

## **Nectria Focus Group Update June 2005.**

### **Nectria Focus Group formation and management.**

The new home for the Nectria Group is as a focus group under the Forest Health Research Collaborative (FHRC). This change includes a more formal management structure and provides the Group with direct links to the FBRC, one of the major funders of the research programme. The group had functioned well under its old structure, largely due to the significant input of Peter Oliver of City Forests, but there are specific areas where the new structure will facilitate progress, specifically:

- funding – both management and sourcing of funds
- proposal evaluation and prioritising.

A management committee has been established consisting of:

Elaine Birk	Rayonier
Peter Oliver	City Forests
Aaron Gunn	Wenita
Lindsay Bulman	Ensis
Gordon Hosking	Hosking Forestry.

### **Pruned stub trial.**

This trial is the cornerstone of current disease management strategies and is scheduled to continue until November 2005. It has been proposed that the 3 monthly assessments be reviewed for first lift pruning, but be retained for second lift. A level of destructive sampling would be essential at completion but it is seen as essential the trial be extended until at least November 2006.

### **Delimiting survey.**

The planning of this survey has been much more complex and costly than first anticipated and is expected to be underway in the field this month. Assessment capacity is seen as a constraint for both trials and surveys, however, quality of assessment was paramount in utilising any additional field staff.

### **Regional incidence survey.**

Further analysis of the data from this survey remains on hold while the need for additional data and resurvey is determined. Completion of the project is considered important to the overall programme and the new Management Committee will undertake a review of the project.

### **DNA separation of Nectria/Sphaeropsis.**

No association was found between *Sphaeropsis* and *Nectria* infection using the DNA marker technique. The DNA technology is seen as the most definitive diagnostic tool currently available for detection of the fungus and its further development and application is considered very important to the programme.

### **Infection of nursery stock.**

While *Nectria* has been shown to survive on glasshouse inoculated seedlings it caused no disease symptoms. It is thought very unlikely the disease can be vectored by topped nursery seedlings, however, it was important to follow up this work with

exposure of topped seedlings in the forest environment under naturally occurring inoculum loadings.

**Susceptibility of other species.**

Some preliminary inoculation trials on *Macrocarpa* showed no evidence of the disease, but there is a need to evaluate other species in particular Douglas fir.

**Inoculum loadings.**

Direct inoculation into the sapwood of radiata pine in a clonal trial produced rapid fluting but key questions remain as to the relationship between inoculum loading and that expected to occur naturally. While differences in disease occurrence were found between clones in this trial the degree of resistance was unclear. The development of an inoculation standard around a minimum spore loading to get infection was seen as important to any future resistance trials.

**Genetic resistance trial assessments.**

Two further trials have been assessed in addition to the City Forests' high density elite trial and the results are expected at the end of June.

**McCrosties inoculation trial.**

Agreement on the primary objective of this clonal inoculation trial and the treatments to be included have yet to be agreed. In particular the inoculation method and inoculum loadings require careful consideration (see above).

**Disease ecology research.**

Understanding the ecology of the disease is seen as fundamental to interpreting what was being found in the field and as the underpinning of disease management strategies. Progress on this research is reported separately.

**Field guide.**

A proposal for the production of a field guide to symptom recognition, sampling for diagnosis etc. is under consideration and is expected to be progressed over the coming year.