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Nanollose Expands Applications for its Soilless Horticultural Technology to Include Commercial Microgreen Market

Highlights:

- **Nanollose’s new dry rehydratable microbial cellulose material, named Biollose™, will be the key ingredient in a range of horticultural products including MicroGel™ for commercial microgreen production, and Jelli Grow™ for home user microgreen kits.**
- **The rebranding reflects the evolution of the Company’s original liquid Jelli Grow™ product (developed primarily for home microgreen growing kits), to the new, more versatile, dry powder (Biollose™) and its potential as a key ingredient in a range of highly scalable commercial agriculture and horticulture products.**
- **MicroGel offers several advantages over current media in the commercial microgreens market, including that it is organic, readily biodegradable, compostable and combustible. It contains no grit, is tasteless, colourless and non-toxic, and requires less space during shipping and storage.**

Leading bio-materials company Nanollose Limited (ASX: NC6) (“Nanollose” or the “Company”) is pleased to announce the introduction of Biollose™ - a new and improved version of the soilless growth media used in the Company’s Jelli Grow™ product – and the expansion of its product range to include MicroGel™, which has been developed specifically to accelerate growth in the commercial microgreens market.

MicroGel has been developed as a soilless growth media for the commercial microgreen market using Nanollose’s new Biollose rehydratable microbial cellulose material. Biollose is also the key ingredient for the Company’s new formulation of Jelli Grow product for home user microgreen kits.

The rebranding reflects the evolution of the Company’s original liquid Jelli Grow product (developed primarily for home microgreen growing kits) to an even more versatile dry powder, Biollose, based on the Company’s recent patent application (*refer ASX Announcement 15 May 2023*). The new dry powder can be rehydrated at point of use, which overcomes the problems with shipping, handling, and storing associated with the original liquid formulation and significantly strengthens its commercial use-case.

Biollose is expected to be a key ingredient in a range of soilless growing substrates developed for the highly scalable commercial agriculture and horticulture markets. The first of these products is MicroGel which has resulted from an extensive period of development at Nanollose, specifically for the commercial microgreen sector. More recently, Nanollose supplied a commercial microgreen grower with small samples of MicroGel and initial trials for both dispensing the medium and microgreen production were highly encouraging.

The global market for soilless growing substrates was estimated to reach US\$882m in 2022 and is projected to grow at a CAGR of 13% to reach around US\$1.64bn by 2027.¹

MicroGel offers a number of advantages over current media in the market for microgreen production, including;

- Dehydrated formulation is only one hundredth of the weight and space of the made-up medium, dramatically reducing shipping and storage requirements.
- Once rehydrated at point of use it can be efficiently dispensed as a liquid/gel in either manual or automated systems.
- Water content of over 99% dramatically reduces the need for constant watering.
- It is organic, readily biodegradable and compostable, and even combustible when dry if required.
- Contains no grit, is tasteless, colourless and non-toxic.

Nanollose continues to develop Biollose for other sectors of the horticulture market and looks forward to updating shareholders in due course.

Nanollose's Executive Chairman, Dr Wayne Best said: *"We are delighted with the rapid progress of our Biollose technology since filing our patent application in May, and are pleased to see our original liquid Jelli Grow product evolve into a number of horticultural products based on Biollose as the key ingredient. We look forward to the completion of the pilot production of MicroGel with our partner Hainan Guangyu Biotechnology (HGB) and the forthcoming uptake for the technology into the commercial microgreen sector."*

About Nanollose

Nanollose Limited (ASX: NC6) is a leading biomaterials company commercialising scalable technology to create fibres, fabrics and other novel materials with minimal environmental impact. Nanollose's, eco-friendly fermentation process can use agricultural waste and by-products to produce cellulose, a versatile raw material traditionally produced from trees via the wood pulping process. The Company then uses this 'Tree-Free' cellulose as an input for its range of innovative biomaterials including its Nullarbor™ fibres, MicroGel™ horticultural medium, and its emerging animal-free and plastic-free leather-like materials.

Nanollose filed a joint patent application with strategic partner, Birla Cellulose, for its high tenacity, Tree-Free Nullarbor lyocell fibre in 2021. Work has now moved out of the laboratory and into Birla Cellulose's pilot production facilities in India where we have completed two successful production runs to date totalling half a tonne of fibre, 350kg of Nullarbor-20™ and 150kg of Nullarbor-30™. Quantities of this fibre have since been sent to several collaborators and been converted into yarns, fabrics, and garments for testing and evaluation, prior to potential uptake by partners.

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AUTHORITY AND CONTACT DETAILS

This announcement has been authorised by the Board of Directors of Nanollose.

¹ <https://www.marketresearch.com/360iResearch-v4164/Soilless-Growing-Mediums-Research-Type-32404229/>

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