OptiCrop™

A CLEARVUE COMPANY

INNOVATING THE CLIMATE CONTROL LANDSCAPE

Root Zone Temperature Optimization Technology for Basil

Opticrop Pty Ltd

A LEADER IN SUSTAINABLE AGRICULTURAL TECHNOLOGIES

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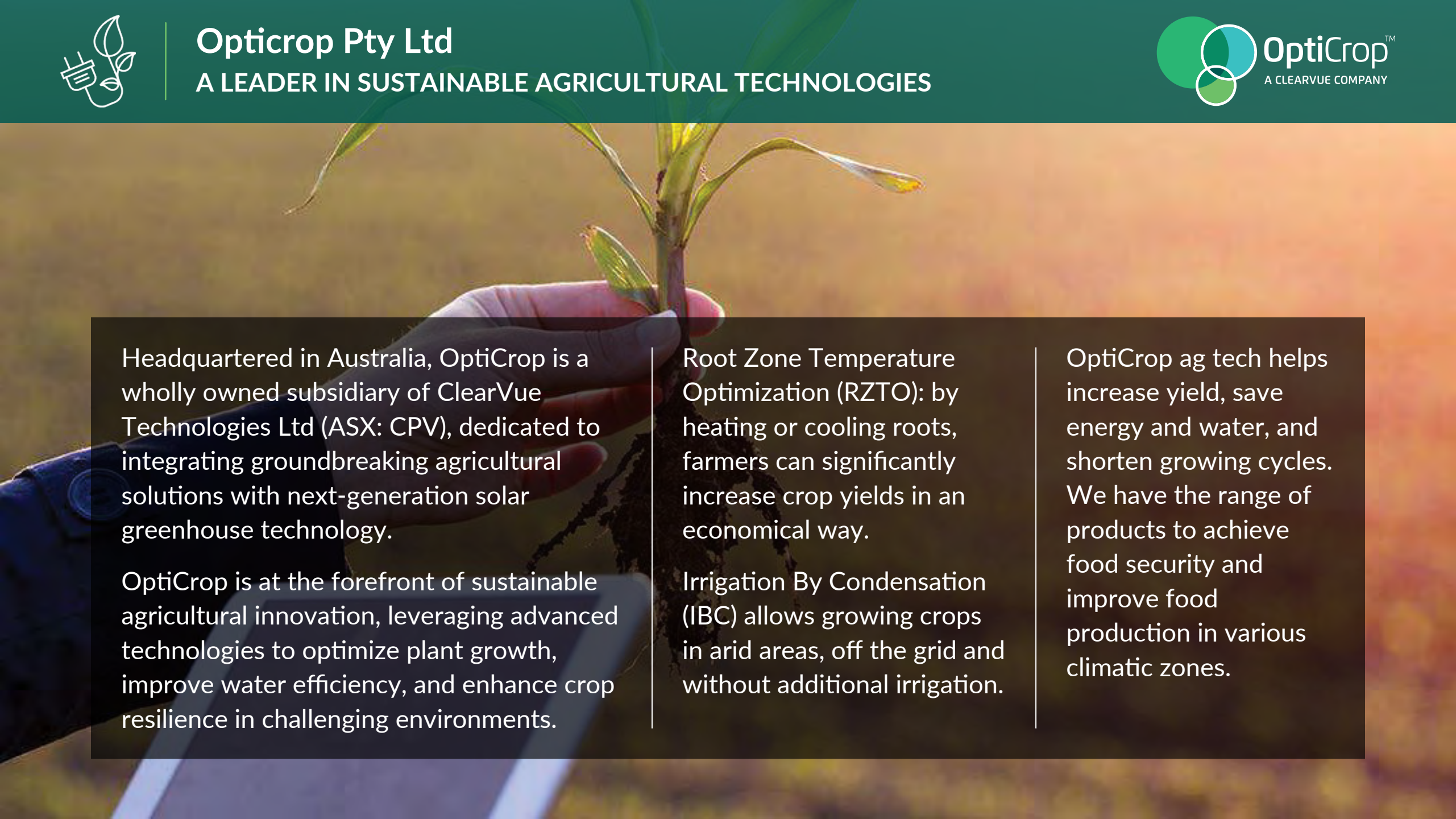

Headquartered in Australia, OptiCrop is a wholly owned subsidiary of ClearVue Technologies Ltd (ASX: CPV), dedicated to integrating groundbreaking agricultural solutions with next-generation solar greenhouse technology.

