



Omics Approaches for Crop Improvement

Guest Editors:

Dr. Roxana Yockteng

AGROSAVIA (Corporación
Colombiana de Investigación
Agropecuaria) – CI Tibaitatá
ryockteng@agrosavia.co

Dr. Andrés J. Cortés

AGROSAVIA (Corporación
Colombiana de Investigación
Agropecuaria) – CI La Selva
acortes@agrosavia.co

Dr. María Ángeles Castillejo

Escuela Técnica Superior de
Ingenieros Agrónomos, Córdoba,
Córdoba, Spain
bb2casam@uco.es

Deadline for manuscript
submissions:

30 September 2021

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. Peter Langridge

School of Agriculture, Food and
Wine, University of Adelaide,
Urrbrae SA 5064, 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 in the Science Citation Index Expanded (SCIE) - Web of Science from Vol. 5 (2015). Covered in **Scopus** (2019 CiteScore: 1.8) and other databases.

Rapid Publication: manuscripts are peer-reviewed and a first decision provided to authors approximately 16.1 days after submission; acceptance to publication is undertaken in 2.9 days (median values for papers published in this journal in the first half of 2020).

Contact Us

Agronomy
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

Tel: +41 61 683 77 34
Fax: +41 61 302 89 18
www.mdpi.com

mdpi.com/journal/agronomy
agronomy@mdpi.com