

Special Issue

Circumventing Resistance to Channel-Targeting Insecticides: A Challenge for Global Health and Food Security

Message from the Guest Editors

This Special Issue aims to highlight recent scientific advances in this field proposed to limit and even circumvent the appearance of these resistance mechanisms. Therefore, we seek submissions of original research and review articles dealing with different strategies proposed in this area, including, for example, the following:

- Alternating the use of chemicals with distinct modes of action;
- Co-application of chemicals with distinct modes of action;
- Co-application of a synergistic agent with an insecticide to optimize efficacy while reducing the insecticide dose;
- Targeting epigenetic regulators to overcome insecticide resistance;
- Identifying the compensatory mechanisms of resistance, which may reduce insecticide efficacy to discover novel strategies for insect control;
- Recent progress in structural studies of ion channels such as molecular docking, crystallography, cryo-EM, etc., aimed at providing accurate templates for identifying unexpected structure-based target sites and facilitating rational design.

Guest Editors

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Message from the Editor-in-Chief

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