



## Reason for Travel

Three meetings being held in successive weeks in southern Europe provide a unique opportunity for Australian researchers to learn of the latest developments in entomology, *Bacillus thuringiensis* and other insect pathogens, and technology transfer in biological control (including biopesticides).



Since Bt and its toxin genes form the keystone of the Australian cotton industry's strategy to reduce its dependence on synthetic chemical insecticides it is imperative that a participant in the Australian research effort on Bt attends the International Meeting on *Bacillus thuringiensis*. The analysis of resistance to Bt, the discovery of new toxins and the mode of action of Bt toxins are currently advancing at a very rapid rate. It is essential that we stay abreast of these developments and the best means for doing so is through participating in major conferences and by the personal contacts that arise from attendance at conferences. The Third International Conference on *Bacillus thuringiensis* will address issues such as management of insect resistance to pathogens, mode of action of Bt, molecular genetics, and new Bt toxins. These issues impact on the CRDC-funded project "Use of Bt for the Management of *Heliothis* in Cotton: Resistance Mechanisms, Synergism with and Complementation of Bt Toxin" and on a CRC on Sustainable Cotton Production project (Novel Bt Toxins). Dr Akhurst is the Principal Investigator for both of these projects and will present a paper the complementarity of Bt toxins for *H. armigera* resistance management..

The International Congress of Entomology will address the broader issues of trends in agricultural entomology, insect molecular biology and biochemistry, resistance management, insect-plant co-evaluation, and advances in microbial control, as well as special issues such as *Bemisia*. It provides a rare opportunity for integrating information from disparate subsections of the large discipline that is entomology. Dr Akhurst will present a poster on the competition of Bt insecticidal crystal proteins for binding sites in *H. armigera*.



The IOBC International Conference Technology Transfer in Biological Control: From Research to Practice seeks to identify the major problems in implementing biological control and develop strategies to overcome them. It will examine novel delivery systems for insect pathogens, evaluation of the efficacy of biological control, production of biopesticides, the influence of public policy on the use of biopesticides, commercialisation of insect viruses and expression systems, and regulation of biological control and biopesticides. Dr Akhurst is seeking to attend this meeting in his capacity as Deputy Program Leader, Biotechnology.

This application is for support for Dr Akhurst's registration and expenses for the International Congress of Entomology. An application has been submitted to GRDC for funds to support Dr Akhurst's participation in the 3rd International *Bacillus thuringiensis* Meeting. The CSIRO Division of Entomology has allocated funds for Dr Akhurst to attend the IOBC meeting. If the GRDC application is fully funded, the airfare component of this application would not be required.

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