

11 August 2020

## Operations Update

- **Global collaboration initiated with well established, international monitoring and control company Talgil – ROOTS now able to access Talgil’s international network, offer a global service and post-sales support**
- **Engagement with an Israeli manufacturer for patented Heat Exchange Device (HED) which delivers higher margins for ROOTS**
- **Several paid demonstration installations secured with new Cannabis growers in Israel**
- **Additional expansion of HED’s IP coverage into Turkey, 7<sup>th</sup> largest Agricultural country in the world**

**Roots Sustainable Agricultural Technologies Limited (ASX: ROO, ROOTS or Company)** is pleased to provide this operations update to shareholders. The Company has made excellent progress across a number of areas of its business that position it well for increased sales domestically in Israel and in new international markets.

**Engagement with Talgil:** ROOTS has teamed up with global irrigation control system manufacturer Talgil which was established in 1987. This allows ROOTS to increase its control system’s reputability and redundancy and provides the Company with access to Talgil’s global dealer network in all the markets where it has a presence. ROOTS’ system are now integrated with Talgil’s SAPIR2 controller. The SAPIR2 is an internet enabled, medium to large scale, professional irrigation controller, supported 24/7 in multiple languages.



**Image 1:** The new Controller by Tal Gil used in ROOTS systems globally

**Engagement with Ultrplast industries LTD:** On 14 July ROOTS engaged with Ultrplast industries LTD, an Israeli based extruder, to upgrade and manufacture ROOTS’ proprietary and revolutionary vertical T shaped Heat Exchange device (HED). The vertical HED is a game changer in the climate control space worldwide as it offers a possibility to optimize root zone temperatures as well as providing accurate range with minute amounts of energy inputs (compared to air heating and cooling).

ROOTS’ former manufacturer in China ceased operations due to Covid-19 for a few months and an alternative manufacturer was located in Israel to meet the growing demand for the HEP based heating and cooling of roots in any substrate.



A 3D prototype of the second generation HED has been tested and approval to advance toward the mold creation has been granted. Early products are expected to roll-out from the Israeli factory next month. Profit margins are expected to increase as shipping from China is now avoided and manufacturing costs are competitive.

**Sales and expansion in Israel:** ROOTS continues to expand its sales and operations in Israel. A third re-order by the same hydroponic (NFT) customer was completed and announced and installed in Bnei Atarot. The system is operated by a ground source heat exchange only allowing for low energy consumption. In another development, the company installed two paid demonstrations among two new cannabis growers.

Based on previous experience, these installations are expected to lead to sales of systems with much greater coverage area as the demonstration is concluded over one or two growing cycles. A third demonstration is about to be installed at a cannabis growing operation near the Dead Sea and will cover 150 Heat Exchange Probes (HEP) compared with 150 plants under control.

**Expansion into Turkey:** ROOTS received Notice of Allowance for its Design patent in Turkey. This is an excellent development as Turkey is geographically close to Israel and it has the seventh largest Agricultural sector in the world with 3.5 million farmers and 20 million hectares of production area. It accounts for 6.1% of Turkey's GDP, a figure that's risen 40% since the turn of the century. Turkey intends to be amongst the top five producers by 2023<sup>1</sup>.

To achieve this goal, the government has enacted a National Agricultural Project to support and grow the sector, through crop diversification and improved productivity. Worth approximately US\$4bn annually, the initiative divides the country into 941 agricultural basins (according to climate and soil type), with each basin allocated specific crops from a strategic list of 19.

Turkey also has three distinct climates so different regions suit particular crops. Turkey is the leading producer in cherry, figs, hazelnut and apricots. Pome, stone fruits and vegetables are also very important beside cereal production.

Farming is still a family business, although a portion of the younger generation is migrating to the big cities. Farming in many regions is still being done traditionally but young farmers are interested in introducing technology to their businesses and are looking for alternative crops to grow.

**Roots Executive Chairman and CEO, Boaz Wachtel said:** *"ROOTS has made excellent progress on a number of fronts and we have significantly strengthened our business and established some excellent catalysts for growth. All of the developments we have announced today will deliver considerable upside. While the global pandemic is presenting us with some obvious challenges, our team is being innovative in pursuing opportunities so we can continue to expand.*

*"We are also rapidly building our presence in Israel in the agricultural and cannabis sectors and we expect further sales to materialise here. I look forward to reporting on more progress very soon."*

**-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 plant's climate management and the shortage of water for irrigation.

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<sup>1</sup> <https://www.adama.com/en/our-commitment/global-farming/farming-stories/turkey-overview-of-the-world-s-seventh-largest-agricultural-producer>

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Roots has developed proprietary know-how and patents to optimise performance 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](http://www.Rootssat.com)

*This announcement was authorised to be given to the ASX by the Roots Executive Directors, Mr Boaz Wachtel and Mr Sharon Devir.*

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**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.

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