Innovating the Climate Control Landscape

Root-Zone Temperature Optimization Technology
What is RZT technology?

Root Zone Temperature (RZT) is a micro-climate control agricultural system that relies on proprietary Ground Source Heat Exchange (GSHE) and/or heat pumps for optimization of root-zone temperatures year round.

The results: providing cost-effective, greater crop yield, better quality and dramatic energy savings, compared with other climate control technologies.

The RZT is a single system for heating & cooling.

For more details, www.rootssat.com
Heating Strawberries Substrate
Heating Israeli Strawberry (*)

The system was able to maintain stable root temperatures near the roots during cold winter nights.

(*) Israeli strawberry breeder, Center of Israel, GSHE only
Soil temperature in elevated strawberry sleeves, experimental Vs. control, recorded max. temperature difference 10.8°C (at 1.2°C air temperature)

ΔT = 10°C

Green – heated roots, Blue - control roots, Red - Air temp

(*)Israeli strawberry breeder, Center of Israel, GSHE only
Heating Israeli Strawberry (*)

- Less deformations
- No need of additional heating
- Average production increase 25%
- Early maturity

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