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Phytophthora taxa associated with cultivated *Agathosma*, with emphasis on the *P. citricola* complex and *P. capensis* sp. nov.

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Agathosma species, which are indigenous to South Africa, are also cultivated for commercial use. Recently growers experienced severe plant loss, and symptoms shown by affected plants suggested that a soilborne disease could be the cause of death. A number of *Phytophthora* taxa were isolated from diseased plants, and this paper reports their identity, mating type, and pathogenicity to young *Agathosma* plants. Using morphological and sequence data seven *Phytophthora* taxa were identified: the A1 mating type of *P. cinnamomi* var. *cinnamomi*, *P. cinnamomi* var. *parvispora* and *P. cryptogea*, the A2 mating type of *P. drechsleri* and *P. nicotianae*, and two homothallic taxa from the *P. citricola* complex. The identity of isolates in the *P. citricola* complex was resolved using reference isolates of *P. citricola* CIT groups 1 to 5 sensu Oudemans et al. (1994) along with multi-locus phylogenies (three nuclear and two mitochondrial regions), isozyme analyses, morphological characteristics and temperature-growth studies. These analyses revealed the isolates from *Agathosma* to include *P. multivora* and a putative novel species, *P. taxon emzansi*. Furthermore, among the *P. citricola* reference isolates the presence of a new species was revealed, described here as *P. capensis*. Findings of our study, along with some recent other studies, have contributed to resolving some of the species complexity within the *P. citricola* complex, resulting in the identification of a number of phylogenetically distinct taxa. The pathogenicity of representative isolates of the taxa from *Agathosma* was tested on *A. betulina* seedlings. The putative novel species, *P. taxon emzansi*, and *P. cinnamomi* var. *parvispora* were non-pathogenic, whereas the other species were pathogenic to this host.

Keywords: AVOCADO; BUCHU; FYNBOS; GLUCOSE-6-PHOSPHATE ISOMERASE; ISOZYMES; MALATE DEHYDROGENASE; PATHOGENICITY; ROOT-ROT; TAXONOMY

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