This joint scientific conference of IUFRO Working Party 7.02.10 Pine Wilt Disease and FP 7 EU-Research Project REPHRAME took place on 15-18 October 2013 at the Julius Kühn-Institut in Braunschweig, Germany. http://dpq.phytomedizin.org/de/pwdc2013/

The current research activities concerning the pine wood nematode, its vector and related microorganisms and pine wilt disease worldwide were addressed in 41 oral presentations and 22 posters. The focus was on management options to tackle the disease on the one hand, and phytosanitary treatments of wood to prevent further spread on the other hand.

Progress was reported regarding the development of an effective vector/lure system as well as the analysis of vector flight capacity and dispersal potential. The latter may influence current eradication efforts. Several molecular biological-based detection methods are available ranging from “yes or no” analyses to species based PCR techniques. Real time PCR and LAMP methods are complemented by methods to distinguish whether positive results from analyzed wood are based on living or dead nematodes.

Research on the influence of phyto-pathogenic bacteria is still ongoing with sometimes contradicting results. Management options in the field including precautionary clear felling showed good results to limit the spread of PWD in Japan. Stem injection of an insecticide/nematicide showed promising results in Portugal.

Several presentations dealt with the biology of PWN and its most closely related species B. mucronatus, which may act as an indicator of potentially suitable habitats. Adaptation of PWN to colder climates may indicate that future research should not only focus on the predicted climate change implying increasing temperatures.

During the final discussions several participants highlighted that a lot of research concerning PWN was going on in the framework of its biology, detection methods, vector associations etc. but management in the field is still lacking powerful options. Future meetings should also focus on management options and contingency planning.

Proceedings are already available at: http://pub.jki.bund.de/index.php/BerichteJKI/issue/view/858. It is planned that a book with full papers will be issued in the first half of 2014.

The next Working Party meeting is scheduled for 2015 in Korea and will be hosted by the Korea Forest Research Institute.

Host organization(s) and sponsor(s): Julius Kühn-Institut; Consortium of EU-Research Project REPHRAME; Deutsche Phytomedizinische Gesellschaft - German Scientific Society for Plant Protection and Plant Health; Nationalparkverwaltung Harz, Außenstelle Oderhaus, Nordwestdeutsche Forstliche Versuchsanstalt