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<http://www.apsnet.org/meetings/abstracts.asp>

**Weiland, J.E.; Nelson, A.H.; and Hudler, G.W. 2008.
Aggressiveness of *Phytophthora cactorum* and *Phytophthora citricola* isolates on European beech and lilac. *Phytopathology* 98:S168.**

Inoculation experiments were conducted to compare the aggressiveness of *Phytophthora cactorum* and *P. citricola* isolates on European beech and lilac seedlings grown in a greenhouse. The isolates were obtained from bleeding cankers on European beech from 5 cities (Albany, Ithaca, Oyster Bay, Plainview, and Rochester) in New York. Isolates of *P. citricola* were subdivided into 2 clades (*P. citricola* 1 and 2) based on distinct differences within selected DNA sequences. Stems, roots, and leaf disks of both hosts were inoculated with 3 single-spore isolates of *P. cactorum*, 4 of *P. citricola* 1, and 3 of *P. citricola* 2. Stems were inoculated with colonized agar plugs, roots via infested soil at 3 inoculum levels, and leaf disks with a zoospore suspension. Disease incidence was independent of isolate in all inoculated stems and leaf disks (100%), but was dependent on isolate in the soil infestation assay (0–100%) for both hosts. Severity (canker length, rate of mortality, and affected leaf disk area) was dependent on isolate regardless of inoculation site (stem, root, or leaf, respectively) or host, with *P. cactorum* isolates usually causing less necrosis than either clade of *P. citricola*. However, the range of disease severity caused by isolates of *P. citricola* 1 was similar to that of *P. citricola* 2. Lilac was less severely affected by inoculation than beech, regardless of isolate. No effect of inoculum level on root infection was observed.