

The procedure followed in all tests was essentially the same. For each treatment mature-green tomatoes were picked from the experimental plots, both sprayed and non-sprayed, and dipped in the chemical washes soon after delivery to the packing shed or in the field immediately after picking. During the first season some of the fruits were immersed in the solutions for various lengths of time up to five minutes to determine whether the period of immersion improved the effectiveness of the chemicals. Tests were also conducted to determine the effect of temperature of the wash upon its effectiveness. Although it was found that both of these factors influenced the effectiveness of the washes, it was recognized that the time the fruits could remain submerged in the wash must be short for commercial use because large quantities of fruit must be handled rapidly, and that there are practical difficulties involved in keeping the temperature of the washing bath much above that of the fruit. Consequently, it was considered advisable to use a wetting agent in combination with a stainless fungicide to insure immediate wetting of all parts of the fruit and retention of a film of the wash on the surface of the fruits. Accordingly, after the first season all treatments were applied by dipping the fruits into the washes at natural or prevailing temperature.

All fruits used for the various treatments and holding tests were carefully sorted and all showing breaks in the skins or any indication of infection were discarded. By thus selecting the fruits, as is done in commercial practice, it was found that the number of fruits available from each picking for holding tests and after-picking treatments was rather small. Consequently, all fruits from plots receiving like treatments in the field were placed in one lot and composite samples taken for subsequent treatments. When the total number was small, a correspondingly small number was used in the treating and holding tests. After the fruits were removed from the solutions they were allowed to drip and were then placed in four-quart baskets and stored in the ripening room until ripe or fairly evenly colored. This required a period of 10 to 14 days, when they were inspected for the presence of rots. All of the minute necrotic specks that could not be identified by inspection were ignored. Furthermore, all fruits bearing spots that could be identified were placed in the proper category regardless of the number and size of the spots and marketable condition of the fruits.