



# TARGETING THE ROOTS' ZONE INSTEAD OF THE CANOPY:



HEATING AND COOLING ROOT ZONE TO INCREASE YIELD,  
SAVE ENERGY, SHORTEN GROWING  
CYCLES AND IMPROVE FARMER'S PROFITABILITY



## ABOUT US

Australian-listed and Israeli based, Roots Sustainable Agricultural Technologies Ltd (ASX: ROO) is commercialising worldwide its disruptive, modular, cutting-edge technologies.

## LEADING TECHNOLOGIES

- \* Root Zone Temperature Optimisation (RZTO): Two- in-one root zone heating and cooling
- \* Irrigation by Condensation (IBC): Electric or solar powered irrigation by condensation technology

## ROOTS' VISION

ROOTS' vision is to help farmers increase yield and provide production security to meet the growing global demand for food and water.



**ROOTS**  
Sustainable Agricultural  
Technologies Ltd.

# ROOT ZONE TEMPERATURE OPTIMIZATION (RZTO) TECHNOLOGY

\*CLICK HERE TO VIEW  
TECHNOLOGY'S VIDEO



Root temperatures influence all parameters of the plant's physiology and an optimum RZT range is essential for a plant's robust growth, productivity and quality.

**The RZTO technology** is a closed loop system exchanging heat in water flowing between underground inserted coils and root zone area. The results of RZT optimization: significant yield increase (20-80% in most cases), better quality, shorter growing cycles, off season planting, reduction in air climate control expenditures, low environmental signature.

✱ **NOTE:** At times, a hybrid system with GSHE coils and efficient heat pump is used in conjunction.

## TECHNOLOGY'S ADVANTAGES



**INCREASE OF  
YIELD QUANTITY  
AND QUALITY**



**FASTER  
GROWTH  
CYCLES**



**SUBSTANTIAL  
ENERGY  
SAVINGS**



**ADDITIONAL  
PROFITABILITY  
PREMIUM PRICES**



**IMPROVES  
UNIFORMITY AND  
SUPPLY SECURITY**

## CLICKABLE CASE STUDIES



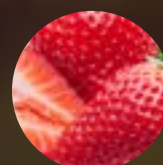
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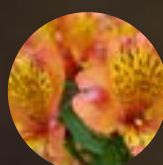
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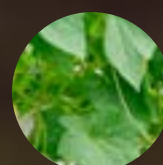
LETTUCE



STRAWBERRY



FLOWERS



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