

four-foot rows on the pineland and 30 inches apart in six-foot rows on the glades. In the experiments of the first two seasons, two-, three-, or four-row plots were used, depending upon the length of the row, so that there was about one-ninth or one-sixth of an acre in each plot. The plots were replicated from four to nine times. In the later experiments the plots on the Station farm were reduced to 1/200 acre with a greater number of replications than was used in earlier tests. The plots to be compared in any one season were always the same size.

At the outset it was decided to use only bordeaux in these experiments, as it proved most satisfactory in earlier spraying experiments for the control of nailhead rust and early blight. However, during the last two years certain other materials that recently had come on the market were tested in comparison with bordeaux. This was done primarily because it was found that bordeaux reduced the yield of marketable fruits during dry seasons. When only one fungicide was used, sprayed plots were alternated with non-sprayed check plots. In those experiments in which more than one fungicide was used, the non-sprayed check plots were replicated the same number of times as the sprayed plots. The time the first application of fungicides was made and the frequency of subsequent applications were determined to some extent by prevailing weather conditions. Usually, if the weather was rainy or warm and accompanied by fogs and dew, the plants were sprayed within 10 days after being set. In periods of dry or cool weather the time before the first application was lengthened to two weeks or longer, and the interval between subsequent applications was lengthened. As a rule, however, eight applications were made during the season, the last being made shortly after the first picking.

In all experiments, spray solutions were applied with a knapsack sprayer and an effort was made to see that thorough spraying was done at each application. All portions of the vines were covered with the fungicides. Calcium caseinate was used as a sticker and spreader with bordeaux, except when otherwise specified, to insure better coverage and longer duration of the sprays. This was considered essential because of the heavy and frequent rains in some seasons.

**Storage Room:**—The building in which the fruits were stored until they ripened consisted of one room with inside dimensions about 8'x8'x8'. It was insulated with a double wall of celotex with a 2-inch dead air space between the walls. The building