

ments, for the different trials were planted on the same ground and the plots were continued in the same order.

The first wilt plants were found on May 24, and after this time infection was rapid. It will be noticed in Table I that the percentages for the first three counts correspond rather closely, but that there is a considerable spread in the percentages of later counts. The variation, however, is not consistent and the averages of total infection for the season in the different plots would indicate that potash did not reduce infection nor retard the development of the disease sufficiently to justify recommendations for using more than four or five percent potash in cotton fertilizers.

SECOND FIELD TEST

Immediately after pulling out plants of the first test, the land was prepared and planted for the next test on June 27. The seeming failure of potash to show any effect on the abundance of wilt in the first test led to much larger proportions of potash being used in subsequent tests, in spite of the fact that the reports from Arkansas and Mississippi, previously mentioned, indicated that benefits were derived from fertilizers containing approximately the same proportion of potash as the check-fertilizer used in these experiments. The same basic fertilizer (4-7-5) was used in this trial, and the proportion of potash on the five plots was 5% in Plot 1, 16% in Plot 2, 27.5% in Plot 3, 35% in Plot 4 and 40% in Plot 5. Germination was rapid, and, as there was no danger of *Rhizoctonia* injury, the plants were chopped to a stand on July 10 and side-dressed with nitrate of soda. Three days later the first count was made and very few wilt plants were found. In subsequent counts the percentage of wilt increased rapidly and by August 21 the stand was extremely ragged. The plants were pulled up on this date and were cut to gain a final and more accurate idea of the prevalence of wilt. A summary of the results is given in Table II.

From the results set forth in Table II, it would appear that in the two plots receiving 16 and 27.5% potash there was some reduction in the amount of wilt. When, however, the percentages of wilt in the two plots receiving the largest applications of potash and in the check plot receiving a normal application of potash are considered, the effect of potash on cotton wilt would appear negligible. There was no plot, however, having no potash, and it is possible that a comparison of potash and no potash plots would have shown greater relative differences.