

The Marglobe variety was used in the experiment on the Sub-Tropical Station farm and the plants were set on October 15. Because of the cool, dry weather which prevailed at this time the plants grew slowly and as a result were not sprayed for about three weeks after setting. Nine applications of 4-4-50 rock-lime bordeaux were made, the first on November 6 and the last on January 14.

Six pickings were made in these plots, the first on December 28 and the last February 18. Complete records of yields of marketable fruit per plot were made of each picking, and fruits were selected from each picking from the sprayed and check plots and stored in the ripening room at the Station for readings on disease development. Also samples of the fruit of certain pickings were packed and shipped to Champaign, Illinois, and Gainesville, Florida, to compare data obtained at these points with those obtained with fruits placed in storage at Homestead. Data obtained from this experiment with fruit placed in transit and held in storage are given in Table 2. The results obtained by these two methods of handling the fruit appeared sufficiently similar to justify the use of the storage room at Homestead for further use in these tests.

**1932-33:**—Two spraying experiments were conducted during the 1932-33 season, both on pineland soil. One was a cooperative experiment and the other was on the Sub-Tropical Station farm.

The Marglobe variety was used in the cooperative experiment, and the plants were set on September 16. Two fungicides, 4-4-50 bordeaux and 20-80 copper-lime dust, were used to compare their efficiency. Eight applications of these fungicides were made, the first on September 27 and the last on December 15.

The plants in this experiment met with many adverse weather conditions. Shortly after the first applications of fungicides, a heavy rain drowned one plot and a portion of a second. This difference was taken into consideration in calculating results. Furthermore, the roots of all plants in the entire experiment were damaged to some extent from a concentrated solution of fertilizer. The fertilizer had been applied just before a rain. Applications of spray had also been made on the day before the rain and when the plants were examined it was noted that all plants receiving 4-4-50 bordeaux were more severely wilted and burned in the tops than those in the dusted or check plots. The two latter series of plots showed no appreciable difference in this respect. This injury was manifest also in the lower yields of