

# Phytophthora Root Rot of Alfalfa - Craig Robert Grau - University of Wisconsin--Extension, 1984 - 1984

Phytophthora rots can girdle the scion (collar rot), damage the rootstock just below the soil surface (crown rot), and cause necrosis and death of fine roots (root rot). While generally considered a larger problem in rain-fed growing regions with heavy soils, Phytophthora problems occur in Washington, especially where irrigation water carries the pathogen or where irrigation and overhead cooling practices create wet soil conditions for extended periods. Multiple species of Phytophthora have been implicated in crop damage with *P. cactorum* and *P. syringae* two of the more significant species. *P. Root rot of alfalfa caused by Phytophthora cryptogea*. *Phytopathology*, 44:700-704. Erwin DC, 1965. Reclassification of the causal agent of root rot of alfalfa from *Phytophthora cryptogea* to *P. megasperma*. *Phytopathology*, 55:1139-1143. Erwin DC; Ribeiro OK, 1996. Development of *Phytophthora* root rot of alfalfa in the field and the association of *Rhizobium* nodules with early root infections. *Phytopathology*, 66(12):1413-1417. Gray FA; Wofford DS, 1987. Cause *Phytophthora* root rot is caused by a number of *Phytophthora* species, including *P. cactorum*, *P. cambivora*, *P. cinnamomi*, *P. citricola*... Alfalfa Leafcutting Bee (*Megachile rotunda*) Pests. Alkali Bee (*Nomia melanderi*) Pests. Blue Orchard Bee (*Osmia lignaria*) Pests. Honey Bee Pests. Legume, Grass, and Field Seed Crops. Pests of Alfalfa Grown for Seed. Canola Pests. Pests of Clover Grown for Seed. Environmental Factors Affecting *Phytophthora* Root Rot of *Rhododendron*. MS thesis. Oregon State University.