

Special Issue

Embracing Systems Thinking in Crop Protection Science

Message from the Guest Editors

To mitigate the pervasive social-environmental problems that emanate from pesticide use, scientists have repeatedly called for a major overhaul of crop protection science. Over the past six decades, they have advocated more holistic 'systems approaches', a closer integration of (natural, social) science disciplines and added attention to ecosystem services. Their ultimate aim has been to remediate pest, weed or disease problems through non-chemical means. In this Special Issue, we aim to showcase case studies where scientists break out of their traditional disciplines to drastically reduce synthetic pesticides in agri-food production systems. Specifically, we look forward to reading more about ways to mobilize, e.g., soil health, biological control, agroecological tactics, behavior-modifying semio-chemicals, microbial inoculants or plant x plant facilitation at field, farm and agro-landscape scales. We hope to inspire interdisciplinary crop protection science and promote resilient, resource-frugal and pest-suppressive farming systems, all while curbing agro-chemical pollutants, shielding biodiversity and knowingly preserving our common future.

Guest Editors

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Message from the Editor-in-Chief

Plants is an open access journal which provides an advanced forum for research findings in areas related to plant function, its physiology, biology, taxonomy, stresses, and its interactions with other organisms. It publishes original research articles, reviews, reports, and conference proceedings (peer reviewed full articles) and communications. In original research papers, it is important that full experimental details are provided. We also encourage timely reviews and commentaries on topics of interest to the plant research community.

Editor-in-Chief

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