

## GROWING COLLABORATIONS BETWEEN FABI AND JAPANESE FOREST AND FOREST PRODUCTS RESEARCH INSTITUTE

FABI has been developing relationships and collaborations with researchers at the Forest and Forest Product Research Institute (FFPRI) in Japan since 2007. Currently researchers in these two groups have an NRF-bilaterally funded project on the characterisation of the diversity and interaction between the Sirex woodwasp, its fungal symbionts and nematode parasites in Japan. Through this funded project researchers and students of both organisations have visited the partner institutions to advance the project and learn new skills.



Professor Bernard Slippers and Dr Brett Hurley both participate in the collaborative project and recently visited three of the FFPRI research centres in Japan, hosted by Drs Masanobu Tabata and Natsumi Kanzaki. The first visit was to the Tohoku Research Centre in Morioka, where they met with various forest pathologists and entomologists to discuss projects on pests and diseases of pine, spruce, oak and lacquer trees. They also visited field

sites affected by the pine wilt nematode, *Bursaphelenchus xylophilus*, a serious pest in Japan and many other countries.

A second part of the visit was to the headquarters of FFPRI in Tsukuba, including a meeting



with the Director of FFPRI, Dr Haruo Sawada. The highlight of this visit was a full day course in the identification of nematodes, and in particular how to distinguish species of *Bursaphelenchus*. It was a special treat to have the opportunity to observe live specimens of many species in this important group of nematodes.

The final part of the visit was to the Forest Tree Breeding Centre near Hitachi, where there are breeding programs for resistance to pests and disease, including pine wilt. Other breeding

programmes included African *Acacia* trees for drought tolerance and reduced pollen production in spruce. An interesting part of the visit was to the high security site hosting genetically modified trees. The visit was concluded by a field visit to a site with plantings of various genotypes of species that FFPRI has worked with over the years, and that continues to provide data and samples for ongoing projects.

FFPRI is an institute of the National Research and Development Agency in Japan. It is a large organization of over 450 researchers, spread across 15 centres. It covers all aspects of forest



research, from genetics and breeding, to forest health, engineering and product testing. FFPRI has passionate researchers, specific skills and access to systems that will be valuable to FABI research as this collaboration continues to grow. Likewise, FABI researchers offer unique skills and knowledge that are of value to FFPRI.

#### **Recent papers from the collaboration:**

Fitza KNE, Tabata M, Kanzaki N, Kimura K, Garnas J, Slippers B. (2016) **Host specificity and diversity of *Amylostereum* associated with Japanese siricids.** *Fungal Ecology* **24**(A):76-81. 10.1016/j.funeco.2016.08.005

Kanzaki N, Tanaka SE, Fitza KNE, Kosaka H, Slippers B, Kimura K, Tsuchiya S, Tabata M. (2016) ***Deladenus nitobei* n. sp. (Tylenchomorpha: Allantonematidae) isolated from *Sirex nitobei* (Hymenoptera: Siricidae) from Aomori, Japan, a new member of the *siricidicola* superspecies.** *Nematology* **18**(10):1199-1217. 10.1163/15685411-00003025