

Special Issue

Crop Monitoring and Weed Management Based on Sensor-Actuation Systems

Message from the Guest Editors

The need to produce more and high-quality food contrasts with the increasing social and legislative pressure to reduce chemical inputs in agriculture. Remote sensing, precision application technologies, artificial intelligence, and digital data management contribute to generate reliable agricultural research and improve food production. Sensor and actuation systems offer promising alternatives to accomplish precision farming and data digitalization. This smart farming approach helps farmers to better monitor crops and optimize practices, adapted to changing environmental factors. This Special Issue aims to combine current research and developments, concerning novel sensors and methodologies together with their specific applications in crop monitoring and weed management. Papers demonstrating innovative ways in which sensor and actuation systems are implemented in precision agriculture, such as plant stress identification, plant nutrition status assessment and fertilization and weed management, precision application or environmentally friendly agricultural technologies, are highly welcome.

Guest Editors

Dr. Victor Rueda-Ayala

Norwegian Institute of Bioeconomy Research, NIBIO Særheim,
Postvegen 213, 4353 Klepp Stasjon, Norway

Dr. Dionisio Andújar

Centre for Automation and Robotics, CSIC-UPM, Arganda del Rey,
28500 Madrid, Spain

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/86003

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

[mdpi.com/journal/
agriculture](https://mdpi.com/journal/agriculture)





Agriculture

an Open Access Journal
by MDPI

Impact Factor 3.6
CiteScore 6.3



[mdpi.com/journal/
agriculture](https://mdpi.com/journal/agriculture)



About the Journal

Message from the Editor-in-Chief

Agriculture (ISSN 2077-0472) is an international, cross-disciplinary and scholarly journal on the science and technology of crop and animal production, and management of the natural resource base for agricultural production. We invite submissions from authors according to the aims and scope of the journal described in more detail on this page. *Agriculture* is published in an open access format – articles are published on the journal's website immediately after acceptance, giving the scientific community and the public unlimited and free access to the content.

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)