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

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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.



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Special Issue



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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.

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