

Bentonite bordeaux was prepared in the same manner as regular bordeaux, except that two pounds of bentonite were substituted for two pounds of lime so that the formula would be 4-2-2-50. Bentonite was used as a wetting-sticking agent with the basic copper sulfate. A formula of 2 pounds of bentonite and 2 pounds of basic copper sulfate to 50 gallons of water was found to be quite satisfactory.

Four pickings were made in this experiment from March 20 to April 12. Dry weather prevailed during the season and a significant reduction in yield was again obtained in plots in which regular bordeaux and bentonite bordeaux were used. Since no Phoma rot developed in any of the fruits placed in storage from these plots during the season, the results are not shown in tabular form.

**1935-36:**—Weather conditions were so unfavorable during the 1935-36 season that no accurate data could be obtained. The seedbeds sown on August 22 were drowned during the hurricane of September 2. Marglobe plants purchased and set in the experimental plots on September 23 were all badly injured by the hurricane on November 4. The plants which survived were killed by frost on the night of November 30.

A cooperative experiment on pineland soil was started on October 10 with Marglobe plants. Five applications of bordeaux were made from October 28 to January 10, and three pickings of fruit were obtained from January 4 to January 20. No Phoma rot or other diseases developed in fruits of the first two pickings, and only a small percentage of Phoma rot developed in fruits of the third picking. A reduced yield on plots sprayed with bordeaux during dry weather was apparent again this year.

#### **EFFECT OF FRUIT WRAPS ON DEVELOPMENT OF PHOMA ROT**

The data given in Table 7 show that no control of Phoma rot or other diseases was obtained from the use of fruit wraps.

As explained under the heading "Experimental Methods", fruits used in these tests were picked from the non-sprayed plots and were wrapped within a few hours after picking. These data confirm results obtained in other experiments which showed that infection occurs through growth cracks and mechanical injuries and that the fungicides must penetrate these injuries to be effective in preventing decay.