

It is gratifying to be able to record results which cannot be accepted otherwise than as absolutely conclusive in connection with perhaps the most important class of fruit which entered into the experiment, viz., apples.

The unusual difficulties and hindrances encountered make the results all the more emphatic and valuable. I wish also to state that the work should have been commenced at least ten days earlier than it was begun, and that the first spraying should have been made with copper sulphate. This is in line with the experience of Mr. Murray Pettit.

The results of Messrs. M. Pettit, E. J. Woolverton and A. H. Pettit are given in detail in the accompanying tabulated statement.

In submitting his results, Mr. M. Pettit says "that the Snow apples were not quite free from fungus, but much better than those last season. Spys were much improved, while the test on Baldwins was a great success."

Mr. E. J. Woolverton, writing under date of Oct. 25th, says: "I have no doubt that had the experimental plots received an application of copper sulphate earlier in the season, the results would have been still more satisfactory; but even now, after all the fruit is picked, it is an easy matter to pick out the treated trees from the untreated, owing to the much richer and more healthy character of their foliage."

"I now enclose you a statement of the result of the spraying experiment with *Bordeaux mixture* conducted in my orchard under your direction during the past season. And in doing so I must express my great satisfaction in the results obtained. It has shown the effect in such a marked degree.

"The experiment you conducted here this season has demonstrated to me, and many other fruit growers, that spraying with Bordeaux, properly applied, and at regular intervals, will be of great practical value in destroying the fungus that is, I believe, causing the unfruitfulness of our orchards. The sprayed trees, aside from the large increase of crop, presented a fine healthy foliage, while those by the side of them, *unsprayed*, showed a very unhealthy appearance and no fruit.

"Now, I may go a little beyond the experiment proper, having sprayed a number of trees to a greater or less extent. The season, as you are aware, was most unfavorable in some respects, not only for spraying regularly, but for the cultivation of the orchard and vineyard, the extreme wet, followed by the rapid drying up of the land. I was pressed for time to get what spraying I did get done (beyond the experiment proper) with any regularity, and some were done moderately well, while other parts were not done so well; but I can distinctly trace the good effects of the application in the increased production and also in the improved condition of the foliage, even to the extent of one side of quite a number of the trees producing good results and good foliage on one side, while the other side of the tree was barren of fruit and unhealthy foliage."

An examination and analysis of the tabulated returns show that the sprayed trees yielded 24 per cent. more of first class fruit and 6 per cent. less of second class fruit and 18 per cent. less of third class fruit.

The effect of the improvements in quality on the gross receipts from an acre of bearing apple trees may be shown as follows:—Supposing the yield to be 50 barrels, we find, according to results gained, that spraying would give us