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

Wang, S.; Lyles, L.; Garneni, S.; Carlos, W.J.; and McKie, P. 2008. *Phytophthora* species associated with silver maple bleeding canker in northern Nevada. Phytopathology 98:S166.

A bleeding canker disease, symptomatically similar to sudden oak death, was first noticed in 1999 on silver maple trees (*Acer saccharinum*) in northern Nevada. The disease has caused decline or loss of both young and mature trees. In an effort to identify the cause, pieces of fresh phloem and xylem tissue were collected from the margin of lesions underneath the canker area, and then placed on pimaricin-ampicillin-rifampicin-PCNB agar to isolate *Phytophthora* species. Six isolates (SM1-SM6) obtained from different locations represent two groups morphologically. Five of them (SM2-SM6) have identical morphology similar to *P. cactorum*, and one (SM-1) differs from other isolates. To confirm their identities, regions of rDNA including partial 18S ribosomal RNA gene, ITS1, 5.8S ribosomal RNA gene, ITS2 and 28S ribosomal RNA gene were amplified from selected isolates, subcloned into pGEM®-T vector, and then sequenced using T7 promoter and SP6 upstream primers. DNA sequences of *P. cactorum*-like isolates generated a minimum of first 97 hits of deposited *P. cactorum* sequences and had 99% nucleotide identities by a BLAST search of the GenBank database. DNA sequence of SM-1 matches mostly the sequences of 7 isolates of an undescribed *Phytophthora* species followed by 74 hits of deposited *P. citricola* sequences. Thus, the identities of these isolates were confirmed as *P. cactorum* and an undescribed *P. citricola*-related species. Both species are believed to be the primary cause of silver maple bleeding canker in northern Nevada.