2008 APS CENTENNIAL MEETING
MINNEAPOLIS CONVENTION CENTER, MINNEAPOLIS, MN
JULY 26-30, 2008
http://www.apsnet.org/meetings/abstracts.asp

Jinek, A.; Simard, M.; Brière, S.C.; Watson, A.K.; Tweddell, R.J.; and Rioux, D. 2008. Susceptibility of six eastern Canadian forest species to *Phytophthora ramorum*. Phytopathology 98:S75.

Phytophthora ramorum (Pr), a recently described pathogen, causes sudden oak death, ramorum leaf blight and ramorum shoot dieback. The list of ornamental and wild plant species that are naturally infected by Pr exceeds 120 host species. Absent in the wild in eastern North America, there is concern that Pr could be introduced and spread into this area. To help assess this risk, detached leaves/needles of six eastern Canadian forest species were inoculated with Pr and the amount of necrosis and sporulation was evaluated. *Abies balsamea*, Acer *saccharum*, *Betula alleghaniensis* (Ba), *Fraxinus americana* (Fa), *Larix laricina*, and *Quercus rubra* (Qr) were the species tested whereas *Rhododendron* 'Nova Zembla' (Rh) served as positive control. With broad-leaved species (BLS), Ba and Fa were the most susceptible but sporulation was only significant on Qr, which was similar to that on Rh. Compared with the BLS, the amount of necrosis on needles was higher in both conifer species concomitantly with a higher level of sporulation. Real-time PCR results suggested that the amount of Pr DNA was higher in BLS than in conifer tissues. In addition, it clearly appeared that the young leaves of Ba, Fa and Qr were more susceptible than the older leaves.