

Phytophthora pachypleura another new species causing root rot of ornamentals in the United Kingdom described.

Henricot, B., Perez Sierra, A., & Jung, T. (2014). *Phytophthora pachypleura* sp. nov., a new species causing root rot of *Aucuba japonica* and other ornamentals in the United Kingdom. *Plant Pathology*, (5), 1095. doi:10.1111/ppa.12194/abstract

Abstract

Isolates of an unknown *Phytophthora* species from the '*Phytophthora citricola* complex' have been found associated with mortality of *Aucuba japonica* in the UK. Based on morphological characteristics, growth-temperature relationships, sequences of five DNA regions and pathogenicity assays, the proposed novel species is described as *Phytophthora pachypleura*. Being homothallic with paragynous antheridia and semipapillate sporangia, *P. pachypleura* resembles other species in the '*P. citricola* complex' but can be discriminated by its distinctively thick-walled oospores with an oospore wall index of 0ae71. In the phylogenetic analysis based on three nuclear (ITS, [beta]-tubulin, EF-1[alpha]) and two mitochondrial (cox1, nadh1) DNA regions, *P. pachypleura* formed a distinct clade within the '*P. citricola* complex' with *P. citricola* s. str., *P. citricola* E and *P. acerina* as its closest relatives. *Phytophthora pachypleura* is more aggressive to *A. japonica* than *P. plurivora* and *P. multivora* and has the potential to affect other ornamental species.