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CCROP-A Web-based Decision Tool Enhances Irrigation and Nutrient Management Decisions
for Container Nursery Managers

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CCROP (Container Crop Resource Optimization Program) is a web-based decision support tool that simulates growth, nutrient, and irrigation requirements of woody ornamental container-grown crops. CCROP is used to assist growers/managers and other industry stakeholders select best management practices that maximize use of water and fertilizer resources and minimize environmental impact. Inputs for CCROP include daily weather data uploaded from the Florida Automated Weather Network (FAWN) as well as critical management practices (e.g. plant date, container size and spacing, fertilizer, pruning, etc.). Outputs include plant growth, evapotranspiration, irrigation requirement, nutrient uptake, and leaching of applied nutrients. A real-time tool recommends daily water application based on resupplying that which is lost through evapotranspiration. Examples of simulations used to choose the best practices to implement and associated costs will be presented and discussed.