

November 12, 2018

# RotoGro Consistently Outperforming Traditional Flat Deck Growing of Lawful Cannabis

### Highlights:

- Significantly increased cannabis yields consistently outperforming traditional 'flat deck systems' occupying the same floor space
- Lawful cannabis consistently yielding 7–9 lbs (3-4kg) of dry final flower product per harvest compared to 2.8lb (1.3kg) with flat deck systems
- Freshero perishable food trials progressing well. Economic assessment underway for a range of products suitable for the Australian market
- RotoGro and Freshero to commence design of Freshero's first perishable produce facility Q1, 2019

Roto-Gro International Limited ("ASX:RGI", "RotoGro" or the "Company") is pleased to provide an update regarding the ongoing trials undertaken at the Company's state-of-the-art research and development facility located in the Town of Caledon, in the Province of Ontario, Canada (the "Facility").

During the first quarter of 2018, the Company designed and built a state-of-theart research and development facility for the cultivation of lawful cannabis and perishable foods. The Facility includes two grow rooms with dedicated growing environments for perishable foods and lawful cannabis, an on-site laboratory, germination and propagation rooms, and a control centre for the remote monitoring of growing facilities around the world (a component of the Company's growing management services).





RotoGro International Limited ACN: 606 066 059

Registered and Business Office

Level 11, 216 St Georges Terrace Perth WA 6000

T. +61 8 9481 0<u>389</u>

F. +61 8 9463 6103

E. info@rotogro.com.au

#### Directors

Michael Carli
(Managing Director)
Michael Slater
(Executive Director)
David Palumbo
(Non-Executive Director)
Julian Atkinson
(Non-Executive Director)

Company Secretary

David Palumbo

www.rotogro.com.au



RotoGro International Limited ACN: 606 066 059

Registered and Business Office

Level 11, 216 St Georges Terrace Perth WA 6000

T. +61 8 9481 0389

F. +61 8 9463 6103

E. info@rotogro.com.au

#### Directors

Michael Carli (Managing Director) Michael Slater (Executive Director) David Palumbo (Non-Executive Director) Julian Atkinson (Non-Executive Director)

Company Secretary

David Palumbo

www.rotogro.com.au

## Figure 1: Single Pod Array of four off four feet RotoGro Systems Cultivating Lawful Cannabis

Designed to showcase the significant space, cost and yield advantages of the RotoGro Hydroponic Garden System, the lawful cannabis grow room houses two four-pod arrays of four-feet RotoGro Hydroponic Garden Systems and the perishable food grow room houses a new eight-foot RotoGro Organic Hydroponic Garden System together with one four-pod arrangement of four-foot RotoGro Hydroponic Garden Systems. Both grow rooms have been constructed to demonstrate a side-by-side comparison with a traditional indoor 'flat deck system' occupying the same amount of floor space.

Testing to date has focussed on varying light sources including Light-Emitting Diodes (LED), Ceramic Metal Halide Lamps and High-Pressure Sodium Lamps. This testing has been combined with adjusting rotational speeds to better understand their impacts on yield, room temperature, humidity management,  $CO_2$  demand and nutrient consumption.

In the cultivation of lawful cannabis, the results of these tests have proven to be extremely promising with each four-foot RotoGro Hydroponic System consistently yielding 7–9 lbs (3-4kg) of dry final flower product per sixty-day cycle, and perishable food cultivation providing equally surprising results regarding crop density, yield and cycle times.

A single RotoGro Hydroponic Garden System occupies a footprint of three-square meters (3m²) or thirty-two square feet (32 sq ft). The comparative yield of a traditional indoor 'flat deck system' occupying the same footprint of three-square meters (3m²) or thirty-two square feet (32 sq ft) is on average 2.8 lbs per harvest.

The average production per harvest for indoor flat deck hydroponic production is taken from a study by BOTEC Analysis Corporation in conjunction with Carnegie Mellon University and TRiQ, Inc. (as published by the Washington State Liquor and Cannabis Board); where they interviewed and studied sixteen (16) lawful cannabis growers<sup>1</sup>.

In addition to the significantly increased yields achieved by a single RotoGro Garden System when compared to the same footprint occupied by a traditional flat deck system, when stacked two high, the average yield is 14-18 lbs and when stacked three high the average yield is 21-27 lb. These yields are achieved all within the same (3m²) or thirty-two square feet (32 sq ft) footprint. This does not take into account the shorter growing cycle and greater number of harvests per year offered by a RotoGro Garden System which translates into even greater advantages over traditional flat deck hydroponic growing.

