Special Issue

Efficient Water Management in High-Value Crops at Different Spatial Scales

Message from the Guest Editors

Water conservation and management are essential for the sustainability of agroecosystems. In high-value crops like vineyards, nut crops, and fruit trees, these practices are crucial due to their large acreage, diverse growing conditions, and high input demands. Optimizing water use is especially important under current climate conditions, as crop yield, quality, and economic viability largely depend on water availability. This Special Issue aims to collect original and quantitative research on water management in high-value crops (i.e., fruit orchards, olive groves, vineyards, citrus, berries, nut crops, etc.), covering topics such as:

- Research on irrigation strategies (deficit irrigation, partial rootzone drying) to save water while maintaining yield and crop quality, especially when employing alternative water sources;
- Studies on cultural practices that reduce water use in orchards (mulching, cover crops, canopy management, cultivar and rootstock selection);
- Studies on climate change impacts on water availability for high-value crops, in the field or under controlled conditions;
- Works using remote sensing to estimate crop water needs at various scales (plant, orchard, watershed).

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Editor-in-Chief

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