

# Lupin Modification Trial Validates Scaled Manufacturing Potential

## Highlights:

- Wide Open Agriculture successfully completed a manufacturing trial of its BP80F lupin protein production process, demonstrating a substantial leap in efficiency.
- The efficiency gains achieved in the trial show the potential for WOA's technology to scale effectively and at lower cost than previously anticipated.
- Trial achieved up to 80% reduction in energy consumption and ~50% reduction in processing time for WOA's licensed IP step, while maintaining product quality.
- The trial was conducted in the U.S.A. and used commercial-scale, automated equipment not previously applied to lupin protein.
- Enhances protection of WOA's proprietary technology by using an automated "black box" configuration.
- Outcome of the trial has shown that improvements in Operating Expenditure (Opex) and Capital Expenditure (Capex) can be achieved both in WOA's German facility and for future commercial scale facilities.

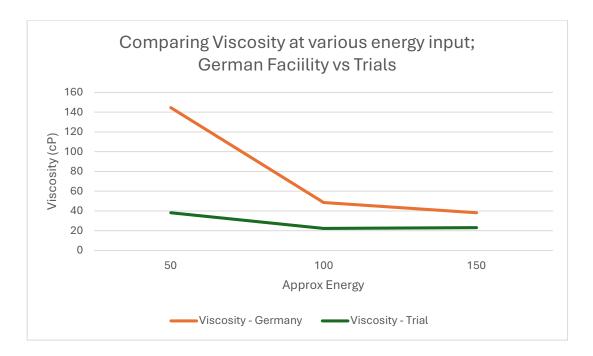
#### Material Reduction in Energy and Processing Time Demonstrated in Trial

Wide Open Agriculture (ASX: WOA), a global leader in lupin protein isolate production for the food and beverage industry, is pleased to announce the successful completion of a trial aimed at improving the efficiency and scalability of its proprietary BP80F (Lupin Protein Isolate) production process. The trial was conducted in partnership with a US-based engineering firm who specialise in scalable, automated production systems, and was tested using commercial-scale equipment not previously applied to lupin protein processing.

The trial results showed an up to 80% reduction in energy consumption and approximately 50% reduction in processing time for WOA's licensed IP step, while maintaining key quality specifications.



Critically, the time required to achieve the desired viscosity levels of the extracted lupin protein was lower than that produced using WOA's existing equipment in Germany, indicating a more efficient and scalable process (see data below). The trial was overseen by a member of WOA's technical team to ensure integrity of the procedure and data accuracy.



During the trial, WOA processed 40 litres of protein mixture through two production units delivering a range of Energy (watt seconds per gramme) to the product. The units in the trial achieved the desired viscosity with an 80% reduction in Energy applied. The units also processed the mixture at twice the rate that the four units in Germany can apply the technology to the 750 litre production runs.

For clarity, these energy and time savings relate only to the processing step where WOA's IP is applied to the lupin protein isolate during manufacture.

#### Improved Process Efficiency Supports Path to Large Scale Production

By achieving lower viscosities across all energy levels, the trial confirms that WOA's proprietary manufacturing process could operate more efficiently while preserving protein quality. This improvement enables a more rationalised production flow, confirming the potential to scale the Company's manufacturing process for large scale commercial use.



The outcomes of the trial also highlight a meaningful opportunity to enhance output from WOA's existing facility in Grimmen, Germany. The improved processing dynamics signal potential reductions in both Operating Expenditure (OPEX) and Capital Expenditure (CAPEX), directly supporting the Company's path toward cost-efficient, scalable manufacturing – and strengthens WOA's commercial positioning as it engages with prospective customers and investors.

Importantly, the trial utilised an automated 'black box' configuration, where core elements of the process are enclosed and shielded from external visibility. This design enhances protection of WOA's intellectual property and adds an additional layer of defensibility to the Company's technology platform.

#### **Next Phase: Refinement, Validation and Scale-Up**

Following this trial, WOA will undertake a second round of trials to further refine the process parameters, validate consistency across different lupin inputs, and confirm quality outcomes under real-world production conditions. These trials are expected to take place at WOA's Grimmen facility in Germany.

WOA is also in active discussions regarding financing and lease options for the commercial system used in the trial, with the intent of integrating it into its existing infrastructure. This could allow the Company to scale output efficiently, reduce processing costs, and build robust, IP-protected production in Europe.

"Our team has worked tirelessly to optimise and scale our lupin protein technology, and this improvement in efficiency is a critical step forward," said Yaxi Zhan, Chair of Wide Open Agriculture. "It demonstrates the strength of our R&D and engineering capabilities, and the information will inform our scale up plans as our sales pipeline grows."

"This milestone sends a strong signal to our customers, investors, and partners that as lupin protein adoption grows, WOA will be able to scale production to meet demand," added Matthew Skinner, CEO.

The Company will provide further updates to shareholders as subsequent trials are completed and feasibility planning progresses.



#### **Disclaimer**

WOA has chosen not to disclose the name of the trial partner at this stage, as part of its ongoing efforts to protect intellectual property and proprietary know-how. The results presented in this announcement are based on controlled trial conditions conducted at an external facility and may not be directly replicated under commercial production conditions at WOA's Grimmen facility. While the outcomes are encouraging, further validation, optimisation and testing are required. There can be no guarantee that similar results will be achieved, nor that the trial will lead to any specific commercial, financial or operational outcomes.

The Board has authorised and approved this announcement per the Company's published continuous disclosure policy.

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### **About Wide Open Agriculture Ltd**

Wide Open Agriculture Ltd (ASX: WOA) is a publicly listed ingredient company pioneering the development of lupin based products for the global food, beverage, cosmetics and nutraceuticals sectors. Leveraging proprietary intellectual property across its production process, WOA produces a portfolio of high-quality lupin-based plant proteins, fibres, oil and other compounds designed to enhance the functionality and performance of products across multiple sectors.

The Company's lupin-based protein isolates offer exceptional versatility across a wide range of applications, including plant-based dairy alternatives, meat substitutes, baked goods, and health-focused products. Recognised for their clean taste, high performance, and broad functionality, lupin protein isolates are emerging as an exciting new ingredient in the evolving plant-based protein market.

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