Special Issue

The Application and Safety Assessment of *Bacillus* thuringiensis Toxins

Message from the Guest Editors

The Special Issue "The Application and Safety Assessment of *Bacillus thuringiensis* Toxins" addresses several key aspects. First, it elaborates on the diverse applications of Bacillus thuringiensis (Bt) toxins in pest control, including their use in transgenic crops, formulation as biological insecticides for agricultural and forestry protection, and potential application in managing vector-borne diseases. Second, it examines the molecular mechanisms of Bt toxicity, with a focus on the specific interactions between Bt toxins and insect midgut receptors, as well as the subsequent events that lead to pest mortality. Third, this Special Issue provides a comprehensive safety assessment covering environmental impacts—such as effects on non-target organisms and soil ecosystems—along with potential risks to human and animal health, including allergenicity and toxicity. Finally, it discusses current challenges and future prospects, particularly the evolution of pest resistance to Bt toxins and strategies for their sustainable application.

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Toxinology is an incredibly diverse area of study, ranging from field surveys of environmental toxins to the study of toxin action at the molecular level. The editorial board and staff of *Toxins* are dedicated to providing a timely, peer-reviewed outlet for exciting, innovative primary research articles and concise, informative reviews from investigators in the myriad of disciplines contributing to our knowledge on toxins. We are committed to meeting the needs of the toxin research community by offering useful and timely reviews of all manuscripts submitted. Please consider *Toxins* when submitting your work for publication.

Editor-in-Chief

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