## SPREAD OF AVOCADO ROOT ROT FUNGUS IN NURSERY STOCK

## George A. Zentmyer

Plant Pathologist at the Citrus Experimental Station, University of California, Riverside.

In several instances within the past few years the avocado root rot fungus (*Phytophthora cinnamomi*) has been found in avocado nursery stock, both in balled trees and in trees grown in tarpaper container?. Severely wilted trees are, of course, discarded in the nursery. Less obviously diseased trees and those with the fungus present in the soil but with no obvious symptoms undoubtedly are sold, as the nurserymen do not realize that the fungus may be present. The root rot fungus may be in the soil and cause no noticeable trouble if soil moisture is not excessive.

This points to the fact that one of the most important methods of spreading this fungus to new groves and new avocado areas is by means of nursery stock. One means, then, of reducing the incidence of avocado root rot in the future is use of clean nursery stock for new plantings or replants. Growers should insist on healthy, vigorous nursery stock, and should bear the following points in mind when buying trees.

- 1. Because of the danger of the avocado root rot fungus developing, nurseries should not be planted on old avocado soil, on areas that tend to stay wet or are poorly drained, or on areas adjacent to groves with root rot.
- 2. There is much less danger of trouble, particularly on soils that tend to be problems, if nurseries move every year to new soil. Under these conditions there is little possibility of building up the *Phytophthora cinnamomi* population in the soil.