



toxins



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Insect Resistance to *Bacillus thuringiensis* Toxins

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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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Special Issue



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Message from the Editor-in-Chief

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