Special Issue

Benefits and Potential Risks of Nanotechnology in Agricultural Systems

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.

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)



an Open Access Journal by MDPI

Impact Factor 3.4 CiteScore 6.7



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

mdpi.com/journal/agronomy





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Editor-in-Chief

Prof. Dr. Leslie A. Weston

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

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