





an Open Access Journal by MDPI

Crop Monitoring and Weed Management Based on Sensor-Actuation Systems

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)

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.











an Open Access Journal by MDPI

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

Message from the Editor-in-Chief

Agriculture (ISSN 2077-0472) is an international, crossdisciplinary and scholarly open access journal on the science and technology of crop and animal production, and management of the natural resource base for agricultural production. Agriculture is published in an open access format – research articles, reviews and other contents are released on the internet immediately after acceptance. The scientific community and the public have unlimited and free access to the content as soon as it is published.

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)

Contact Us