

THE CURRENT STATUS OF *S. NOCTILIO* DISTRIBUTION, IMPACT AND MANAGEMENT CONTROL DEVELOPMENT IN AUSTRALIA.

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Sirex noctilio became established in Australia in 1952 when the wasp was discovered in a plantation near Hobart, Tasmania. After a decade the wasp found in the mainland State of Victoria and subsequently spread to adjoining States throughout the *Pinus radiata* estate. The federal government, through CSIRO, funded a major research program aimed at finding biological agents suitable for introduction. A number of insect parasitoids were introduced into Tasmania for mass rearing and subsequently some of these were released in the field. The introduction of the nematode *Beddingia siricidicola* proved to be a very effective biocontrol agent, however in the late 1980's it became apparent that nematode infectivity rates were declining.

At the present time *Sirex* is still a forest pest problem in much of the *P. radiata* estate. The wasp is still increasing its distribution, there are problems with ineffective strains of the nematode, and bark beetles are impacting on the effectiveness of trap tree establishment.

The development of static trap detection of low level populations of *Sirex* is enabling cost savings to be made in both the numbers of trap trees required and early introduction of the nematode.



Dick Bashford has been involved with the *Sirex* Control Program in Australia since 1964. At that time he joined a team at a research station was established by CSIRO, at Silwood Park, England. The aim was to survey Europe for parasitoids of *Sirex noctilio*, rear them from logs and send cultures to Australia for mass rearing. In 1968 the station closed and he moved to Hobart, Tasmania, still with CSIRO, to join the group involved in field testing both insect parasitoids and the nematode *Beddingia siricidicola*. Between 1968 and 1980 Dick worked on a range of forest insect pest species and assisted in developing the operational control options for *Sirex* in Australia. In 1980 he joined Forestry Tasmania and has worked on a wide range of forestry pest problems as well as managing the *Sirex* control program for Tasmania. He is a member of the Australian National *Sirex* Co-ordination Committee that oversees standards for operational control of *Sirex* and administers a research program funded by a levy on growers.