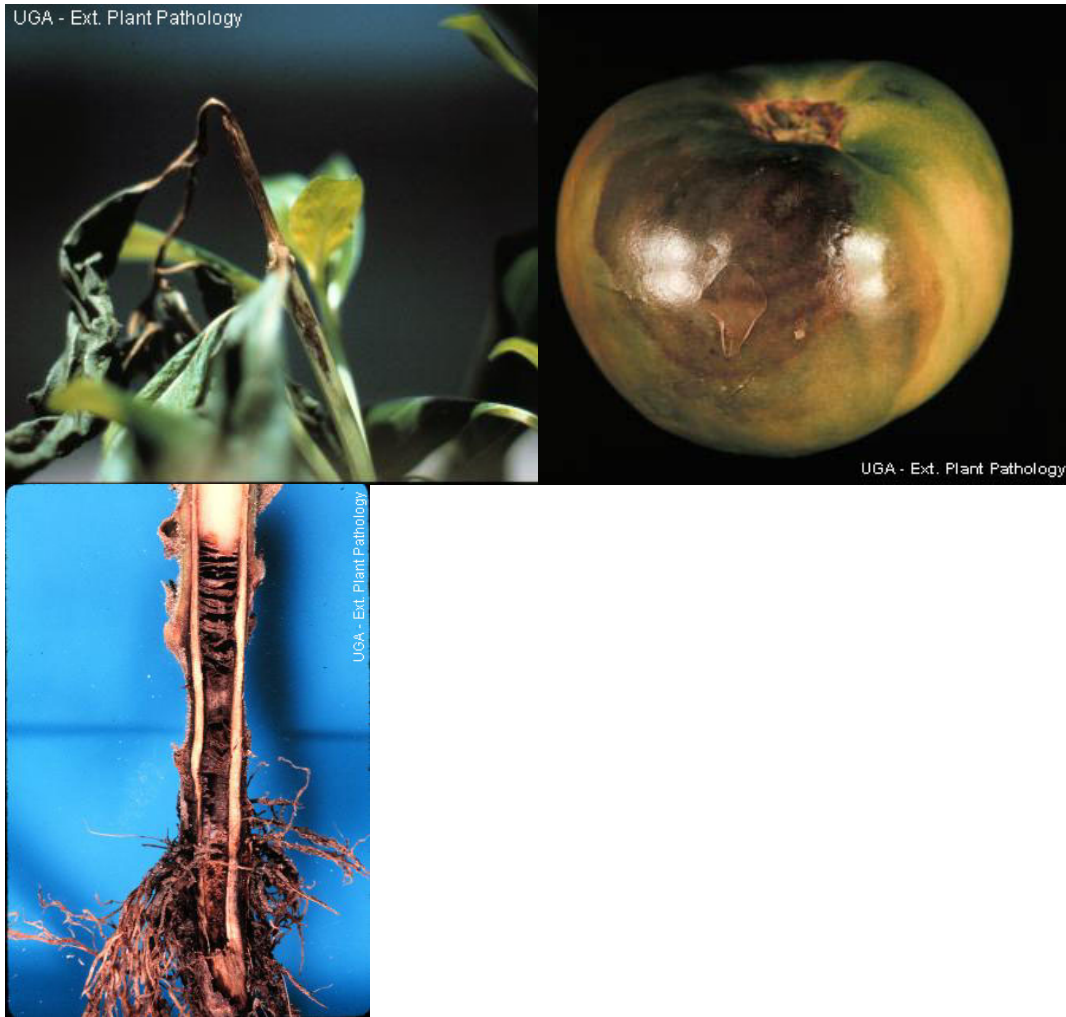


# Phytophthora

**Important diseases:** Late blight of tomato and potato, Little leaf disease of pine, Black shank of tobacco.

*Phytophthora* causes damping off, root, crown, stem, tuber and corm rots, and leaf blights of numerous plants including vegetables, fruit and forest trees, field crops, and ornamentals. *Phytophthora* is a water-mold and its infection is favored by wet, saturated conditions.



*Phytophthora* initially causes water-soaked or dark lesions on infected leaves that enlarge to blight the entire leaf. Black lesions are formed on infected stems and fruits. Plants infected with *Phytophthora* in the roots often exhibit chlorosis, marginal necrosis and eventually death. Cutting the lower stem at the soil line often reveals brownish necrotic tissue progressing up the stem.



UGA - Ext. Plant Pathology



UGA - Ext. Plant Pathology

*Phytophthora* mycelium is elongated, wide, and without cross walls (aseptate). The fungus overwinters in infected roots. Lemon-shaped sporangia are produced at the tips of the sporangiophores.



UGA - Ext. Plant Pathology

Oospores and sporangia can be sometimes seen within infected plant tissue. If using the stain acid fuchsin, the structures will be stained pink. Can be easily confused with *Pythium*, but it can be distinguished by the production of lemon-shaped sporangia, hyphal swellings and fewer and often larger oospores found within infected plant tissue.