

Third Generation Citrus Grower Commanding Water Efficiency with EnviroSCAN®

A significant reduction in water use, a saving of 50 pumping hours, and up to 40 hours reduction in labour has led Steve Lang to proclaim:

'EnviroSCAN® is the best on the market...look ahead to tomorrow.'

South Australian citrus grower Steve Lang reports these as three of the benefits attributed to the use of EnviroSCAN®, Sentek's continuous soil moisture monitoring system.

Steve and his wife Jacqui own and operate the 'Wiela' property in South Australia's Riverland. The farm has over 70 hectares with a range of citrus varieties and has been in the Lang family for three generations. Throughout his lifetime Steve has witnessed a myriad of change in irrigation methods and management and has himself pioneered irrigation monitoring for best practice irrigation on the family farm.

Steve's purchase of his EnviroSCAN® system was a major strategic step forward in managing water resources on his property and was a calculated effort to maximise water resources while also maximising returns.

EnviroSCAN®

Sentek's flagship product, EnviroSCAN® has become the most widely used continuously logging, irrigation management tool in Australia. The EnviroSCAN® is a complete and stand alone soil moisture monitoring solution. The data obtained by the EnviroSCAN® sensors is collected by a central logger and then downloaded by the grower through a variety of telemetry methods. The EnviroSCAN® software program converts this information into graphical form to give growers a better understanding of moisture levels in the soil profile.

Yield Results

By using the EnviroSCAN®, Steve has optimised his water use and as a result, along with favourable environmental factors, experienced an increase in crop yield totaling 28T/ha over 4 years. This increase was experienced in just one crop of Washington navels. Steve highlights the importance of an improved irrigation schedule for placement and retention of fertiliser in the rootzone and attributes much of the quality increase to the correct management and application of an improved nutritional program.

Labour Savings

Depending on climactic conditions such as rainfall and temperature, Steve was able to save up to 40 hours per week on irrigation related matters using an irrigation schedule based on data from the EnviroSCAN®.

Water Economy

The data collected by EnviroSCAN® indicated to Steve that while the frequency of irrigation for navel oranges needed to be maintained, the overall volume of water per irrigation could be significantly reduced. The reduction in the volume resulted in 50 hours being slashed from the pumping time compared to the previous seasons - "a huge saving".

The information from EnviroSCAN® allows Steve to fine tune irrigations across a range of varieties and growing conditions. The savings in both water and power highlight the advantages of this feature. As Steve says:

'Watering at the right time results in less water stress, which leads to larger fruit, which is a financial advantage in the citrus industry.'

Flexibility and Saving Time

As a busy grower, Steve needs to be able to access his data when it is convenient for him. The flexibility of EnviroSCAN® allows Steve to download when he needs to, allowing for effective time management. As Steve states:

'I can download [the data in the morning] and plan my whole day...without having to rely on information coming through at 5pm in the afternoon.'

Grower's Thoughts

Steve's commitment to water conservation has led him to adopt an undertree irrigation system, with the soil water content continuously monitored by the EnviroSCAN® system.

Since installing the EnviroSCAN®, Steve has clear and accurate information on plant water usage that, in Steve's words, has:

'Taken the guesswork out of how much water the plant requires.'

As for other growers, Steve recommends that if they want to stay ahead of the market, they need to invest in the best technology.

For more information on the EnviroSCAN® or Sentek product range, please contact marketing@sentek.com.au.

Acknowledgements

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