Special Issue

Genetic Potentials and Breeding Progress in Cereal Grains

Message from the Guest Editors

In light of the increase in food demand, genetics and breeding play a significant role in increasing cereal productivity and contributing to the resilience of those agri-food systems in a changing climate. With the advent of new technologies, it is possible to intervene in plant breeding schemes to significantly accelerate the rate of genetic gain and develop elite germplasm with the adequate combination of traits for the environments in which new varieties will be grown. In this Special Issue, we encourage the submission of papers related to:

- The application of new technologies and methods to advance cereal breeding, including, but not limited to genomic prediction, marker-assisted selection, environomics, high-throughput phenotyping, speed breeding, gene editing, etc.
- The estimation of genetic gains in cereals for yield potential and climate resilience.
- Genetic studies of traits relevant to cereal production and food security, including, but not limited to genome-wide association studies and linkage mapping experiments.

New methodologies and strategies that have the potential to increase genetic gain.

Guest Editors

Dr. Leonardo A. Crespo-Herrera

International Maize and Wheat Improvement Center (CIMMYT), Texcoco 56130, Mexico

Dr. Ravi Prakash Singh

International Maize and Wheat Improvement Center (CIMMYT), Texcoco 56130, Mexico

Deadline for manuscript submissions

closed (31 January 2024)



Agronomy

an Open Access Journal by MDPI

Impact Factor 3.4 CiteScore 6.7



mdpi.com/si/162240

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)

