



OptiCropTM

A CLEARVUE COMPANY

INNOVATING THE CLIMATE CONTROL LANDSCAPE

Root-Zone Temperature
Optimization Technology

COFFEE PROJECT IN DUBAI



Opticrop Pty Ltd

A LEADER IN SUSTAINABLE AGRICULTURAL TECHNOLOGIES



Headquartered in Australia, OptiCrop is a wholly owned subsidiary of ClearVue Technologies Ltd (ASX: CPV), dedicated to integrating groundbreaking agricultural solutions with next-generation solar greenhouse technology.

OptiCrop is at the forefront of sustainable agricultural innovation, leveraging advanced technologies to optimize plant growth, improve water efficiency, and enhance crop resilience in challenging environments.

Root Zone Temperature Optimization (RZTO): by heating or cooling roots, farmers can significantly increase crop yields in an economical way.

Irrigation By Condensation (IBC) allows growing crops in arid areas, off the grid and without additional irrigation.

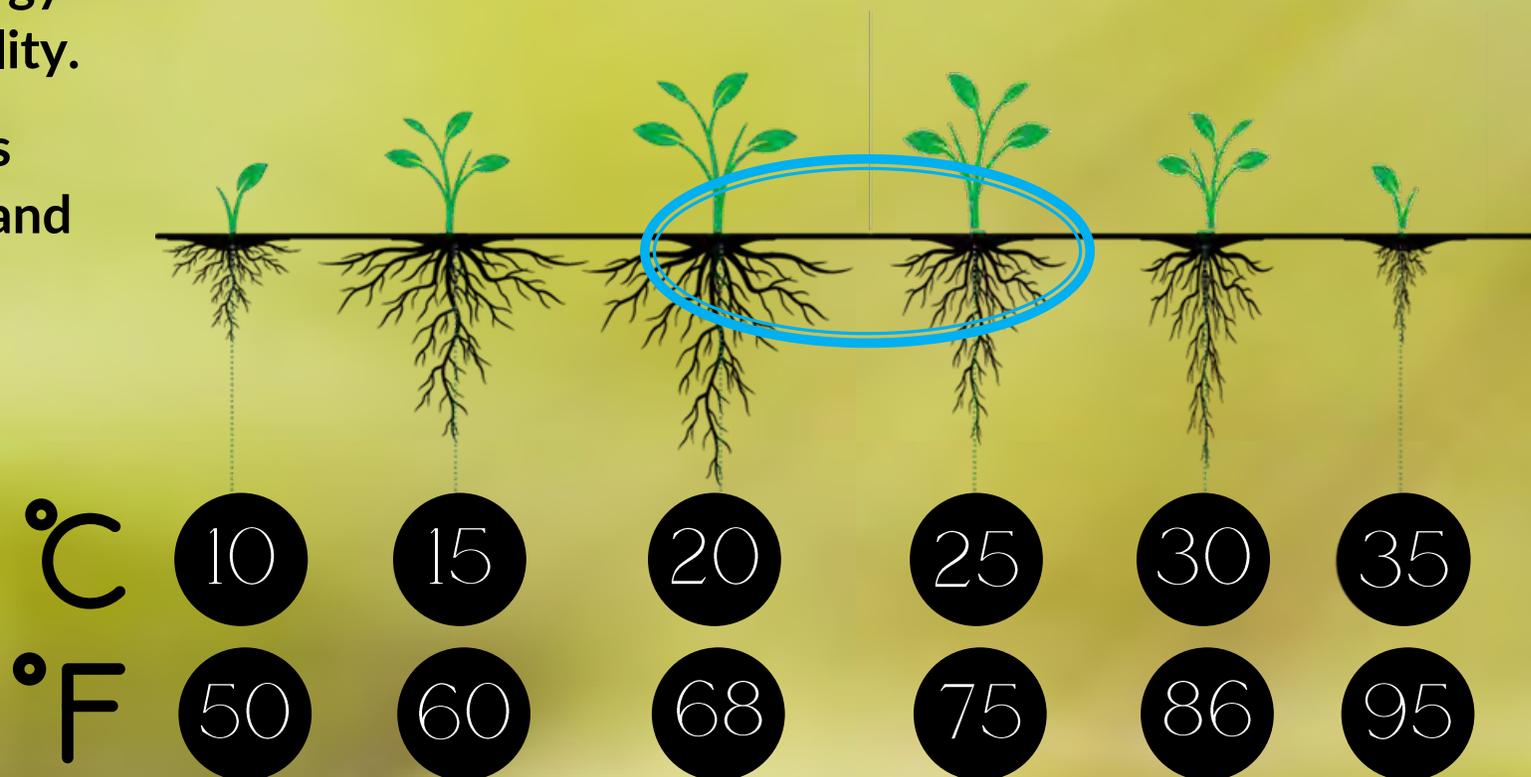
OptiCrop ag tech helps increase yield, save energy and water, and shorten growing cycles. We have the range of products to achieve food security and improve food production in various climatic zones.



