

## RESISTANCE OF SPECIES OF PERSEA TO AVOCADO ROOT ROT

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With the increased seriousness of the avocado root rot problem in California a concerted effort is being made to find a rootstock resistant to **Phytophthora cinnamomi**. A number of additional collection have been made in recent years in the search for a resistant rootstock and for breeding material (1, 2, 3).

These materials have been tested for resistance to **Phytophthora cinnamomi**, on the Riverside campus. Results of these tests, together with earlier tests of other species (4) are presented below. Tests for compatibility of the various species with avocado have been conducted on the Los Angeles campus; results of these trials are presented in another paper in this Yearbook by Frolich, Schroeder, and Zentmyer.

Tests for resistance have been carried out in soil and in nutrient solution in the greenhouses at Riverside. A number of the collections showing resistance in greenhouse tests have been tested further in field plantings, with comparable results to date.

Resistance of Species of *Persea* and Other Related Plants to *Phytophthora cinnamomi*

Species	Source	Resistance
<i>Persea americana</i> (avocado)	California, Latin America	generally low
<i>P. borbonia</i>	Southeast U.S.	high
<i>P. caerulea</i>	Venezuela	high
<i>P. chrysophylla</i>	Colombia	high
<i>P. Skutchii</i>	Honduras, Costa Rica	high
<i>Persea</i> species M2	Mexico	high
<i>Persea</i> species M3	Mexico	high
Species of <i>Nectandra</i> <i>Ocotea</i> , <i>Phoebe</i>	Latin America	moderately high
<i>P. Donnell-Smithii</i>	Guatemala	generally high, but variable
<i>Umbellularia californica</i>	California	moderate
<i>P. durifolia</i>	Peru	moderate
<i>P. floccosa</i>	Mexico	low
<i>P. gigantea</i>	Honduras	low
<i>P. lingue</i>	Chile	low
<i>P. longipes</i>	Mexico	low
<i>P. indica</i>	Canary Islands	very low
<i>P. nubigena</i>	Guatemala	low
<i>P. Schiedeana</i>	Guatemala, Mexico, Costa Rica	generally low, but variable
<i>P. portoricensis</i>	Puerto Rico	low
<i>P. sp.</i> (aguacate Mico)	Guatemala, El Salvador	low
<i>Cinnamomum camphora</i>	East Indies	low

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