



Changes in world trade are increasing the likelihood of introducing alien pests and pathogens from their native ranges to other continents where the native flora has not adapted to these damaging organisms. During the 19th and 20th Centuries, many inadvertent introductions were made through anthropogenic activities, including several with rather spectacularly negative impacts. Dutch elm disease has been described as amongst the most significant environmental disasters known, since the second wave of this disease spread through North America and Europe. The Gypsy Moth was deliberately introduced into North America from Eurasia in the 1860s, escaped and is a continuous and severe problem in susceptible forests of the north-eastern USA and south-eastern Canada. Further severe damage can result from hybridisation between native and introduced pathogens, as probably occurred with the appearance of the alder Phytophthora in the early 1990s. These introductions pose considerable threats to the integrity of native forest ecosystems in affected areas: witness the devastating impact of Phytophthora cinnamomi on the Eucalyptus forests of Western Australia and Victoria State.

Clearly, we, as scientists and policy makers, have a moral obligation to protect the diversity of our forests from damage through anthropogenic introductions of potential pests and pathogens. This obligation is now entrenched in international treaties, designed to protect and foster native biodiversity in all countries.

The papers collected in this volume arose from the first meeting of IUFRO Working Party 7.03.12, Alien Invasive Species and International Trade, held in Jedlnia, Poland in July 2006. They cover all aspects of potentially invasive pests and pathogens; invasive weeds are not covered. Chapters include reviews of current and potential alien invasive species in different parts of the world, specific pest risk analyses, the impacts of different Phytophthora species in forests, potentially important insects, methods for managing the problems, and a particular focus on ISPM-15, a success story in international cooperation on phytosanitary regulations.

It is essential that all interested forest biologists, ecologists, pathologists, entomologists, quarantine personnel and policy makers integrate to focus their work on better methods for prevention and management of potential invasions. This new initiative will be instrumental in bringing together the multidisciplinary players in this highly diverse and complex problematical area, and will have a major impact on policy formulation in the field of phytosanitary regulation.

**Dr Steve Woodward,**  
**University of Aberdeen,**  
**School of Biological Sciences, Scotland, UK**

**ISBN 978-83-87647-64**

Alien Invasive Species and International Trade

IUFRO UNIT 7.03.12 MONOGRAPH

# Alien Invasive Species and International Trade

Edited by  
 Hugh F. Evans and Tomasz Oszako



**Forest Research Institute (FRI)**  
 Śękocin Stary, Poland



The Research Agency of the Forestry Commission  
 Farnham, Surrey, UK



International Union of Forest Research Organizations  
 Vienna, Austria



General Directorate of the State Forests  
 Warsaw, Poland



Institute of Pomology and Floriculture  
 Skierniewice, Poland