Special Issue

Insecticidal Toxins from Bacillus thuringiensis 2021– 2022

Message from the Guest Editors

Bacillus thuringiensis (Bt) and Lysinibacillus sphaericus are soil born bacteria that produce a variety of toxins with specificity against different insect species or nematodes. One of the most important characteristics of the toxins produced by these bacteria is their high specificity against their target organisms, showing no toxicity against other insects or to humans. Different Bt and L sphaericus strains have been used to make products highly effective in the control insect pests or insects that are vectors of human diseases. Additionally, the genes of certain Bt toxins have been expressed in plants for the efficient control of crop pests. This Special Issue will focus on progress in the characterization of novel insecticidal Bt and L. sphaericus toxins, including Cry, Cyt, Vip, Vpa, Vpb, App, Xbp, Mpp, Mtx, Spp, Tpp, and Gpp. Studies concerning their expression regulation, mode of action, structure, and synergism among these proteins as well as analysis of the resistance mechanisms and intracelular responses in the different targets are welcome. This knowledge is likely to provide a sustainable method of use for this technology for insect pest and nematode control.

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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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