Root Temperatures

Root temperatures is the most influential factor in plant physiology for growth, productivity, and quality.

An optimum temperature range is essential to productivity, health, and output quality.

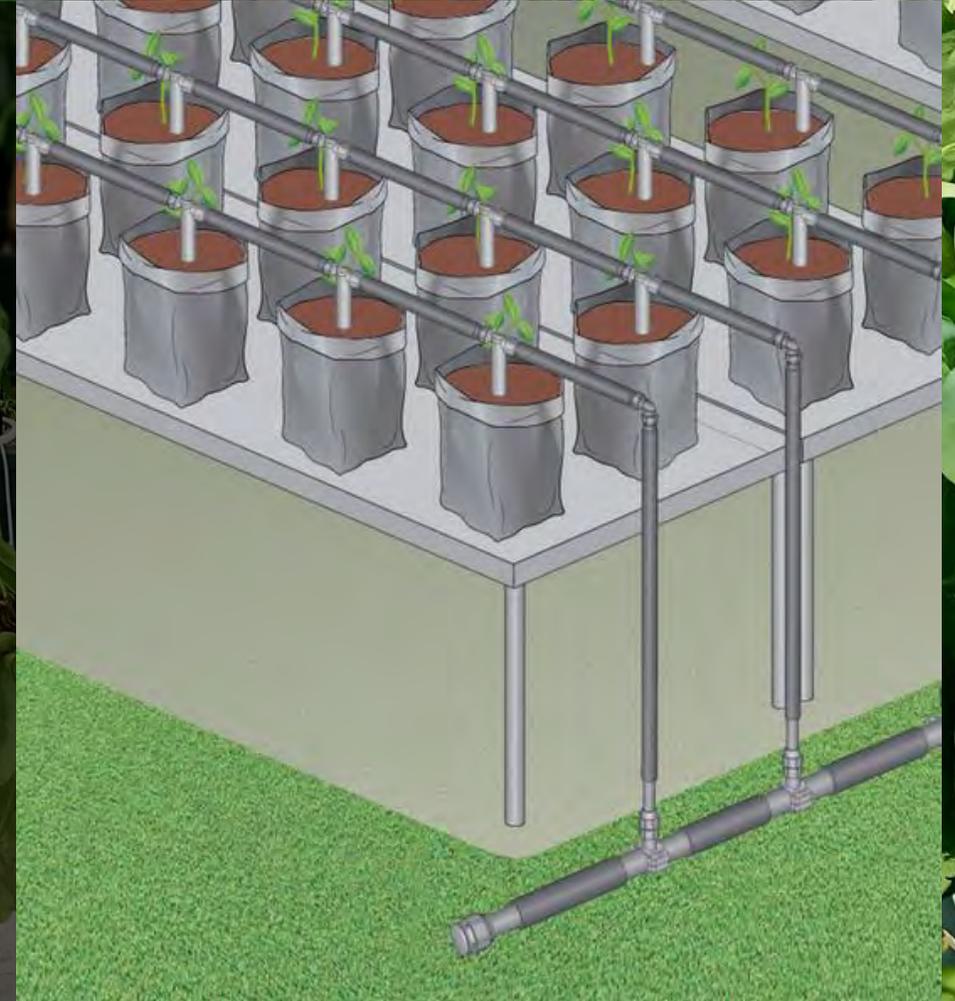




Coffee Project in Dubai



We installed 18,000 HEPs in 9000 coffee plants,
2 HEPs per plant.
Temperature target in the system is 22 deg Celcius.
The temperature is regulated using 2 heat-pumps.

