

## Special Issue

# Insect Resistance to *Bacillus thuringiensis* Toxins

### Message from the Guest Editor

The insecticidal toxins (Cry and VIP proteins) produced by the bacterium *Bacillus thuringiensis* (Bt) have been successfully used to control some major insect pests via both Bt formulation sprays and transgenic crops. The global planting area of Bt crops increased from 1 million hectares in 1996 to 108 million hectares in 2019.

However, practical resistance to Bt crops has been reported in at least nine major pest insects. The evolution of resistance to Bt toxins by target pests has been a major threat to the long-term effectiveness of Bt crops. Understanding the evolution and mechanism of Bt resistance is essential for developing sensitive resistance detection methods and adaptive resistance management strategies. The aim of this Special Issue is to create a collection of recent advances in all aspects of insect resistance to Bt toxins, including detection and monitoring of Bt resistance, genetics and mechanisms of Bt resistance, mode of action of Bt toxins, and resistance management strategies. Both original research and review articles are welcomed.

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### Guest Editor

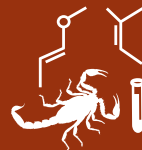
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### Deadline for manuscript submissions

closed (30 November 2021)



## Toxins

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## About the Journal

### Message from the Editor-in-Chief

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.

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### Editor-in-Chief

Prof. Dr. Jay Fox

Department of Microbiology, University of Virginia, Charlottesville, VA,  
USA

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