

## 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 yield 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

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### Deadline for manuscript submissions

closed (25 June 2023)



## Agriculture

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## About the Journal

### Message from the Editor-in-Chief

*Agriculture* (ISSN 2077-0472) is an international, cross-disciplinary and scholarly journal on the science and technology of crop and animal production, and management of the natural resource base for agricultural production. We invite submissions from authors according to the aims and scope of the journal described in more detail on this page. *Agriculture* is published in an open access format – articles are published on the journal's website immediately after acceptance, giving the scientific community and the public unlimited and free access to the content.

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### Editor-in-Chief

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