Special Issue

Effects of Conservation Tillage on Crop Cultivation and Production

Message from the Guest Editors

Conservation tillage, along with some complimentary practices such as soil cover and crop diversity has emerged as a viable option to ensure sustainable food production and maintain environmental integrity. The principle of conservation tillage involves maintenance of surface soil cover through retention of crop residues achievable by practicing different intensity of tillage treatments and mechanical soil disturbance. Crop grown with conservation tillage system has more climate adaptation (e.g., drought and high temperatures) benefits. The potential benefits of conservation tillage along with other practices such as soil cover in reducing carbon and nitrous-oxide emissions to the atmosphere, economic advantages associated with reductions in crop establishment time and energy use cannot be over emphasized. Therefore, to achieve sustainable food production with minimal impact on the (agro)environment (soil, water and the atmosphere), conservation soil tillage practices become more important now than ever.

Guest Editors

Dr. Danijel Jug

Dr. Vladimír Smutný

Prof. Dr. Irena Jug

Dr. Edward Wilczewski

Deadline for manuscript submissions

closed (20 May 2025)

Plants

an Open Access Journal by MDPI

Impact Factor 4.1
CiteScore 7.6
Indexed in PubMed

mdpi.com/si/185772

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

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, 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)

MDPI