Special Issue

Plant Essential Oils for the Control of Insects and Mites

Message from the Guest Editor

Plant essential oils have emerged as promising natural alternatives to synthetic pesticides due to their rich chemical diversity, biodegradability, and low environmental persistence. This Special Issue, "Plant Essential Oils for the Control of Insects and Mites", aims to explore the potential of essential oils and their major constituents in managing pest populations of economic importance. We welcome original research and review articles focused on the isolation, chemical characterization, and bioactivity of essential oils and their compounds. Studies on fumigant, contact, and repellent activity, effects on development and reproduction, sublethal and behavioral impacts, and mechanisms of action and resistance are of particular interest. Contributions addressing formulation strategies, nanoemulsions, and the selective toxicity of essential oils to beneficial organisms are also encouraged. This Special Issue offers a platform for interdisciplinary contributions from entomology, acarology, plant chemistry, and pest management to deepen our understanding of how essential oils can be integrated into sustainable pest control strategies.

Guest Editor

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Message from the Editor-in-Chief

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