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# Roots launch new small-scale Root Zone Temperature Optimisation (RZTO) system to target new markets and home food gardeners

## Highlights:

- Targeted at new International dealers, strategic and private customers to simultaneously introduce Roots technology in multiple jurisdictions
- Designed to assist the growing numbers of small-scale private food gardeners and communal gardens to grow food crops and adopt the plants to local weather conditions
- The smaller scale RZTO systems are a plug and play, DIY focused products
  - Utilises second generation, proven and proprietary RZTO systems for optimum root zone temperatures, greater food security and a lower carbon footprint
- Home food gardening sector a rapidly growing market, in part due to the COVID-19 pandemic and health enhancement dynamics
- Selling DIY root zone technology is in line with the Company's response to the COVID-19 pandemic with strategy around limited global shipping and transportation
- Initial sales focus on large addressable markets in Europe and the USA

Roots Sustainable Agricultural Technologies Limited (ASX: ROO, "Roots" or "the Company") is pleased to advise that it has launched a new, small scale Root Zone Temperature Optimization (RZTO) system to target home owners with gardens. The new system is designed to assist home gardeners and growers to grow food and ornamentals under local weather conditions, delivering greater food security and superior crop quality.

The system utilises the same design and intellectual property as the Company's proprietary RZTO technology. It has a small, easy to operate electric heat exchange pump, circulation pump, and can be used with 30 heat exchange probes for insertion into pots, grow bags, or straight into the soil.

This new system caters specifically to the rapidly growing home food gardening market and can be used in a variety of settings for privately owned and small-scale communal food production gardens, as well as ornamentals.

The system is designed to provide greater food security to gardeners and growers. By maintaining optimal root zone temperature year-round, it allows food and ornamentals to be grown through periods of extreme hot or cold weather. This allows for food production to take place locally, without the use of harmful



pesticides and long-distance freighting. It also reduces greenhouse emissions and establishes a lower carbon footprint in communities.

The launch of the new system provides a valuable entry point into the emerging market for home food growing. As more consumers have faced challenges associated with lockdowns during the COVID-19 pandemic, it has led to a significant increase in the number of individuals participating in food gardening activities, with over 25% of consumers in the key US market planting a food garden due to the pandemic<sup>i</sup>. In Australia, over half (52%) of all households are growing some of their own food with a further 13% reporting they intend to start<sup>ii</sup>.

This supports the extensive market research and R&D initiatives undertaken by the company to develop the system, including rigorous tests under various weather conditions to determine the efficiency and effectiveness against a range of extreme growing conditions. The competitive pricing assures a low barrier of entry and opens board markets for the Company compared with large agricultural projects, Roots primary market to date.





Images: Roots' new small scale RZTO system and heat exchange stub

**Roots Executive Chairman and CEO, Boaz Wachtel said:** "It's very pleasing to see the hard work and development come together to launch our plug and play, small scale RZTO system, another revolutionary product aimed at solving the challenges of global food security. Designed for use in private and communal gardens, the new system utilises our proven technology and opens untapped markets for Roots, significantly reducing the barriers of entry for consumers.

"Initially, the Company will focus on high density areas across Europe and USA, where consumers are engaging with the natural world around them and the benefits that home food gardens provide. We look forward to leveraging our new technology and scaling up our offerings further. We are confident that sales of this and our existing RZTO offering will materialise in the coming months."

#### -ENDS-

#### **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 management of plant's root zone temperatures 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, productivity and quality by stabilising the plant's root zone temperature. Using Ground source heat exchange (GSHE) installations either alone, or in combination with heat pumps, or with heat pumps alone, ROOTS is able to provide accurate range of root zone temperatures for farmer and the plants to obtain the multiple benefits.

This significantly increases yields, increases growing cycle planting options, improves quality, mitigates extreme heat and cold stress while significantly reducing energy consumption by stabilising and optimising the ROOTS zone temperature.

#### **Corporate Enquiries:**

EverBlu Capital

E: info@everblucapital.com

P: +61 2 8249 0000

Released through: Henry Jordan, Six Degrees Investor Relations, +61 (0) 431 271 538

This announcement was authorised to be given to the ASX by the Board of Roots Sustainable Agricultural Technologies Limited.

#### **Forward looking statements**

This announcement contains forward-looking statements with respect to ROOTS and its respective operations, strategy, investments, financial performance and condition. These statements generally can be identified by use of forward-looking words such as "may", "will", "expect", "estimate", "anticipate", "intends", "believe" or "continue" or the negative thereof or similar variations.

The actual results and performance of ROOTS could differ materially from those expressed or implied by such statements. Such statements are qualified in their entirety by the inherent risks and uncertainties surrounding future expectations. Some important factors that could cause actual results to differ materially from expectations include, among other things, general economic and market factors, competition and government regulation.

The cautionary statements qualify all forward-looking statements attributable to ROOTS and persons acting on its behalf. Unless otherwise stated, all forward-looking statements speak only as of the date of this announcement and ROOTS has no obligation to up-date such statements, except to the extent required by applicable laws.

<sup>&</sup>lt;sup>1</sup> https://www.packagedfacts.com/Home-Food-Gardening-Trends-Opportunities-13992623/

<sup>&</sup>quot;https://australiainstitute.org.au/report/grow-your-own/