Foreword from the editors

The 6th Pacific Rim Conference on the Biotechnology of *Bacillus thuringiensis* and its Environmental Impact was held in Victoria, British Columbia, Canada, from October 30 to November 3, 2005, for the first time on the east side of the Pacific. Previous conferences were held in Taipei (Taiwan) in 1994, in Chiang Mai (Thailand) in 1996, in Wuhan (China) in 1999, in Canberra (Australia) in 2001 and in Hanoi (Vietnam) in 2003. All these past international meetings proved to be great successes. They brought together scientists from various countries with diverse, and often specific problems, priorities and approaches to the use of *Bt*, but sharing same interests and complementary expertises. They provided a unique platform to review and present new research results of both fundamental and practical nature, to discuss new trends and issues related to *Bt* science, *Bt* products and *Bt* uses worldwide. The Victoria Conference continued this tradition and offered updated, significant contributions to sound science, transparent communication and critical appraisal of the continuing progress experienced by the *Bt* field.

More than six decades after its commercial introduction as a biological control agent against agricultural and forestry pests, after three decades following the discovery of *Bt* strains active against major dipteran insects, with a major impact on human health, and after twelve years of commercialization of the first *Bt* transgenic crops, *Bt* remains the most widely used biopesticide, far ahead of other microbial agents. *Bt* is specific. *Bt* is safe to humans and it does not damage the environment. Furthermore, pest resistance to sprayable *Bt* products remains limited, and efficient strategies are being implemented to prevent its development in *Bt* transgenic planted areas. This continuing success story does not translate, unfortunately, into more than 1.5 to 2% share of the global pesticide market, for several reasons: (1) *Bt* products are narrow spectrum agents, compared to synthetic pesticides; (2) while many *Bt* strains have been isolated, their toxicity spectrum is not known and only a few are produced and commercialized; (3) the industry has been in constant restructurating; (4) a large part of the industrial efforts in the last decade has been devoted to transgenic crop development; (5) demand by growers and foresters, and acceptance by users and the public have not always been properly promoted, and easier, more economical access to *Bt* products and better information on their use have not been optimal; (6) ethical, legal and environmental issues have been raised, but have often been poorly addressed by all parties involved; and finally (7) the synthetic pesticide industry is evolving and is coming up with new products which may be less dangerous to human and animal health, and to the environment.

The 6th Pacific Rim Conference on the Biotechnology of *Bacillus thuringiensis* and its Environmental Impact, as will be documented in the following pages, addressed several of the above issues. Forty oral communications and twenty posters were presented to close to one hundred delegates. The contributions were grouped into eight sessions: toxin mode of action, novel toxins and activities, public safety, environmental impact, Bt crops and resistance, application in agriculture, forestry and vector control.

The organizers wish to express their sincere thanks to all contributors, scientists and trainees, for the excellent presentations they gave at the meeting and for their contributions to this book of proceedings. They are also indebted to Kees van Frankenhuyzen from the Great Lakes Research Centre and Nicholas Conder from the Pacific Research Centre of the Canadian Forest Service (CFS), Natural Resources Canada and to Lucie Lévesque and Stéphane Dupont from the Biocontrol Network, for their outstanding organizational and technical support.

We also thank the generous sponsors of the conference: Valent Biosciences Corporation, the Société de protection des forêts contre les insectes et maladies (SOPFIM), the Spray Efficacy Research Group (SERG), the Bacteria Division of the Society for Invertebrate Pathology (SIP) and the Biocontrol Network of Canada. The production of these proceedings would not have been possible without the strong financial and technical support provided by CFS-Natural Resources Canada and Agriculture and Agri-Food Canada. And finally, the continuing support of the International Standing Committee of the Pacific Rim Conferences on the Biotechnology of *Bacillus thuringiensis* and its Environmental Impact is highly appreciated.

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