

***Phytophthora* Species Associated with Forest Soils in Central and Eastern U.S. Oak Ecosystems**

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The existence of native and exotic species of *Phytophthora* in soils of eastern and central oak ecosystems is largely unknown. This informational void and the potential threat of *P. ramorum* to eastern oak species provided the impetus for a multiple state survey of soils associated with oak cover types. The initial survey was conducted from April-June 2004 with the assistance of state and federal cooperators from IL, IN, MD, MI, MN, OH, PA, WI and WV. Sampling sites were chosen to avoid areas impacted by oak wilt, recent storm damage or defoliation. Most stands contained a diverse population of species; stands were generally greater than 40 years of age and located on moist sites. At each site, four soil samples were taken 1.5 m from the base of the tree in four directions. Samples from each tree were bulked; generally five trees were sampled per site. To date, a total of 79 sites were surveyed and soils from 410 oak trees sampled. An oak leaf baiting procedure was used whereby soils from each tree were placed in a container, flooded with distilled water and three-to-seven day old *Quercus robur* leaflets were floated on the water surface to bait *Phytophthora*. Leaf samples that trapped *Phytophthora* and produced sporangia were plated on PARPNH-medium. When initial isolations attempts failed, soils were dried at room temperature and the isolation procedure repeated. Twenty-eight percent of the samples from individual trees yielded *Phytophthora*; *P. cinnamoni* was the most frequently recovered species (77%). Other species recovered included *P. europaea* and *P. citricola* and several yet unidentified or undescribed species. These findings suggest that *Phytophthora* species are common to oak forest types in the eastern and central U.S. A comparable survey will be conducted during the fall of 2004 to establish a more complete assemblage of *Phytophthora* species so that studies of their role in forest health can be initiated.