



plants



an Open Access Journal by MDPI

Factor-Specific Nutrient Modeling and Management of Agricultural and Forest Crops

Guest Editors:

Prof. Léon Etienne Parent

1. Department of Soils and Agri-Food Engineering, Laval University, Quebec, Canada
2. Department of Soils, Federal University of Santa Maria, Santa Maria - RS, Brazil
Emeritus professor at Université Laval, Québec, Canada, and visiting professor at Universidade Federal de Santa Maria, Rio Grande do Sul, Brazil

Dr. Anoop Kumar Srivastava

Indian Council of Agricultural Research—Indian Agricultural Research Institute, Gogamukh 787034, Assam, India

Deadline for manuscript submissions:

closed (30 June 2021)

Message from the Guest Editors

In this Special Issue, we welcome articles (original research, reviews, modelling approaches, perspectives, opinions) focusing on the integration of factors affecting yield and quality of agricultural crops and the mineral nutrition of forest crops at local scale. Regional nutrient management recommendations often fail at local scale by not accounting for key factor interactions. Environmental and managerial factors, soil and tissue tests, remote and proximate sensing, ionomes of species down to cultivars or hybrids, biofortification and food contamination by trace metals must be addressed in detail to reach accurate predictions of crop performance and environmental quality at local scale. This warrants uniform data collection protocols, ethical data sharing, and large data sets; hence, close collaboration among stakeholders is required to trustfully collect metadata and the results of field trials, laboratory analyses, mapping, and surveys. Machine learning and compositional models are unprecedented tools to process factor interactions and to reach productive soil–plant systems at local scale.



mdpi.com/si/50676

Special Issue



an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Dilantha Fernando
Department of Plant Science,
University of Manitoba, Winnipeg,
MB R3T 2N2, Canada

Message from the Editor-in-Chief

Plants is an open access journal which provides an advanced forum for research findings in areas related to plant function, its physiology, biology, taxonomy, stresses, and its interactions with other organisms. It publishes original research articles, reviews, reports, conference proceedings (peer reviewed full articles) and communications. In original research papers, it is important that full experimental details are provided. We also encourage timely reviews and commentaries on topics of interest to the plant research community.

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), PubMed, PMC, PubAg, AGRIS, CAPlus / SciFinder, and other databases.

Journal Rank: JCR - Q1 (*Plant Sciences*) / CiteScore - Q1 (*Plant Science*)

Contact Us

Plants Editorial Office
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/plants
plants@mdpi.com
[X@Plants_MDPI](https://twitter.com/Plants_MDPI)