Special Issue

Adaptive Evolution in Weeds: Molecular Basis and Management

Message from the Guest Editor

Weeds are the most important biotic limitation to agricultural production and pose a major threat to global food security. In this Special Issue, we attempt to elucidate the molecular basis of weed adaptive evolution by contributing with novel mechanistic insights and important management strategies. The topics of interest include the molecular basis of seed dormancy and germination, mechanisms of herbicide resistance and biotic/abiotic stress tolerance, and integrated weed management. Welcome invite submissions of research that includes, but is not limited to, the following areas:

- New insights into weed adaptive evolution;
- Weed-seed dormancy and germination;
- Abiotic/biotic stress tolerance;
- Target-site/non-target-site herbicide resistance;
- Molecular basis of evolution and phenotypic variation in adaptive traits;
- Management of herbicide/stress resistance;
- Novel approaches for weed-management strategies.

We welcome novel research articles and reviews addressing all the related topics that introduce new discoveries, insights, and management strategies regarding adaptive evolution occurring in weeds.

Guest Editor

Prof. Dr. Shouhui Wei

Institute of Plant Protection, Chinese Academy of Agricultural Sciences, Beijing 100193, China

Deadline for manuscript submissions

31 January 2026



an Open Access Journal by MDPI

Impact Factor 3.4 CiteScore 6.7



mdpi.com/si/146409

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

mdpi.com/journal/agronomy





an Open Access Journal by MDPI

Impact Factor 3.4 CiteScore 6.7



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)