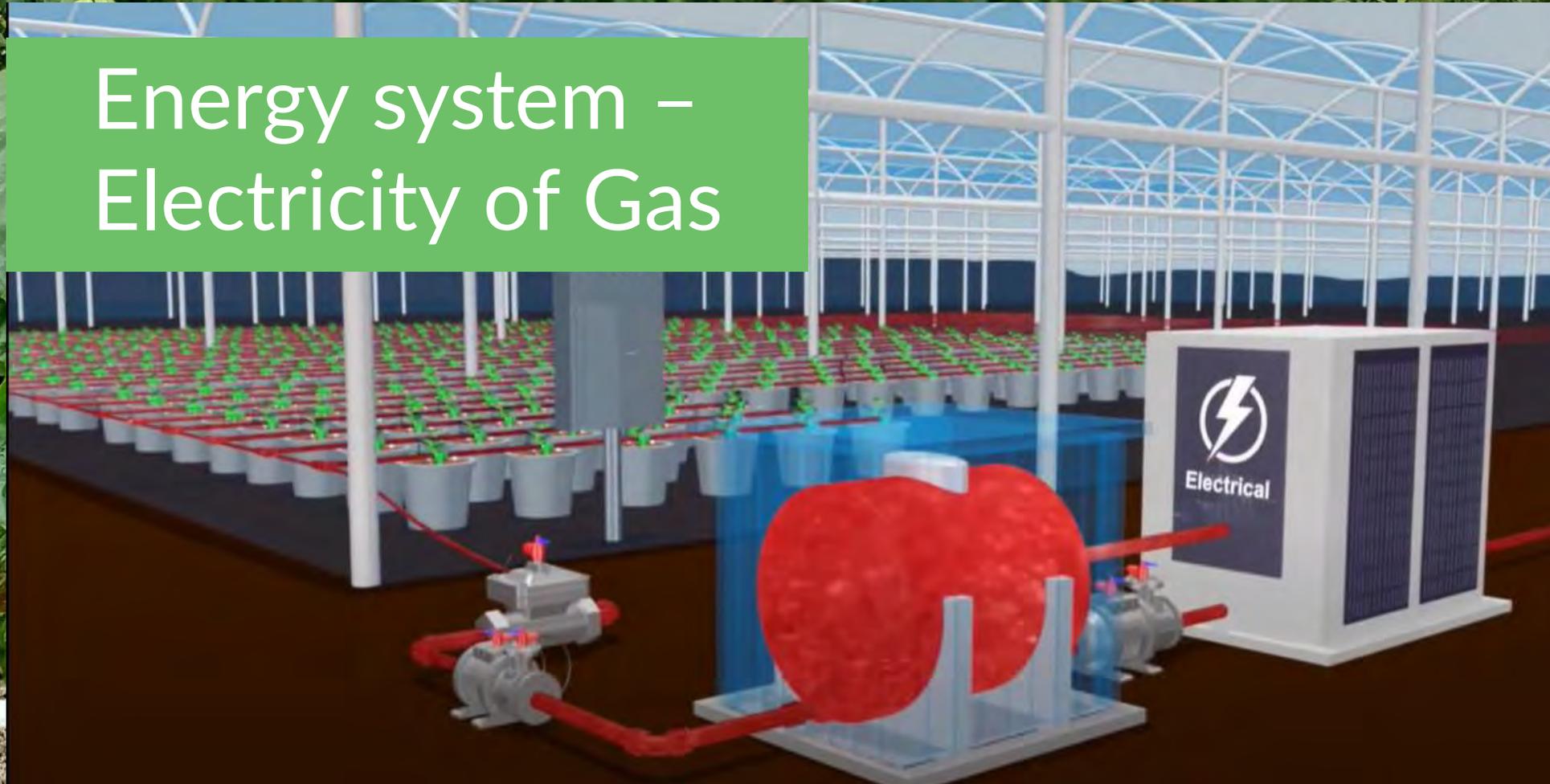


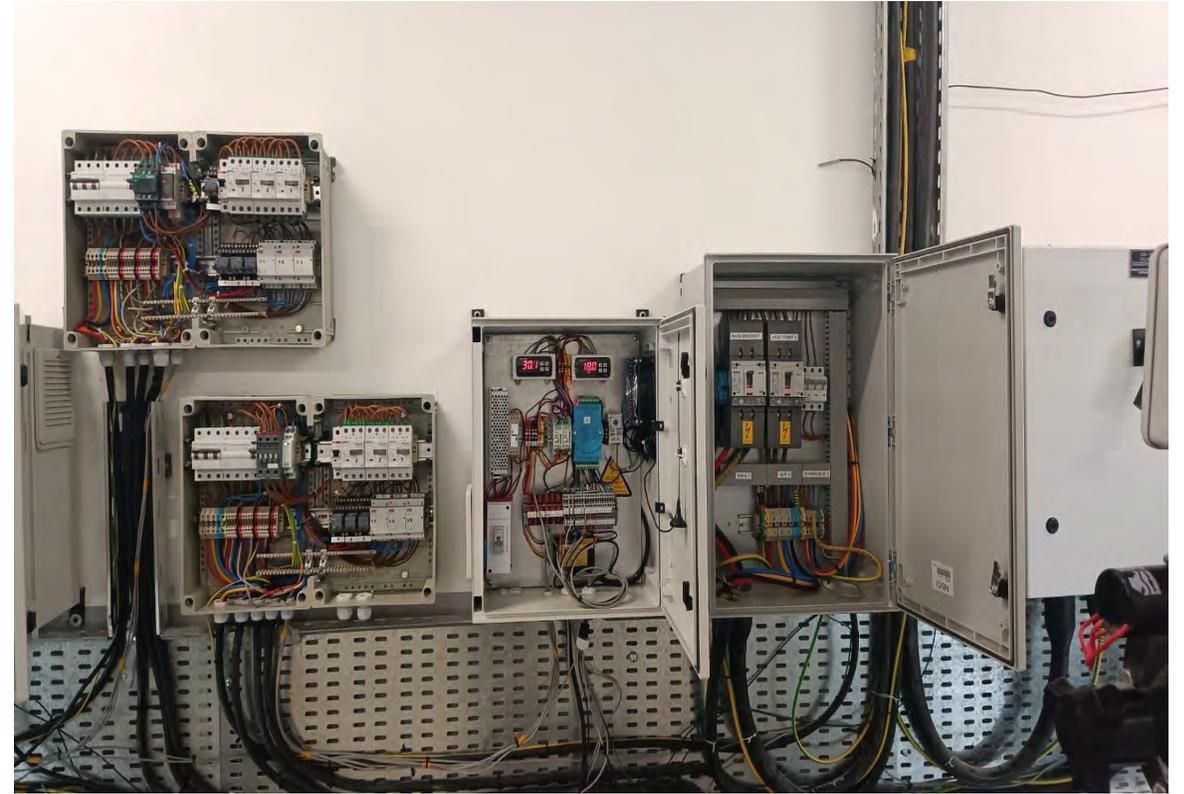


How does it work?



Energy system – Electricity of Gas





Chillers used for maintaining cooled and optimal root zone temperatures in very hot air temperatures



How does it work?



