Special Issue

Pest Management: Challenges, Strategies, and Solutions

Message from the Guest Editors

Global horticultural production faces unprecedented pest management challenges driven by climate volatility, pesticide resistance, invasive species expansion, and heightened food safety demands. These pressures threaten crop productivity, ecological sustainability, and economic viability across fruit. vegetable, and ornamental sectors. Traditional reliance on synthetic pesticides is increasingly untenable, necessitating science-driven strategies that leverage ecological principles and plant innate defenses. This Special Issue seeks innovative research advancing sustainable pest control through synergistic themes: plant-centric approaches, including host resistance, induced defenses by herbivory or elicitors, and semiochemical: biodiversity-driven strategies, such as companion planting, habitat manipulation, conservation biological control, physical and mechanical control sex pheromones; and implementation pathways, encompassing adoption barriers, policy frameworks, and farmer-participatory validation. We welcome original research, case studies science with field applications. Submissions should sustainability, scalability, and solutions for horticultural crops worldwide.

Guest Editors

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Message from the Editor-in-Chief

Horticultural plants and their products provide sustenance, health, and beauty. A confluence of factors is putting increasing pressure on horticultural production to evolve, and innovative research is addressing these challenges. *Horticulturae* provides a venue to communicate research results in a rapid manner with open access, allowing everyone the opportunity to stay abreast of leading research addressing horticulture. I invite you to consider publishing the results of your research in this high quality, peer-reviewed journal.

Editor-in-Chief

Prof. Dr. Luigi De Bellis

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