Special Issue

Crop Cultivation Physiology and Farmland Greenhouse Gas Emission Reduction

Message from the Guest Editors

At the farm or field level, multiple agriculture activities on the land interact with one another, playing important roles in crop yield and the biogeochemical cycling of carbon, nitrogen, and other elements and thus affecting soil carbon storage and greenhouse gas (GHG) emissions. The effects of these activities on the agricultural ecosystem can result in synergies or in tradeoffs to obtain the destination of crop yield increase and GHG emission mitigation. To the extent possible, all management decisions must be incorporated in the quantification of a farm's vield formation and GHG impact. This SI focuses on the development and assessment of crop management, crop breeding, and biotechnology advances on the potential synergies of crop yield and GHG emission reduction. The corresponding physiological mechanisms related to this process should be evaluated to advance our understanding on how to mitigate the GHG emission without crop penalty. This SI welcomes highly interdisciplinary quality studies from disparate research fields, including crop management, crop physiology, environment science, and crop growth models. Original research articles and reviews are accepted.

Guest Editors

Prof. Dr. Lijun Liu

College of Agriculture, Yangzhou University, Yangzhou, 225009, China

Prof. Dr. Hao Zhang

College of Agriculture, Yangzhou University, Yangzhou 225009, China

Deadline for manuscript submissions

closed (25 June 2023)



Agriculture

an Open Access Journal by MDPI

Impact Factor 3.6 CiteScore 6.3



mdpi.com/si/120331

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

mdpi.com/journal/agriculture





Agriculture

an Open Access Journal by MDPI

Impact Factor 3.6 CiteScore 6.3



About the Journal

Message from the Editor-in-Chief

Agriculture (ISSN 2077-0472) is an international, scholarly and scientific open access journal publishing peer-reviewed research papers, review articles, communications and short notes that reflect the breadth and interdisciplinarity of agriculture.

Editor-in-Chief

Prof. Dr. Les Copeland

Sydney Institute of Agriculture, School of Life and Environmental Sciences, The University of Sydney, Sydney, NSW 2006, 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, RePEc, and other databases.

Journal Rank:

JCR - Q1 (Agronomy) / CiteScore - Q1 (Plant Science)

