Special Issue

Precision Irrigation System: Challenges and Opportunities

Message from the Guest Editors

This Special Issue will examine new knowledge and practical solutions under the theme "Precision Irrigation System: Challenges and Opportunities." We invite contributions on, but not limited to, the following topics:Irrigation scheduling and management: Use of decision support tools, data driven models, and field studies to guide efficient water use.

Image-based analysis for irrigation support: Use of images to detect crop stress, disease, and pest conditions, and to link these observations with irrigation management for more informed decision making and complete view of field management.

New irrigation technologies: Development of sensors, control systems, and water delivery methods that allow detailed monitoring of crop water status and precise application.

Quantitative modeling for irrigation management:
Application of crop models, hydrological models,
machine learning, deep learning, and other data driven
approaches to improve irrigation decisions.
Social and economic perspectives: Cost-benefit
analysis, training needs, cultural factors, and policies
that influence the adoption of precision irrigation.

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Message from the Editor-in-Chief

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