1: <a href="https://lcb.wa.gov/publications/Marijuana/BOTEC%20reports/5a\_Cannabis\_Yields-Final.pdf">https://lcb.wa.gov/publications/Marijuana/BOTEC%20reports/5a\_Cannabis\_Yields-Final.pdf</a>
<a href="https://botecanalysis.com/">http://botecanalysis.com/</a>

https://lcb.wa.gov/





RotoGro International Limited ACN: 606 066 059 ASX Code: RGI

Registered and Business Office

Level 11, 216 St Georges Terrace Perth WA 6000

T. +61 8 9481 0389

F. +61 8 9463 6103

E. info@rotogro.com.au

#### Directors

Michael Carli (Managing Director) Michael Slater (Executive Director) David Palumbo (Non-Executive Director) Julian Atkinson (Non-Executive Director)

Company Secretary

David Palumbo

www.rotogro.com.au

During the month of October, the Company commenced trials on behalf of Freshero Pty Ltd (Australia) ("Freshero") covering a range of perishable food (produce) products spanning leafy greens, herbs, cherry tomatoes, cucumbers, capsicums and strawberries. These trials are progressing well, with the Freshero's technical team onsite this past week. RotoGro and Freshero have undertaken economic analysis for a range of products suitable for the Australian market, as well as facility specifications and design layouts for Freshero's own research grow room in Australia. Trials will continue into the new year at which point RotoGro and Freshero will commence the design of Freshero's first perishable food (produce) facility.

Managing Director of RotoGro, Michael Carli states, "Continual research and development at our state-of-the-art facility provides a strong foundation for supporting a wide range of our clients' needs. This, coupled with the commencement of our qualified botanist and completion of our on-site laboratory, further facilitates the testing, scientific analysis and study of different plants and strains in both the lawful cannabis and perishable foods space. The future is very exciting as we continually improve and refine our technology in conjunction with our global data control centre to optimise yields and maximise cost efficiencies."

--ENDS--

#### For more information please contact

#### **Roto-Gro International Limited**

Adam Clode
General Manager
adam.clode@rotogro.com

#### **Investment Enquiries**

Terry Gardiner
Barclay Wells Limited
terry@barclaywells.com
+61 (0)8 6380 3333

James Titcombe
Emerald Capital Australia
<a href="mailto:jiticombe@emeraldcapital.com.au">jiticombe@emeraldcapital.com.au</a>
+61 (0)481 055 924

#### About Roto-Gro International Limited

Roto-Gro International Limited (www.rotogro.com) is an Australian-based company with global operations focused on the cultivation of lawful cannabis and perishable food (produce) which take advantage of its licensed, proprietary, patented, and patents-pending technology in the stackable rotary hydroponic garden space. RotoGro holds worldwide exclusive licenses for lawful medicinal and recreational cannabis markets and has agreed, subject to shareholder approval, to acquire the technology for all other purposes including pharmaceuticals, nutraceuticals and perishable foods.

The Company has collaborated with Gibio Inc. and Freshero Pty Ltd. These ventures leverage RotoGro's patented rotational hydroponic garden systems, crop management fertigation hardware and proprietary software systems to



produce greater yields and lower operating costs. In addition, the Company has entered into a Share Purchase Agreement to acquire all the issued and outstanding shares in the capital stock of Supra THC Services Inc. which holds a Dealer's License issued by Health Canada for lawful cannabis.

RotoGro's wholly-owned subsidiary, Global Fertigation Solutions Inc. ("GFS"), provides a patent-pending specialized business line for water treatment and nutrient management in the viticulture, perishable foods and lawful cannabis space. GFS has successfully provided design solutions, installations and ongoing service contracts for more than twelve (12) licensed lawful cannabis facilities in the State of Nevada, USA and is embarking on expanding this offering globally.

The Company continues its focus on expanding into industry synergistic opportunities; exploring strategic partnerships and complimentary acquisitions in related markets which include, perishable food (produce) partnerships, lawful cannabis license ownership, growing management services, industry leading nutrients, emerging tissue culture (micropropagation) expertise and other supporting faculties of hydroponic growing.



RotoGro International Limited ACN: 606 066 059 ASX Code: RGI

Registered and Business Office

Level 11, 216 St Georges Terrace Perth WA 6000

T. +61 8 9481 0389

F. +61 8 9463 6103

E. info@rotogro.com.au

#### Directors

Michael Carli (Managing Director) Michael Slater (Executive Director) David Palumbo (Non-Executive Director) Julian Atkinson (Non-Executive Director)

Company Secretary

David Palumbo

www.rotogro.com.au



Figure 2: Lawful Cannabis Research Grow Room





Figure 3: Testing Ceramic Metal Halide & High-Pressure Sodium Lamps



Figure 4: Manufacture and Assembly of RotoGro 4' Rotational Garden Systems



RotoGro International Limited ACN: 606 066 059 ASX Code: RGI

Registered and

Level 11, 216 St Georges Terrace Perth WA 6000

- T. +61 8 9481 0389
- F. +61 8 9463 6103
- E. info@rotogro.com.au

#### Directors

Michael Carli (Managing Director) Michael Slater (Executive Director) David Palumbo (Non-Executive Director) Julian Atkinson

Company Secretary

David Palumbo

www.rotogro.com.au