

Maple (Acer) Decline: Collar Rot and Basal Canker Complex #1981 #University of Wisconsin--Extension, 1981 #Gayle L. Worf

Cause The fungus-like organism, *Phytophthora* spp., has been found in rotted maple (especially *Acer palmatum*) roots and branch tip diebacks by the OSU Plant Clinic. In addition, *P. cactorum* was found by the OSU Plant Clinic associated with bleeding trunk cankers. *Phytophthora gonapodyides* and other species have been found in symptomless roots of *Acer rubrum* shipped from the west coast. Other organisms, such as *Pythium* spp., have also been found in association with rotting maple roots. Flooded or poorly drained soil or media encourages disease development. These organisms survive unfavorable per *Phytophthora* canker and decline diseases. 1990). However, in many cases, abiotic factors or secondary pathogens instead of the primary *Phytophthora* pathogens are considered as the causal agents of disease. The reasons for such misidentifications are mainly based on the specific life-cycles of *Phytophthora* spp. Highly specific isolation methods are required in order to break dormancy of resting spores and exclude fungi and other oomycetes like *Pythium* or *Phytophthora* which are usually much faster growing than *Phytophthora* species (Ribeiro 1978, Tsao 1983, Erwin & Ribeiro 1996, Jung et al. 1996, lings, saplings, and adult trees of Japanese maple, *Acer palmatum* var. *Matsumurae* Makino, by analyzing the. [Show full abstract] My research objectives were to characterize the formation and growth of basal sprouts in the juvenile stage and determine the effects of light intensity and stump diameter on these characteristics. Twenty sprouting clones were investigated at a natural site in Nagano Prefecture during a four-year period after cutting. Japanese red maple exhibited abundant and vigorous sprouting from the root collar of cut trees. Many sprouts arose immediately after cutting. Average number of sprouts per stump was 12.2. The genus *Acer*(maple) comprises a large number of species distributed worldwide, but especially in the northern hemisphere. Because of their morphological diversities and physiological complexities. Because of their morphological diversities and physiological complexities, only a few *Acer* species have received attention from researchers in diverse fields; yet they hold onto their mysteries for scientists to unravel. The maple belongs to the *Aceraceae* family, *Dicotyledoneae* class of *Angiosperms* (Fernald 1950). There are up to 148 wild or cultivated *Acer* species, widely distributed throughout North America, Europe, Asia and North Africa (Olson and Gabriel 1974).