

Current Research Objectives

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Research topic: Accelerated production of citrus nursery trees using automated ebb-and-flow subirrigation

Primary Research Objective(s): 1) automate ebb-and-flow subirrigation operation using capacitance soil moisture sensors, 2) evaluate the system performance on plant growth, water and nutrient use, 3) evaluate if subirrigation shorten crop cycle and accelerate citrus nursery propagation time compared to overhead irrigation, and 4) determine water and fertilizer guidelines for different liners (rootstocks).

Research Goal: Study alternatives to accelerate high-quality citrus tree production.

Outcomes to date: subirrigation is accelerating tree growth compared to traditional overhead irrigation method. One large commercial nursery is using the system commercially, with reported positive results.

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