Water Management Strategies for Hedgerow

The 2022 Olive Oil Day presentations began with one by Giulia Marino, UC Cooperative Extension specialist in orchard systems, who gave a report on the "Water management strategies for hedgerow olive orchards in California". This is a 4-year project that will look at how better irrigation can maximize yields, achieve quality objectives and increase resilience to water restrictions.

One aspect of this work has focused on better understanding the water needs of CA oil olives. All the basic water research on olives in CA was done on table olives so establishing these basic water needs for CA oil olives is essential.

The project is using two orchards, one in Corning and one in Stockton. The treatments are a control (the grower's usual irrigation) and three deficit irrigation regimes beginning at pit hardening (80% ET, 25% ET (x2; one will be modified this year). The trees are being extensively monitored: stem water potential, vegetative growth, fruit size and oil yield and quality, and return bloom.

Work for the future includes measuring ET and crop coefficient, characterizing phenological stages of the olive, adding a 4th plant-based irrigation treatment and starting to develop an outreach program for better water management.

A field day to learn more about this research project has been scheduled for June 1 in Stockton—save the date!

Find the full research report here.