Special Issue

Wheat–Pest Interaction: From Biology to Integrated Management

Message from the Guest Editors

Wheat (*Triticum aestivum* L.) is one of the most important crops worldwide and provides almost 20% of the calories consumed by humans. Wheat insect pests, including cereal aphids, wheat midges, and underground pests, threaten wheat yield and quality. Conventional chemical pesticide application contributes to increasing wheat yields, but it causes a severe negative impact on the environment and human health. It is necessary to establish effective and environmentally friendly management strategies for wheat insect pest control through ecological and behavioral regulations and biological control, which need to understand the wheat–insect pest interactions. Therefore, this Special Issue will highlight the identification of wheat plant resistance germplasms and their mechanisms, induced plant defense, effectors involved in modulating plant immunity, potential uses and mechanisms of plant volatiles for push–pull technology, and wheat and other plant intercropping and biodiversity strategies for pest control. This Special Issue will also focus on the effects of global climate change on wheat–pest–natural enemy interactions in wheat ecosystems.

Guest Editors

Prof. Dr. Julian Chen
Institute of Plant Protection, Chinese Academy of Agricultural Sciences, Beijing 100193, China

Dr. Yong Zhang
Department of Agricultural Entomology, Institute of Plant Protection, Chinese Academy of Agricultural Sciences, Beijing 100193, China

Deadline for manuscript submissions

closed (20 October 2022)

Plants

an Open Access Journal by MDPI

Impact Factor 4.1
CiteScore 7.6
Indexed in PubMed

mdpi.com/si/117127

Plants
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
plants@mdpi.com

mdpi.com/journal/plants

Plants

an Open Access Journal by MDPI

Impact Factor 4.1
CiteScore 7.6
Indexed in PubMed

mdpi.com/journal/plants

About the Journal

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, 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

Prof. Dr. Dilantha Fernando
Department of Plant Science, University of Manitoba, Winnipeg, MB R3T 2N2, Canada

Author Benefits

Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility:

indexed within Scopus, SCIE (Web of Science), PubMed, PMC, PubAg, AGRIS, CAPlus / SciFinder, and other databases.

Journal Rank:

JCR - Q1 (Plant Sciences) / CiteScore - Q1 (Ecology, Evolution, Behavior and Systematics)