

basis for measuring effectiveness in the control of Phoma rot, through spraying, was the amount of this disease that developed on the fruit after they were picked and placed in storage. Since the amount of Phoma rot developing on the fruit after picking varied from year to year, it seems advisable to present the results by years.

1931-32:—Three separate spraying experiments were conducted during the 1931-32 season. Two of these were cooperative with growers and one was on the Sub-Tropical Experiment Station pineland farm. One of the cooperative experiments was on pineland and the other was on the marl “glades” soil. The Break O’Day variety was used in the cooperative pineland experiment and the plants were set on September 23. Eight applications of 4-4-50 rock-lime bordeaux were made to the plots during the season, the first on October 2 and the last on November 30.

No comparative yield data were recorded from the various plots, as the object of this test was to determine the effectiveness of spraying in the field in controlling Phoma rot in the fruits in storage. The data thus obtained (Table 1) show that considerably less rot developed in fruit from sprayed plots than in that from check plots.

TABLE 1.—CONTROL OF PHOMA ROT OF TOMATO FRUITS BY SPRAYING IN THE FIELD WITH BORDEAUX MIXTURE, 1931-32.

Plot Treatment	Picking	Condition of Fruit after Storage		
		Total Number of Fruits	Phoma Rot Percent	Other Diseases Percent
Pinelands Soil				
Sprayed.....	First	119	23	4
Check.....	First	119	55	2
Sprayed.....	Third	135	14	5
Check.....	Third	140	58	19
Glades Soil				
Sprayed.....	Second	124	8	1
Check.....	Second	128	13	2
Sprayed.....	Fifth	162	22	5
Check.....	Fifth	195	19	8

The cooperative experiment on glades soil was started later in the season. Livingston’s Globe was used in this experiment