



Omics Approaches for Crop Improvement

Guest Editors:

Dr. Roxana Yockteng

AGROSAVIA (Corporación
Colombiana de Investigación
Agropecuaria), Tibaitatá 250047,
Colombia

Dr. Andrés J. Cortés

AGROSAVIA (Corporación
Colombiana de Investigación
Agropecuaria), La Selva,
Colombia

Dr. María Ángeles Castillejo

Campus Rabanales, University of
Cordoba, Cordoba, Spain

Deadline for manuscript
submissions:

closed (20 April 2023)

Message from the Guest Editors

The growing human population and climate change are imposing unprecedented challenges for the global food supply. Therefore, it is urgent to improve agronomical important traits such as yield, resistance, and nutritional value by pivoting direct and indirect genetically-assisted approaches. High-throughput screening technologies, known as “omics” (e.g. genomics, transcriptomics, proteomics, metabolomics, and phenomics), are retrieving large volumes of crops data that can be used to speed up trait improvement. Coupling these data with bioinformatics and machine-learning approaches, are helping us to elucidate the mechanisms behind crop features. Omics datasets are not only being generated from tissues of a single genotype, but are also used to explore crop performance at the macro-scale interactions with microbes, and environmental conditions.

This Special Issue will offer updated views on multidimensional large-scale omics-based approaches. Specifically, we welcome studies that explore the uses of the omics and their integration through trans-disciplinary bioinformatics, as tools to improve qualitative and quantitative traits in crop species.





an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Leslie A. Weston

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

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.

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 (Plant Sciences) / CiteScore - Q1 (Agronomy and Crop Science)

Contact Us

Agronomy Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/agronomy
agronomy@mdpi.com
X@Agronomy_Mdpi