Special Issue

Emerging Technologies and Tools for Next-Generation Plant Growth Management

Message from the Guest Editors

The advancement in sensing technologies enables acquiring data efficiently with unprecedented resolutions for timely non-destructive monitoring. Emerging technologies such as unattended aerial vehicles (UAVs) coupled with sensor systems are increasingly used to capture crop growth. Together with traditional aerial and satellite-based systems, these systems provide monitoring data at various spatial and temporal scales. More newly developed sensors and data acquisition technologies have been developed to further support crop growth monitoring and yield prediction. Combining new data-processing algorithms (e.g., machine learning and big data architecture) and high-performance computers is expected to generate a better agricultural outcome. We aim to disseminate the latest findings in exploiting emerging technologies for smart agriculture, where its adoption can significantly contribute to decision-making and practical management interventions. It includes, but is not limited to, crop classification; monitoring diseases, pests, weeds, water stress, and nutrient deficiencies; crop modelling; predicting yield potential and its variability; and execution of management interventions.

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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.

Editor-in-Chief

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