professor Kiesselbach² points out the occurrence of experimental error in many kinds of crop tests. The bulletin is well prepared, contains much of value, and should be carefully studied by anyone engaged in comparative trials of any sort.

It is not the purpose here to review the bulletin in detail, but rather to point out certain cases which it seems might well be considered further. The first is competition that apparently occurs between different rows and the second the conclusion reached regarding the use of the probable error.

First, in regard to the competition between rows. The author compares the competition between thin and thick stand and obtains in this case a much smaller yield from the thin planting. The rate of planting is not given, unfortunately, so we cannot discuss this from that standpoint. Another point is not stated, that is, whether the series were so arranged that the rows ran from east to west or north to south. These points are omitted, altho the author (page 89) urges that the methods used by experimenters should be given. We have reason to believe that some of these rows at least extended east and west, so that competition would no doubt occur and perhaps be very marked in certain cases. As the direction of the rows is not made clear, it is well at this time to emphasize this point.

In certain experiments conducted at Ithaca, N. Y., where the rows run from north to south and data are available it is shown that there is little competition between varieties; in fact, there is so little between the ordinary varieties usually tested in any one locality that no correction would be necessary. Perhaps for other conditions the results would be different. In order to obviate any criticism of this method it might be well to follow the plan of arranging varieties

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