typical of the disease. These spots may be scattered freely over the surface of the infected fruit or several may merge to form irregular black patches. The spots are confined chiefly to the rind of the fruit, but more advanced stages may penetrate into the edge of the meat. The interior of a spot is composed of brown, spongy tissue made up of dead, collapsed cells of the fruit rind, intermingled with the dark colored mycelium of the fungus. The disease is confined apparently to the fruit. However, in a few cases the fungus has been found in spots on fruit stems similar to those on the fruit.

CAUSE

Avocado blotch is caused by a fungus belonging to the genus Cercospora. This is the type of spore produced in the white fuzzy growth on the surfaces of spots and the only spore type that has been observed as yet by the writer. However, it is believed that the fungus has another spore form which carries it over from one season to another.

The fungus has been isolated repeatedly from the interior tissue of spots on the surface of fruit and from spots representing all stages of development. It is frequently found associated with Colletotrichum in black spot lesions, especially where the two diseases occur on the same fruit. On a few occasions this Cercospora has been isolated from spots on the fruit stems.

The fungus grows readily on the ordinary laboratory media and forms a typical growth which is at first grayish in color and later turns to brown or blackish brown. In cornmeal agar it produces a round, raised, tufted, gray colony which is hemispherical in outline. The surface growth is composed of short, thickly tufted hyphae, and the colony has a tough or leathery consistency. Cultures made from Cercospora spores, taken from the surface of a blotch spot on an infected avocado, produced identically the same growth characteristics on artificial media as the fungus isolated from the interior tissue of blotch spots.

Various attempts to make the fungus fruit under laboratory conditions have failed and no spore forms have been observed in the pure cultures isolated and kept under study. The identity of the species is undetermined yet.

The parasitic nature of the fungus has been demonstrated by artificial inoculations into healthy avocado fruit. The fungus was applied on the surface and introduced thru the rind into healthy Mexican avocado fruit which was about half grown at