

plete eradication of the disease from a community in which it has become troublesome, but it can be controlled or held in check by a proper system of spraying.

CONTROL

The results from one season of spraying experiments indicate that black spot can be controlled with bordeaux mixture.

Probably two or three applications of the fungicide will give satisfactory results in controlling the disease on seedling fruit. The period during which the fruit may become infected is perhaps comparatively short and lies somewhere between the time the fruit is one-third to two-thirds mature. Young fruit shows no indication of the disease and spotting is rarely observed until after the fruit is half mature. As the fruit nears maturity it shows less tendency to spot. Most of the spots that appear on infected fruit are evident by the time the fruit is half grown.

In 1920 several groups of trees were sprayed to control the spotting of the fruit of seedling avocados. For this experiment 36 trees were selected in a grove of seedling trees where black spot and other fruit diseases had been severe for several seasons. The trees were large bearing ones and were from fifteen to eighteen years old. None were selected except those known or suspected to have suffered from "spotted fruit" in seasons past. The first spraying was made into the open bloom with 3-3-50 bordeaux mixture about the middle of the blooming period. Other sprayings were made at monthly intervals until four applications had been made on some of the trees. Bordeaux mixture, 3-3-50 formula, or its equivalent, was used in the first applications, and the 4-4-50 formula was used in the last applications. The spraying was done with a power sprayer and spray guns, using a pressure of 200 pounds. While the spraying was fairly thoro in some cases it was not possible to cover completely the foliage and fruit in the tops of some of the tallest trees.

The object of this experiment was to determine the number of applications of bordeaux mixture necessary to prevent black spot or blotch and the time at which these applications should be made. The results obtained were encouraging and indicate that avocado fruit can be kept comparatively free from these diseases, if sprayed at the proper time. The experiment is summarized in table 2.