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Pesticide Chemistry and Toxicology

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Message from the Collection Editor

Insecticides are chemical substances used to control insect pests that can damage public health or the economy. However, many insecticide chemicals are resistant to degradation in the environment and have accumulative properties. Even after banning some insecticides, they can still accumulate in the environment and adversely affect non-target organisms and human health. Hence, understanding how insecticides operate and how these chemicals can adversely affect their surrounding nature is essential. This Topical Collection will report recent discoveries and review key subject areas of insecticide chemistry and toxicology for safe and effective insect pest management. We invite manuscripts that focus on one or more of the following research areas: (1) identifying novel insecticide targets or modes of action; (2) xenobiotic metabolism and selective toxicity; formulation and rational insecticide use; (4) resistance mechanisms and new methods to circumvent insecticide (5) environmental resistance: persistence recommendations for safe and effective insect pest management.



