

***Phytophthora* - an emerging threat to plantation forestry in Vietnam**

S.Q. Pham¹, D.N. Quynh¹, T. Burgess³ and B. Dell²

¹Forest Protection Research Centre, Vietnamese Academy of Forest Sciences, Hanoi, Vietnam; ²Centre for Phytophthora Science and Management, School of Veterinary and Life Sciences and Biotechnology, Murdoch University, Perth, WA, Australia; ³Division of Research and Development, Murdoch University, Perth, Australia.
phamquangthu@vafs.gov.vn

The impact of diseases caused by a number of *Phytophthora* species has been well documented in Vietnam but the focus until now has been exclusively on horticultural plants and some annual crops, including pepper, fruit trees, taro and potato. In 2012, *Phytophthora* was isolated for the first time from the rhizosphere soil of severely declining *Acacia mangium* plantations in Tuyen Quang province. Initial isolates were identified as *P. cinnamomi* and these isolates were shown to cause root rot and stem lesions in *A. mangium* seedlings. Since then, a program was initiated to assess whether *Phytophthora* was present and causing damage in plantations, hedge orchards and nurseries. So far, a range of highly pathogenic *Phytophthora* and *Phytophthora* and *Phytophthora* isolates have been obtained. *Phytophthora cinnamomi*, *P. parvispora* and a new species most closely related to *P. elongata* were the most frequently isolated species. The distribution and potential threat from *Phytophthora* spp. to plantations and other forest species in Vietnam will be discussed. Management strategies to manage disease outbreaks and to reduce the spread of *Phytophthora* will be considered.