

Special Issue

Application of Sensors for Mechanical Weed Control

Message from the Guest Editor

Sensor technologies have been developed to automatically guide mechanical hoes in the center between two crop rows. More sophisticated algorithms of plant species identification were implemented in weeding robots to detect weeds within crop rows and selectively control them without damaging the crop. Lately, neural networks have been trained for the classification of weed and crop species. Those information technologies have improved efficacy and selectivity of mechanical weed control. However, there is a great potential for improving and automating mechanical weed control in arable, vegetable, and permanent cropping systems. Sensor technologies can be used to vary the intensity of harrowing, support decision rules for mechanical weed control, and collect information on crop development and quality.

Guest Editor

Prof. Dr. Roland Gerhards

Department of Weed Science, University of Hohenheim, Otto-Sander-Str. 5, 70599 Stuttgart, Germany

Deadline for manuscript submissions

closed (15 August 2021)



Agronomy

an Open Access Journal
by MDPI

Impact Factor 3.4
CiteScore 6.7



mdpi.com/si/67140

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

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





Agronomy

an Open Access Journal
by MDPI

Impact Factor 3.4
CiteScore 6.7



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



About the Journal

Message from the Editor-in-Chief

Agronomy draws together researchers from diverse areas of agricultural research with a common aim of enhancing agricultural productivity globally. The journal provides unlimited free access to all those interested in advancing agricultural science from both the research and general community. Papers are released immediately after acceptance through the internet.

Agronomy is supported by our authors and their institutes through low article processing charges (APC) for accepted papers. We hope you will support the journal by becoming one of our authors.

Editor-in-Chief

Prof. Dr. Leslie A. Weston

Gulbali Centre for Agriculture, Water and Environment Research,
Charles Sturt University, Wagga Wagga, NSW 2678, 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, and other databases.

Journal Rank:

JCR - Q1 (Agronomy) / CiteScore - Q1 (Agronomy and Crop Science)