Special Issue

Technological Innovation for Measurements on Crop Physiological and Agronomic Traits

Message from the Guest Editor

The development of novel techniques in agriculture are playing key roles for faster and automated measurements of crop physiological and agronomic traits for breeding of improved crop varieties. These advancements are increasing the precision, accuracy. and throughput of data collection, while reducing costs and resource usage, as well as improving our understanding of novel crop traits previously unexplored due to method or resource constraints. In this Special Issue, we aim to cover advanced digital, automated, and reliable measurements and data analytics for traits such as growth (e.g., biomass, growth rate, yield), morphological (plant height, area, branching, architecture), phenological (growth stages), plant health (greenness, senescence), and physiological (canopy temperature, chlorophyll, nitrogen, photosynthesis). These measurements are deployed in crops under various scenarios, including but not limited to biotic and abiotic stress tolerance, increasing nutrient use efficiency, crop monitoring, and yield and quality improvement.

Guest Editor

Dr. Surya Kant

1. Agriculture Victoria, Grains Innovation Park, 110 Natimuk Rd, Horsham, VIC 3400, Australia

School of Applied Systems Biology, La Trobe University, Bundoora, VIC 3083, Australia

Deadline for manuscript submissions

closed (15 December 2023)



Agriculture

an Open Access Journal by MDPI

Impact Factor 3.6 CiteScore 6.3



mdpi.com/si/135239

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

mdpi.com/journal/agriculture





Agriculture

an Open Access Journal by MDPI

Impact Factor 3.6 CiteScore 6.3



About the Journal

Message from the Editor-in-Chief

Agriculture (ISSN 2077-0472) is an international, scholarly and scientific open access journal publishing peer-reviewed research papers, review articles, communications and short notes that reflect the breadth and interdisciplinarity of agriculture.

Editor-in-Chief

Prof. Dr. Les Copeland

Sydney Institute of Agriculture, School of Life and Environmental Sciences, The University of Sydney, Sydney, NSW 2006, 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, RePEc, and other databases.

Journal Rank:

JCR - Q1 (Agronomy) / CiteScore - Q1 (Plant Science)

