Special Issue

Precision Agriculture in Crop Production

Message from the Guest Editor

Precision Agriculture (PA) is a modern strategy of farming management. It uses information technology to measure inter- and intra-field variability with the aim of obtaining better quality products, sustainable profitability and higher production efficiency with minimum environmental impact. PA combines several technological advances such as remote sensing, sensors, satellite technology, variable rate application machinery, Internet of Things, geostatistics and Geographical Information Systems.

This Special Issue intends to cover the state of the art and recent progress in different aspects related to the real implementation of Precision Agriculture in a wide range of cropping systems. Articles may include, but are not limited to, the following topics:

- Proximal and remote sensing of soils and crops;
- Internet of Things, Wireless sensor networks;
- Big data analysis for PA purposes;
- Sampling, mapping and geostatistical analysis;
- Precision Irrigation;
- Precision crop protection;
- Delineation of management zones;
- Ag-engineering, robotics and Unmanned Aerial Vehicles (UAVs);
- Crop models and decision support tools;
- Augmented reality in PA.

Guest Editor

Dr. Vasileios Liakos

Laboratory of Precision Agriculture, Department of Agrotechnology, University of Thessaly, Gaiopolis, 41110 Larissa, Greece

Deadline for manuscript submissions

closed (31 July 2025)



Plants

an Open Access Journal by MDPI

Impact Factor 4.1
CiteScore 7.6
Indexed in PubMed



mdpi.com/si/192875

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

mdpi.com/journal/plants





Plants

an Open Access Journal by MDPI

Impact Factor 4.1 CiteScore 7.6 Indexed in PubMed



About the Journal

Message from the Editor-in-Chief

Plants is an open access journal which provides an advanced forum for research findings in areas related to plant function, its physiology, biology, taxonomy, stresses, and its interactions with other organisms. It publishes original research articles, reviews, reports, conference proceedings (peer reviewed full articles) and communications. In original research papers, it is important that full experimental details are provided. We also encourage timely reviews and commentaries on topics of interest to the plant research community.

Editor-in-Chief

Prof. Dr. Dilantha Fernando

Department of Plant Science, University of Manitoba, Winnipeg, MB R3T 2N2, Canada

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), PubMed, PMC, PubAg, AGRIS, CAPlus / SciFinder, and other databases.

Journal Rank:

JCR - Q1 (Plant Sciences) / CiteScore - Q1 (Ecology, Evolution, Behavior and Systematics)

