

Special Issue

Anaerobic Soil Disinfestation: A Tool for Non-Fumigant-Based Integrated Soil-Borne Disease and Pest Management

Message from the Guest Editors

Since its development in early 2000, anaerobic soil disinfestation (ASD), also known as biological soil disinfestation or reductive soil disinfestation, has proven to be a promising non-fumigant approach for soil-borne disease management in high-value crops worldwide. Due to the biological mechanisms involved, ASD's effects vary depending on factors such as soil type, temperature, previous cropping history, potential for anaerobiosis, type and rate of carbon sources applied, and target pathogens. This Special Issue invites papers from developed and developing countries on cutting edge research facilitating broader adoption and understanding of ASD. In particular, we welcome papers on the development of environmental thresholds for suppressing a range of soil-borne pests by ASD, studies on mechanisms of disease and weed suppression and plant growth enhancement by ASD, potential adverse and positive environmental impacts of ASD, the integrated use of ASD with other non-fumigant-based tactics, the current status of ASD adoption in different parts of the world, and potential limitations and barriers to adopting ASD from stakeholders' perspectives.

Guest Editors

Dr. Joji Muramoto

Prof. Dr. Carol Shennan

Dr. Erin Rosskopf

Dr. Noriaki Momma

Deadline for manuscript submissions

closed (31 December 2023)



Agronomy

an Open Access Journal
by MDPI

Impact Factor 3.4
CiteScore 6.7



mdpi.com/si/139320

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), GEOBASE, PubAg, AGRIS, and other databases.

Journal Rank:

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