

ASX and MEDIA RELEASE

1 November 2018

Roots obtains first RZTO sale in the lucrative medical cannabis market

- **Roots has secured the first sale of its Cannabis Roots Zone Temperature Optimisation (RZTO) technology in the ag-tech sector.**
- **Initial AU\$47,000 order involves Roots installing its RZTO technology for heating/ cooling in four areas within the greenhouse.**
- **Showcases the relevancy of the RZTO system on numerous crops and conditions.**
- **Supports company's marketing strategy of initial pilots on select crops, followed by commercial orders.**

Roots Sustainable Agricultural Technologies Limited (ASX: ROO, Roots or Company) has secured the first sale of its Root Zone Temperature Optimisation (RZTO) heating and cooling technology in the ag-tech sector serving the lucrative medical cannabis market.

The sale in central Israel, a fully legal medical cannabis jurisdiction, follows promising interim proof of concept cooling results on medicinal cannabis planted in greenhouses in July, where cooled plants achieved a substantial increase in plant size and stem diameter compared to control crops in just two months.

During the world-first proof of concept on medicinal cannabis in northern Israel, Roots' RZTO cooling system was used to keep the root zone of cannabis plants at more than 7 degrees below the root zones of the control crops and kept a favorable temperature range.

Valued at AU\$47,000, the initial order involves Roots installing its RZTO heating technology in four areas within the greenhouse: plant quarantine, mother plant, rooting greenhouse and growing-tables.

Dr Sharon Devir, CEO and co-founder said, "By providing a micro-climate control system, Roots' first sale to the local cannabis sector so soon after the interim results were published highlights the sizeable opportunity this market presents for our heating and cooling technology. We expect this order will be the first of many as we continue to demonstrate the benefits of root zone heating and cooling on cannabis crops in varying climates and growing conditions."

"This sale is a good example of the versatility and adaptability of Roots' RZTO system on various crops, in protected agricultural as well as in open fields. It supports our step-by-step pilot-to-sales marketing approach of conducting pilots on select crops in various conditions to prove its efficiency. A hybrid system, it will comprise of ground source heat exchange coils and a heat pump to heat the roots during winter and cool them in summer using very little energy at a fraction of the cost compared with traditional air heating and cooling systems. We believe this sale will support a growing body of evidence that our technology provides optimal growing conditions essential for achieving high yield and healthy plants."



“The medicinal cannabis sector is expected to reach US\$31 billion¹ in sales globally over the next four years. Utilising RZTO technology allows growers to provide optimal growing conditions for demanding cannabis plants, increasing profitability while reducing energy use.”

About Roots Sustainable Agricultural Technologies Ltd:

Israeli-based, Roots Sustainable Agricultural Technologies Ltd. is developing and commercialising disruptive, modular, cutting-edge technologies to address critical problems faced by agriculture today, including plant climate management and the shortage of water for irrigation. Roots has developed proprietary know-how and patents to optimise performance, lower installation costs, and reduce energy consumption to bring maximum benefit to farmers through their two-in-one root zone heating and cooling technology and off the grid irrigation by condensation technology.

Roots is a graduate company of the Office of the Israeli Chief Scientist Technological Incubator program.

More information www.Rootssat.com

About Root Zone Temperature Optimization (RZTO):

Root Zone Temperature Optimization (RZTO) optimises plant physiology for increased growth, health, productivity and quality by stabilising the plant’s root zone temperature. Leveraging the principle of Ground Source Heat Exchange (GSHE), Roots installs a closed-loop system of underground coils for heat charging and pipes at the root zone area for heat discharging. The lower part is installed at a depth where soil temperature is stable year-round and not affected by weather extremes, and the upper part in the target crop’s root zone just below the soil surface. The water discharged at the lower coils, heats (or cools) the crop roots, depending on the season.

By stabilising and optimising the root zone temperature with very little energy use, the technology significantly increases yields, improves quality, mitigates extreme heat and cold stress and allows for off-season planting and growing.

-ENDS-

Investor Enquiries:

Justin Foord
Market Eye
E: Justin.foord@marketeye.com.au
P: +61 2 8097 1200

Media Enquiries:

Tristan Everett
Market Eye
E: tristan.everett@marketeye.com.au
P: +61 403 789 096

Corporate Enquiries:

EverBlu Capital
E: info@everblucapital.com
P: +61 2 8249 0000