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

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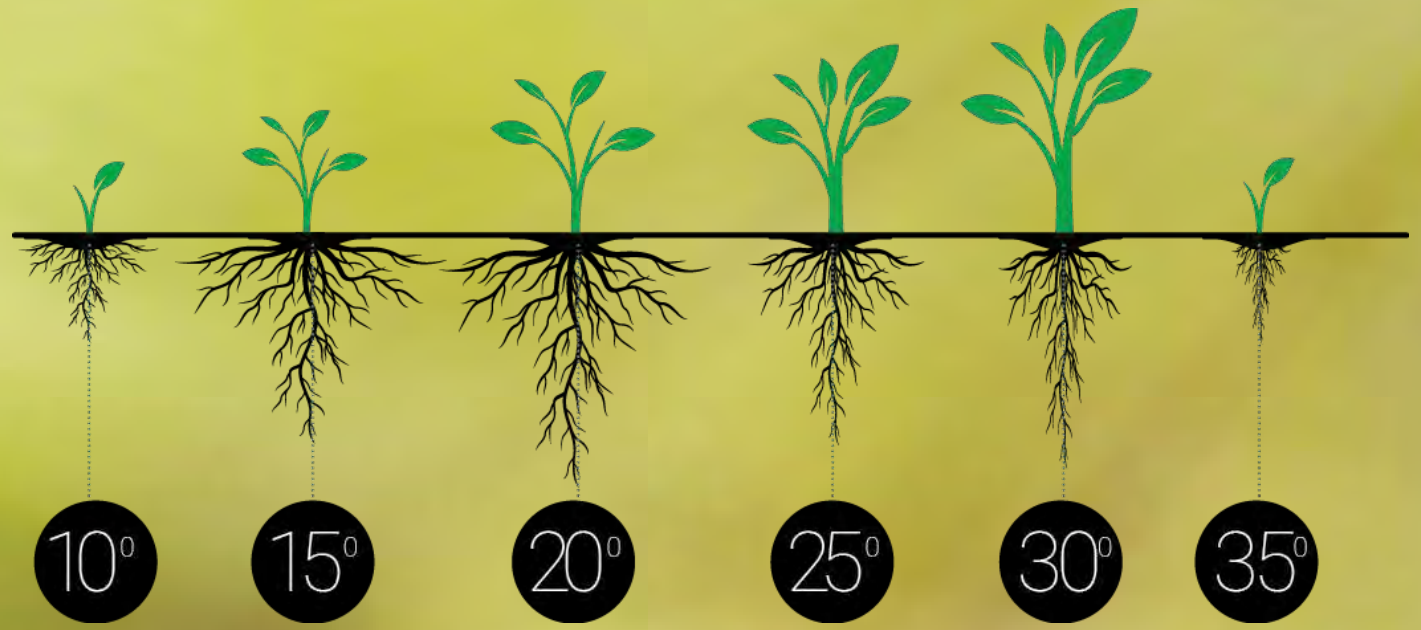
Root temperature is the most influential factor in plant physiology for growth, productivity, and quality.

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



Root-Zone Temperature Optimisation Technology for Basil: Summary

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66%
yield increase

35% increase
in plant size

Energy efficient

Greater resistance
to diseases

Suitable for
any substrate

Applicable for indoors,
greenhouses, hoop

Remote control PC
and mobile viewing

Heating and cooling of roots
in one closed cycle sytem

RESULTS
During wintertime, centre of Israel

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UP TO
10°C

difference between heated roots and unheated roots

RESULTS
During wintertime, centre of Israel

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Heated roots
vs. control
(unheated) roots

CONTROL

HEATED

RESULTS
10 days from planting

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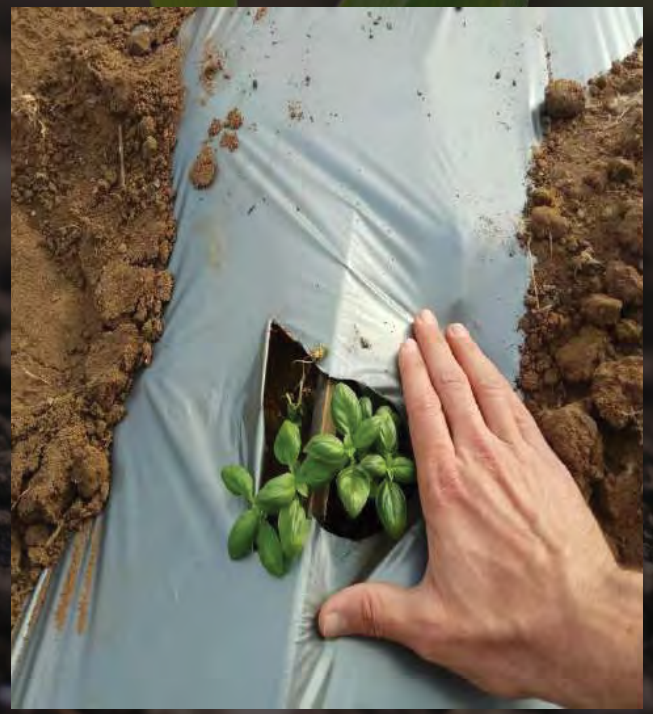
Plants size:

Heated roots
vs. control
(unheated) roots



CONTROL

HEATED

RESULTS
30 days from planting

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Comparing the size of heated roots vs. control (unheated) roots

CONTROL

HEATED

RESULTS
39 days from planting

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Comparing yield:

