

Italian walnut producer, Il Noceto, owns 200Ha of specialised orchards. The soils have a shallow ground water that provides a good supply of water through upward capillary movement. Il Noceto chose to purchase Sentek's EnviroSCAN product as an important decision making support tool to optimally manage water and nutrients.

## Equipment

The Sentek EnviroSCAN probe allows the user to measure soil moisture down the profile at different depths. The agronomist can then access the data via the Internet displayed in real time. Sentek's IrriMAX™ software is used to define the best irrigation strategy.

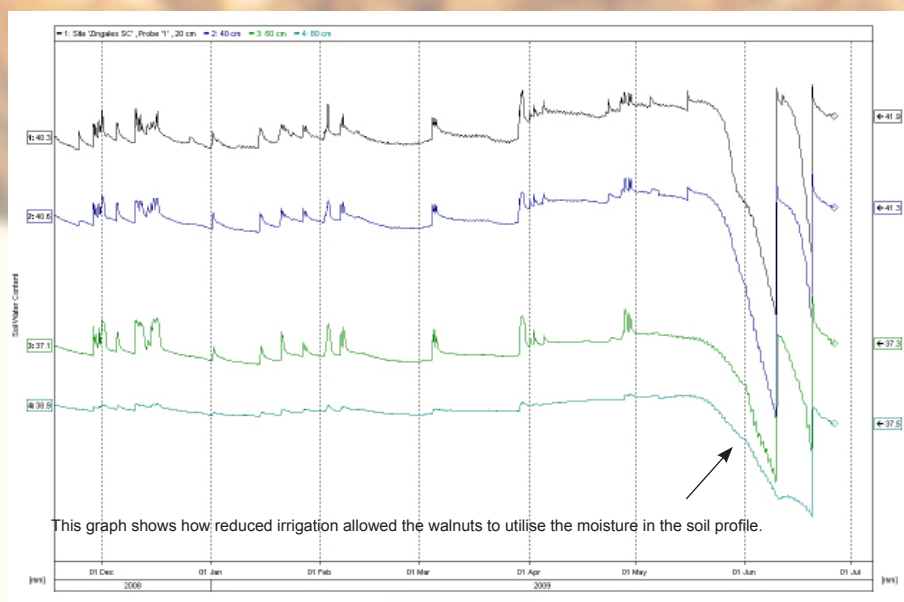
**“The quality of the data influenced the decision to reduce the number of irrigations resulting in increased yield. The equipment was paid for in just one season.”**

*- President of Italian walnut producers, Il Noceto.*

## Results

The use of continuous soil moisture monitoring produced precise information for Il Noceto regarding:

- The depth of the active rootzone
- Infiltration and saturation time
- The water being sourced from ground water by the crop
- The effect of irrigation
- Daily crop water use
- The evapotranspiration rate



This information was used to:

- Avoid the need to irrigate beneath the root zone
- Avoid saturation resulting in plant stress
- **Reduce irrigation by 70%** based on the actual water use of the plant
- Improve crop quality through reduced shrivelling
- Improve yield which more than paid for the equipment in one season