Special Issue

From Phenotyping to Phenomics II—Translation to Agile Agritech Tools for Field Crop and Genebank Material Evaluation

Message from the Guest Editor

The plant phenotype is a complex product driven by plant genetics, growth conditions, environmental factors and their interactions over generations. Whole plants can be phenotyped for their identity, biomass, dry weight or, in some cases, quality. With the advent of better data analytical methods, machine learning and more accurate and lighter sensors, our understanding of the mechanisms of evolution in plant traits during growth has improved dramatically. The epigenetic regulations during growth also impact phenotypes over several generations of germplasm growth in the field. Despite all this progress, there are still challenging traits that are extremely difficult to measure in crop, forage and tree species. Continuous measurement of these traits in the field and under differing conditions would help the advancement of these technologies into reliable field-based agritech tools. This Special Issue in *Plants* will provide insights into the advances in plant phenomics methods and tools, their transferability to the field for large-scale germplasm phenotyping and how environmental factors influence these tools and methods in the field.

Guest Editor

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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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