

Transmission of Avocado Sunblotch Disease to Cinnamon

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ABSTRACT

DA GRAÇA, J. V., and S. P. VAN VUUREN. 1980. Transmission of avocado sunblotch disease to cinnamon. *Plant Disease* 64:475.

Cinnamon seedlings onto which bark strips from a sunblotch-infected avocado were grafted developed symptoms of the disease. This is believed to be the first report of transmission of avocado sunblotch to a host other than avocado.

According to Drake and Wallace (2), the only known host of avocado sunblotch disease is the avocado (*Persea americana* Mill.). Recently, Alper et al (1) attempted to transmit sunblotch mechanically to a number of plant species, without success.

We decided to try to transmit sunblotch to cinnamon (*Cinnamomum zeylanicum* Nees), which, like the avocado, is a member of the family Lauraceae. Three bark strips from a sunblotch-infected avocado were grafted onto each stem of five cinnamon seedlings. The plants were then cut back, and new growth was observed for disease symptoms. Bark strips from healthy avocados were grafted onto two other cinnamon seedlings.

After 7 mo, yellow depressed streaks appeared on the stem of a side shoot of one of the plants with an infected

avocado graft; more streaks appeared on other branches later. A second plant developed similar streaks 9 mo after inoculation. The stems of both plants then developed yellow blotches and a lumpy appearance (Fig. 1). No symptoms appeared on the control plants.

Bark strips from the symptomatic cinnamon plants were grafted onto five healthy avocado seedlings. Within 12 mo, two of the avocado seedlings had developed typical sunblotch stem symptoms. The control cinnamon plants were also indexed, with negative results.

This is believed to be the first report of transmission of avocado sunblotch to a host other than avocado.

LITERATURE CITED

1. ALPER, M., M. BAR-JOSEPH, R. SALOMON, and G. LOEBENSTEIN. 1978. Some characteristics of an avocado strain of tobacco mosaic virus. *Phytoparasitica* 6:15-20.
2. DRAKE, R. J., and J. M. WALLACE. 1973. Transmission of avocado sunblotch virus by embryo grafting. *Calif. Avocado Soc. Yearb.* 57:135-136.



Fig. 1. Cinnamon seedling with avocado sunblotch disease. Shoot on the right has depressed streaks on the stem (arrows) and a lumpy appearance.