



Site-Specific Weed Management (SSWM): Integrating Weed Population Dynamics with Information-Communications Technologies (ICTs)

Guest Editors:

Dr. Guillermo R. Chantre

Dpto. de Agronomía, Universidad Nacional del Sur y CERZOS (CONICET), Bahía Blanca 8000, Argentina

Dr. Roberto Benech-Arnold

IFEVA - Cátedra de Cultivos Industriales, Facultad de Agronomía, Universidad de Buenos Aires/CONICET, Av. San Martín 4453, Buenos Aires 1417, Argentina

Dr. Marcos Yannicari

Facultad de Agronomía, National University of La Pampa/YPF Tecnología (YPF-CONICET), Santa Rosa 6300, Argentina

Deadline for manuscript submissions:

31 October 2024



mdpi.com/si/200617

Message from the Guest Editors

Dear Colleagues,

ICTs are currently being used to empower site-specific weed management (SSWM). Site-specific weed management is based on the fact that weed populations are commonly irregularly distributed within crop fields, and it implies applying chemical and/or physical control measures only where and when they are needed. Currently, the use of AI models allows for the integration of photogrammetry or image analysis to establish databases for developing algorithms that enable weed management using automated or robotic techniques to distinguish weeds from crops. Both remote sensing (satellite) and unmanned aerial vehicles (UAVs) are being used to collect data at different spatial scales. The integration of both remote and proximal datasets to train and test AI algorithms is a novel route towards more precise and optimized management decisions. In this Special Issue, we invite researchers to contribute original researches, reviews, and opinion pieces covering all topics related to site-specific weed management, weed population dynamics, and ICTs.

Dr. Guillermo R. Chantre

Dr. Roberto Benech-Arnold

Dr. Marcos Yannicari

Guest Editors



an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Leslie A. Weston

Gulbali Centre for Agriculture,
Water and Environment
Research, Charles Sturt
University, Wagga Wagga, NSW
2678, Australia

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.

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 (Plant Sciences) / CiteScore - Q1 (Agronomy and Crop Science)

Contact Us

Agronomy Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/agronomy
agronomy@mdpi.com
X@Agronomy_Mdpi