- We install efficient heat pumps for root zone heating and cooling, operated either with electricity or gas
- The system is a closed-loop, one time water fill up roots zone area cooling or heating system
- The heat pump produces a stable range of roots zone temperature year-round

Systems configurations come with monitoring and control equipment available for viewing in app on mobile phone and PC.

System head

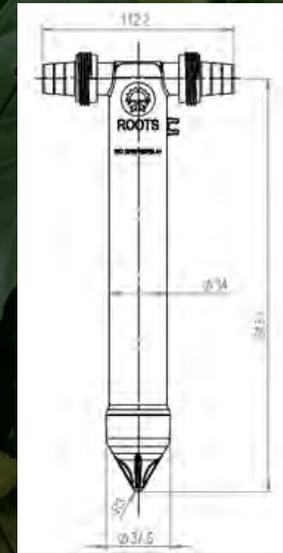




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Roots' HEP (Heat Exchange Probe) is covered by OptiCrop patent. The HEP unique design is use for heat exchange in any substrate, heating or cooling as needed.





First week of growing post RZTO installation





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Installation was done by **Elite agro project LTD** with on-site supervision of our technical team

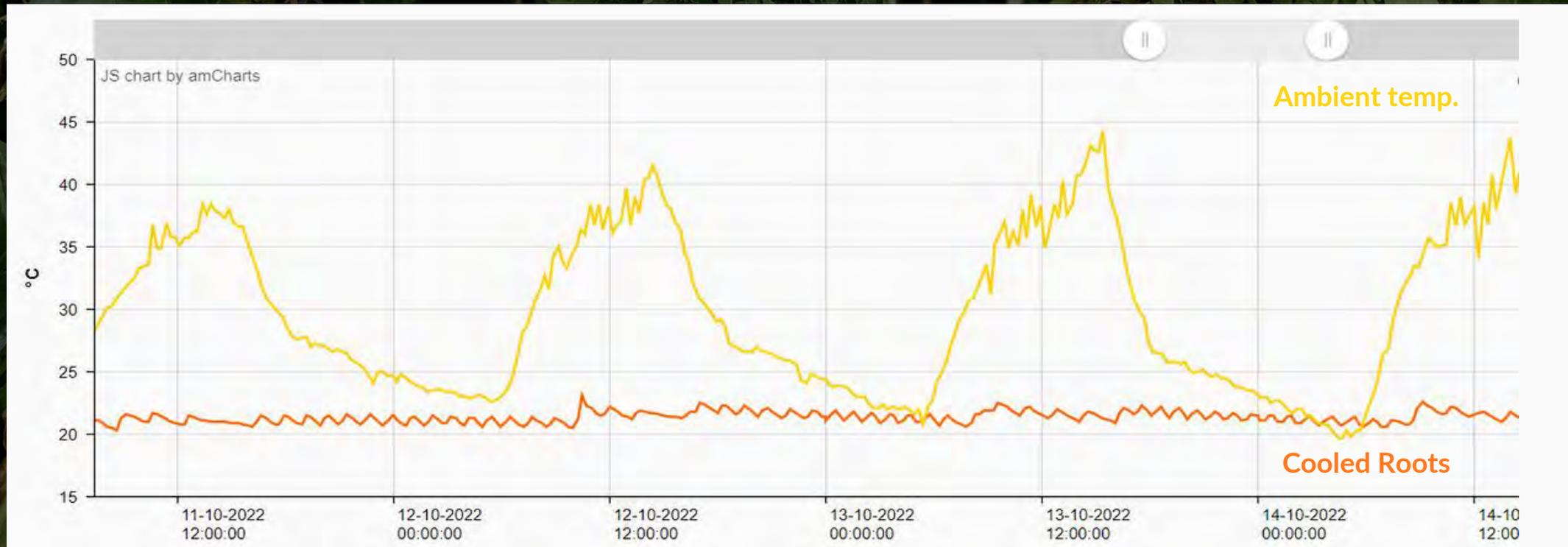




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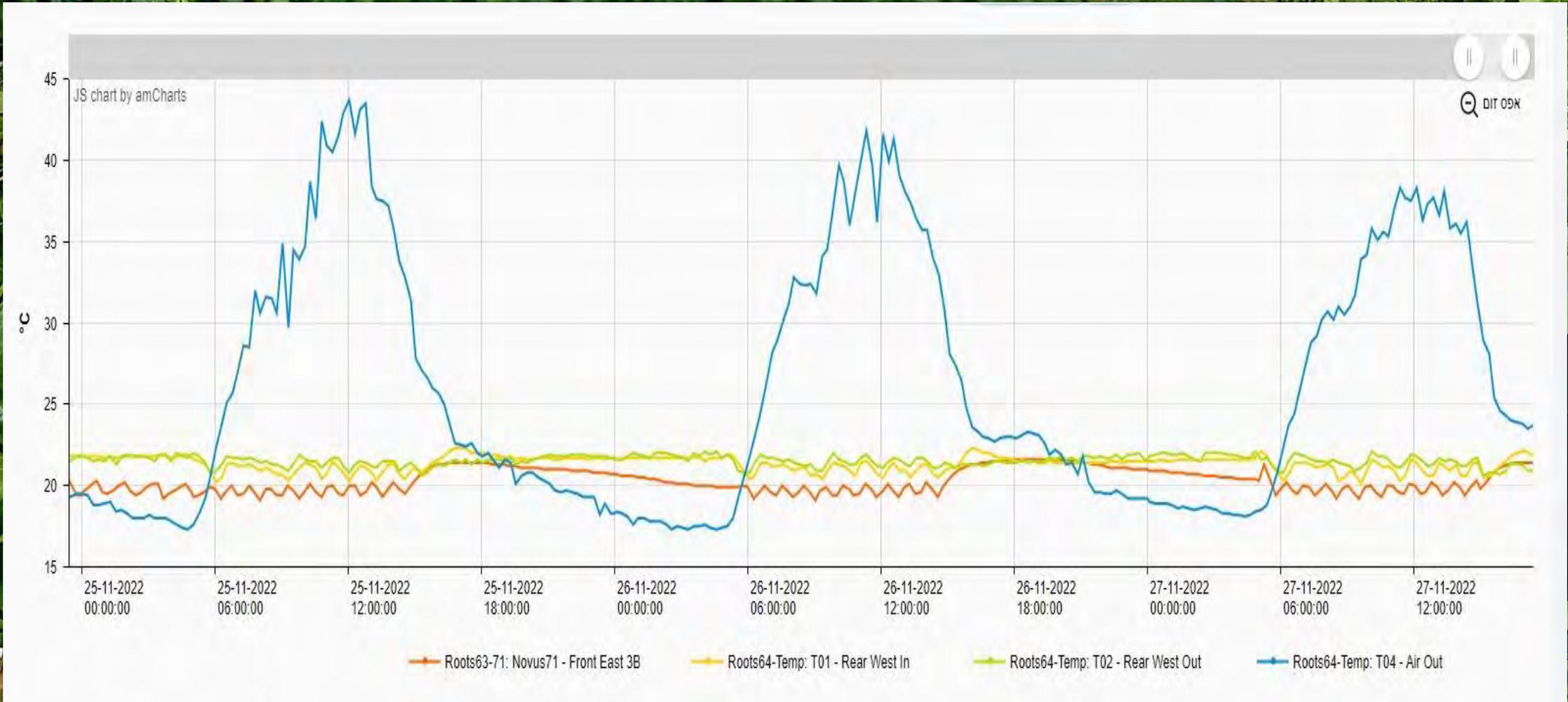


Up to 22°C differences between heated roots and air temp
Roots temp regulated to steady 20-22°C





Coffee Project in Dubai





Maintaining cooled and stable (20-24 DC) root zone temperature even under 49 DC air temp. in the green house





We offer a separate system to control the irrigation water temperatures (separately) or combined with liquid fertilizer supplied via the irrigation water

THANK YOU

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