

Special Issue

Development, Management and Application of Models and Databases in Agriculture

Message from the Guest Editors

Crop models and biogeochemical models are widely used to quantify crop yield, net primary production, plant nutrient requirement, soil organic carbon and greenhouse gas emission of croplands and systems' performance due to environmental changes. The development of new methods and the evaluation of existing models against empirical data are crucial steps toward providing useful tools for the agricultural sector. These models are driven by environmental data (most of all meteorological and soil information), while quantification of management plays a major role in the calculations.

We welcome both original research articles and review papers focused on the following topics:

Application of models for agricultural production, for major but even more for minor crops; Development and evaluation of models and procedures, sensitivity and uncertainty assessment;

Creating databases for testing models or parameterizing models;

Model calibration, verification and validation backed up with quantitative results;

Model comparison;

Model development;

Ensemble modeling;

Gridded modeling;

Providing solutions for any crop-modeling-related problems.

Guest Editors

Dr. Klára Pokovai

Department of Soil Physics and Water Management, ISS CAR, Herman O. str. 15., 1022 Budapest, Hungary

Dr. Sándor Molnár

Department of Soil Physics and Water Management, ISS CAR, Herman O. str. 15., 1022 Budapest, Hungary

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

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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.

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

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