# Special Issue

# Precision Crop Farming: Innovations in Sustainable Crop Monitoring and Management

# Message from the Guest Editors

Precision agriculture has become possible due to advancements in software and hardware. These have allowed us to study details and improve all processes and aspects of food production related to plants, animals, the environment, farmers, consumers, etc., which is especially critical given the pressures of climate change, a growing population and political instability. This Special Issue promotes new methods for data collection, decision making and actuation to help improve existing agricultural practices and build a base for proposing new ones. This Special Issue covers, but is not limited to, the following topics:

- The monitoring and treatment of individual crops;
- Sensors and methods for monitoring crop physiology:
- The precise management of crops for livestock;
- Methods for measuring the environmental impact of crops;
- Digital twins of crops;
- New methods for precise soil measurements;
- Modelling crop-weed interactions;
- Precise analysis of experimental growing methods: intercropping, zero-tillage, etc.;
- New non-chemical methods for crop treatments;
- Big data in crop analyses.

### **Guest Editors**

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### Editor-in-Chief

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