Heated roots
vs. control
(unheated) roots

CONTROL

HEATED

Innovating the climate control landscape

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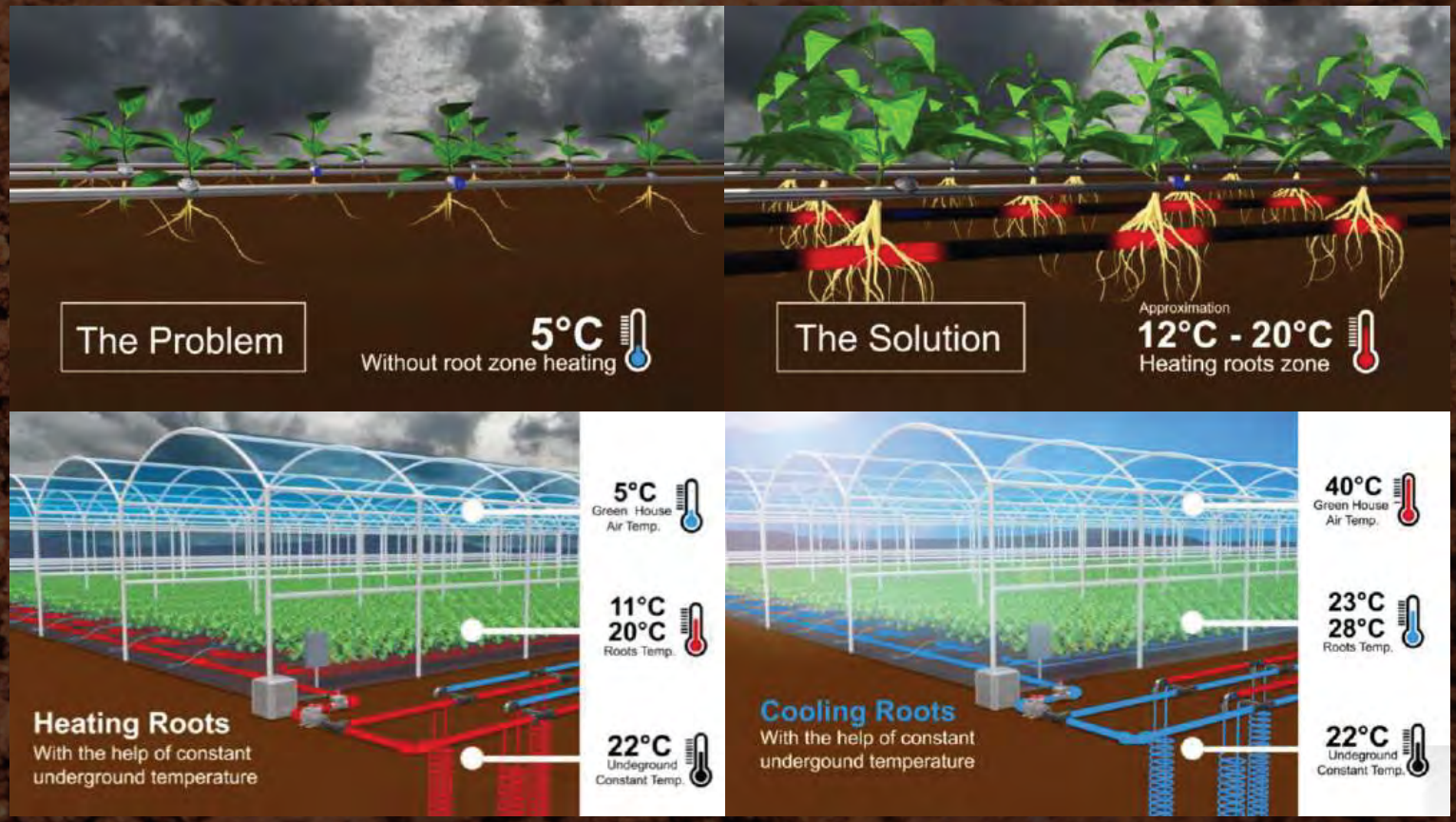
OptiCrop's technology is heating and cooling the roots zone year-round

CLICK HERE TO VIEW TECHNOLOGY VIDEO



How does it work?

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CONFIGURATION A:

Heat pump

We install efficient heat pumps for root zone heating and cooling, remotely controlled operated either with electricity or gas.

CONFIGURATION B:

Ground source heat exchange (also called Geothermal)

Inserted coils pipe in soil at 10 meters for heat exchange between water in the coils and soil at depth. Stable water temperature of water emerges from the underground exchange discharged near roots in any substrate. The only energy used to cool or heat by up to 10 degrees vs. control is a circulation pump.

CONFIGURATION C:

Hybrid – Inserted Geothermal coils + heat pump

For more accurate and influential results under more extreme weather conditions. Slightly more energy use compared with the basic configuration.

All three configurations come with a stable monitoring and control equipment available for viewing in app on mobile phone and PC.

Suitable for any substrate

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OptiCrop's proprietary stub enables producers to stabilise pot and grow bag soil temperatures year-round, increases pot maneuverability as well as significantly reduce costs associated with RZTO installation.

Heat exchange stub for various substrates – saves on entering the pots or grow bags from the side and allows free movement of the pots and substrates just by lifting the stub.

THANK YOU

OptiCrop Pty Ltd

Suite 9, 567 Newcastle Street
West Perth, Western Australia 6005

+61 8 9220 9020

www.opticrop.ag

hello@opticrop.ag

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