

Replanting Avocado Root Rot Soil

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The problem of replanting areas where avocado trees have been removed because of root rot ("decline") has been recognized as a serious one for a number of years. Replants in the field invariably fail to grow or grow poorly.

When soil from under diseased trees was taken into the greenhouse and placed under well-drained and aerated conditions in clay pots the same difficulty in replanting avocado seedlings has developed. The root-rotting fungus **Phytophthora cinnamomi** has been consistently isolated from the diseased seedlings, as it has from the large trees in the field.

A number of soil samples from different localities has been collected during the past two years, from under diseased trees and from under healthy trees. The following table gives the results of replanting some of these soils with Mexican avocado seedlings in the greenhouse.

Locality of soil collection	From healthy or diseased trees	P. cinnamomi isolated from trees in field	No. of replanted seedlings	No. making normal growth	No. affected with root rot
Escondido No. 1	Diseased	Yes	6	0	6
Escondido No. 2	Diseased	Yes	2	0	2
Escondido No. 2	Diseased*	No	2	2	0
Escondido No. 4	Healthy	No	2	2	0
Escondido No. 5	Diseased*	No	2	2	0
Vista No. 1	Diseased	Yes	6	1	5
Vista No. 2	Healthy	No	1	1	0
Vista No. 2	Diseased	Yes	2	0	2
Vista No. 3	Diseased	Yes	3	0	3
Vista No. 3	Healthy	—	2	1	1
Vista No. 4	Diseased	Yes	6	0	6
Yorba Linda No. 1	Diseased*	No	2	2	0
Yorba Linda No. 1	Healthy	No	1	1	0
Yorba Linda No. 2	Diseased	Yes	2	0	2
La Habra Hts. No. 1	Diseased	Yes	4	0	4
La Habra Hts. No. 2	Diseased	Yes	3	0	3
Carpinteria	Diseased	Yes	4	0	4
Carpinteria	Healthy	No	4	4	0
Goleta	Diseased*	No	2	2	0
Greenhouse soil	—	—	4	4	0

*Trees from around which this soil was taken were making poor growth but were not quite typical examples of root rot. Some were merely too dry. Most of them recovered and made good growth later.