

Special Issue

Insecticide Resistance and Novel Insecticides

Message from the Guest Editors

Recent advances have taken insect resistance and novel insecticides in exciting new directions. For example, dsRNAs, small peptides, metadimide compounds isoxazoline compounds, etc., have been or will be used for insect control in agriculture. Meanwhile, basic science studies have provided major new insights into the targets of insecticides. For example, the target of pymetrozine is the transient receptor potential vanilloid (TRPV) channel, and the glycine in the third transmembrane of the RDL subunit of the GABA receptor is considered to be a potential action site of isoxazoline insecticides.

For this Special Issue, we give special attention to the mechanisms of insect resistance and novel insecticide, including green chemical insecticides, dsRNA, small peptides, and so on, acting on novel or traditional targets. Systematic reviews and experimental and original research related to insect resistance and novel insecticides are welcome. Topics of interest include, but are not limited to:

Insecticide resistance; Synthesis of insecticides; Nanomaterials for insecticides; RNAi; Small peptides; Receptors of insecticide; Novel insecticide targets; Biogenic insecticides.

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Deadline for manuscript submissions

15 August 2025



Agronomy

an Open Access Journal
by MDPI

Impact Factor 3.4
CiteScore 6.7



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