

Special Issue

Recent Trends towards Genetics-Based Methods for Pest Management in Agroecosystems

Message from the Guest Editors

In agro-ecosystems, many insects are key pests that cause serious economic losses to agricultural production. Therefore, pest management is crucial for protecting food security. Conventional control methods, particularly the use of chemical insecticides, have often failed to prevent the enormous damage caused by insect pests. As a result, genetics-based methods for pest management have been developed as alternative control to chemical insecticides. This Special Issue covers a range of topics related to genetics-based methods or techniques for pest management in agroecosystems. It includes the development of insect-resistant genetically modified (IRGM) crops using techniques such as RNAi, CRISPR/Cas9 editing, or other genetically modified methods. The Special Issue also explores the control efficacy and ecological risks of IRGM crops in field applications, as well as the use of genetic diversity in insect-resistant crops for pest management. This Special Issue welcomes all kinds of papers related to genetics-based methods for pest management, including research articles, short communications, reviews, and method introductions.

Guest Editors

Prof. Dr. Lanzhi Han

Institute of Plant Protection, Chinese Academy of Agricultural Sciences, Beijing, China

Prof. Dr. Fajun Chen

Department of Entomology, College of Plant Protection, Nanjing Agricultural University, Nanjing 210095, China

Deadline for manuscript submissions

closed (31 December 2023)



Agronomy

an Open Access Journal
by MDPI

Impact Factor 3.4
CiteScore 6.7



mdpi.com/si/162391

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

[mdpi.com/journal/
agronomy](https://mdpi.com/journal/agronomy)





Agronomy

an Open Access Journal
by MDPI

Impact Factor 3.4
CiteScore 6.7



[mdpi.com/journal/
agronomy](https://mdpi.com/journal/agronomy)



About the Journal

Message from the Editor-in-Chief

Agronomy draws together researchers from diverse areas of agricultural research with a common aim of enhancing agricultural productivity globally. The journal provides unlimited free access to all those interested in advancing agricultural science from both the research and general community. Papers are released immediately after acceptance through the internet.

Agronomy is supported by our authors and their institutes through low article processing charges (APC) for accepted papers. We hope you will support the journal by becoming one of our authors.

Editor-in-Chief

Prof. Dr. Leslie A. Weston

Gulbali Centre for Agriculture, Water and Environment Research,
Charles Sturt University, Wagga Wagga, NSW 2678, Australia

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), PubAg, AGRIS, and other databases.

Journal Rank:

JCR - Q1 (Agronomy) / CiteScore - Q1 (Agronomy and Crop Science)