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## EVERYTHING YOU WANTED TO KNOW ABOUT *SIREX NOCTILIO*

Springer has recently published a book on the sirex woodwasp.

**Slippers, B.; de Groot, P.; Wingfield, M.J. (eds) 2011. The Sirex Woodwasp and its Fungal Symbiont: Research and Management of a Worldwide Invasive Pest. Springer. 301p.**

The following is taken from the publisher's flyer about the book.

“The Sirex woodwasp, *Sirex noctilio*, is the most important invasive alien insect pest in Pinus plantations across the Southern Hemisphere, and it now threatens pines in North America. *Sirex noctilio* is native to Eurasia, where it causes little damage and is better known for its fascinating biology, including an obligate mutualism with the fungus *Amylostereum areolatum*. The wasp first appeared outside its native range around 1900 in New Zealand, and it has subsequently spread to Australia, South America and Africa. The pest continues to spread globally and this is vividly illustrated by its recent appearance in North America.

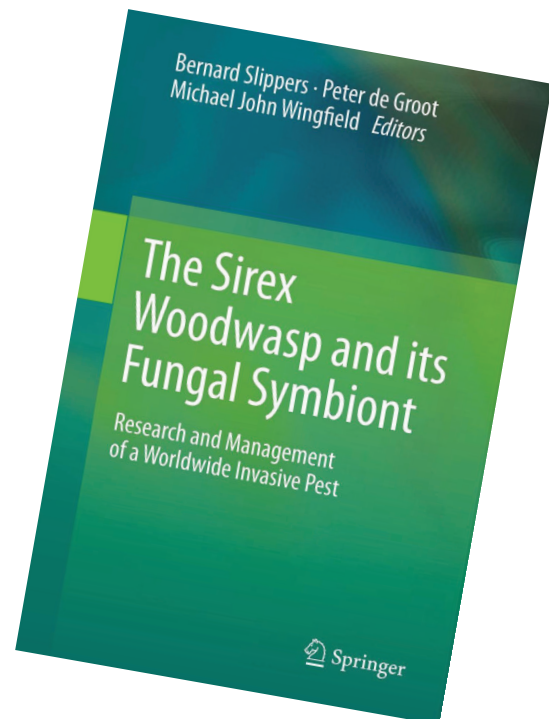
This genesis of this book was an International Sirex Symposium held in South Africa in May 2007. The symposium recognised the growing global threat from the woodwasp and the realization that a sustained research effort would be required to deal with it. This meeting succeeded remarkably in bringing together a diverse mosaic of government, industry and academic experience from many parts of the world. The shared experience emerging from the meeting, as well as the research and management work that has been undertaken subsequently, is captured in the book.

The book covers aspects of the insect's taxonomy, life history, host-plant relationships, population dynamics

and chemical ecology, as well as the nature of its obligate mutualistic relationship with the fungus *Amylostereum*, its distribution, diversity and biology. There is also a focus on the development and adaptation of biological control systems using various parasitic wasps and the nematode *Deladenus siricidicola*. Importantly the book contains a complete synthesis of the history and current status of the pest, as well as efforts to control it in the Southern Hemisphere and North America”.

New Zealand contributed a chapter on “The Sirex Woodwasp in New Zealand: History and Current Status”. This was written by John Bain, Stephanie Sopow and Lindsay Bulman.

John Bain



## INFECTION COURTS USED BY *NEONECTRIA FUCKELIANA*, THE CAUSE OF NECTRIA FLUTE CANCKER

Although flute cankers caused by *Neonectria fuckeliana* are invariably associated with pruned branch stubs, studies have shown that direct entry through the stub is not the only possible, or even the most likely, entry method for the fungus. Inoculation of a spore suspension directly into stubs results in only small stem depressions in a small percentage of trees and the fungus is largely contained within the branch trace.

A number of trials aimed at identifying possible infection courts have been carried out. A high percentage (>70%) of trees inoculated directly into the stem developed cankers though length and severity of cankering was highly variable between trees. The fungus killed branches that were cut to 200-400 mm long stubs and inoculated at the cut end but movement of the fungus through the branch towards the stem was slow.

*Neonectria fuckeliana* has been found in some trees prior to pruning and bark cracks and branch crotches are considered to be likely infection courts. For more information see:

Hopkins, A J M; Dick, M A; Carlson, C A; Crane, P E; Early investigations into the infection courts used by *Neonectria fuckeliana* to enter *Pinus radiata* stems. *European Journal of Plant Pathology*, DOI 10.1007/s10658-011-9899-7, November 2011.

Margaret Dick

## VISITOR WITH FOREST PROTECTION

Natalija Arhipova arrived in November and will be working with our group until next April. Her visit is part of the collaboration we have with the Department of Forest Mycology and Plant Pathology of the Swedish University of Agricultural Sciences under a programme funded by STINT (The Swedish Foundation for International Cooperation in Research and Higher Education).

We have already had a number of successful short and longer term exchanges between the two countries as part of this agreement. Natalija is actually from Latvia, but is studying for her PhD in Sweden on the silvicultural control of *Heterobasidion annosum* with Dr. Rimvydas Vasaitis, Prof. Jan Stenlid and Dr. Talis Gaitnieks as supervisors. She is employed at the Latvian State Forest Research Institute "Silava".

While she is with us Natalija will be helping the pathologists with research into radiata pine diseases including needle casts, nectria and armillaria. She will also be giving a seminar on her work in Sweden. We look forward to a useful and worthwhile period of collaborative research while she is here with us.

Editor



## CHRISTMAS SHUTDOWN

We will be closed during the Christmas holidays from the end of business Friday 23 December 2011 and will re-open on Wednesday 4 January 2010.

If you need to contact us on any urgent matters during this period phone John Bain on 07 348 1263 or 021 927 249.

Editor

## NEW RECORDS

We are no longer publishing details of new records. For further information on results of MAF funded programmes see MAF's Biosecurity magazine (<http://www.biosecurity.govt.nz/publications/biosecurity-magazine/index.htm>) where information on new biosecurity identifications is regularly published.

John Bain