



Benefits and Potential Risks of Nanotechnology in Agricultural Systems

Guest Editor:

Prof. Dr. Pavel Horký

Department of Animal Nutrition
and Forage Production Mendel
University in Brno, Zemědělská
1/1665, 613 00 Brno, Czech
Republic

Deadline for manuscript
submissions:

closed (30 September 2021)

Message from the Guest Editor

Nanotechnologies are experiencing great progress. Nanomaterials can completely influence the current view of agricultural production. The use of nanomaterials is also associated with a certain risk. Agricultural systems are very sensitive to external interventions. Therefore, it is necessary to look at nanomaterials critically. Many nanomaterials are used in animal nutrition and are subsequently excreted into the environment. They can form toxic compounds in the environment and damage biodiversity. Research may focus on influencing the soil microbiome in relation to agricultural production. Nanomaterials form different compounds in the soil. These compounds may behave differently in soils than the original material. The big question is the decomposition of nanomaterials in the environment. Nanomaterials can also significantly affect the quality of water resources, which can affect human and animal health. In studies, attention may be focused on tracing nanoparticles in the environment.

The Special Issue welcomes studies focusing on toxicity, microbiome effects, and life cycle monitoring of nanomaterials in agricultural systems. Studies can be in vitro or in vivo.





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