

Special Issue

Precision Agriculture Technology, Benefits & Application

Message from the Guest Editors

Precision agriculture, also known as "site-specific farming", is an agricultural approach that uses digital technology to optimize agricultural management. Relying on the collection and analysis of detailed data to make informed decisions and improve the efficiency of agricultural practices, precision agriculture aims to maximize crop yields, reduce costs, reduce waste of natural resources, and minimize environmental impacts. Some of the key elements of precision agriculture include: data collection; data analysis; site-specific decision-making; efficient resource use; real-time monitoring; and advanced technologies. Precision agriculture aims to make agriculture more efficient, sustainable, and profitable through the application of advanced technologies and data analysis to enable informed decision making. This is especially important in a world where agricultural production needs to meet growing demands for food, while also being mindful of conserving natural resources and reducing environmental impacts.

Guest Editors

Prof. Dr. Fábio Henrique Rojo Baio

Prof. Dr. Paulo Eduardo Teodoro

Dr. Larissa Pereira Ribeiro Teodoro

Deadline for manuscript submissions

closed (30 May 2025)



Plants

an Open Access Journal
by MDPI

Impact Factor 4.1
CiteScore 7.6
Indexed in PubMed



mdpi.com/si/189814

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

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





Plants

an Open Access Journal
by MDPI

Impact Factor 4.1
CiteScore 7.6
Indexed in PubMed



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



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, and 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)