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ASX Release **7 October 2021**

LUPIN PROJECT UPDATE

Highlights:

- *Leading food and ingredient companies have received samples of modified lupin protein along with an updated Product Information Form (PIF). These groups were exclusively selected by WOA and are located across Europe, North America and Australia.*

- *Product development is advancing with two new oat milk products undergoing testing and additional staff secured to expand scientific, engineering and commercialisation capacity.*

- *Internal competitive analysis studies highlight modified lupin protein has advantages over all other major plant-based proteins currently available in the market.*

- *The lupin pilot manufacturing facility will be located at WOA's Distribution Centre in Kewdale, Western Australia. The first tranche of equipment has already been delivered.*

- *WOA invited to participate in Western Australia's Food Innovation Precinct's Protein X accelerator program aiming to take sustainable protein innovations to Asia.*

Wide Open Agriculture Limited (ASX: WOA) ("WOA" or "the Company"), is pleased to provide an update highlighting positive developments across its lupin protein project, whereby the Company is developing a number of plant-based food and beverage products using proprietary technology with verified competitive advantages.

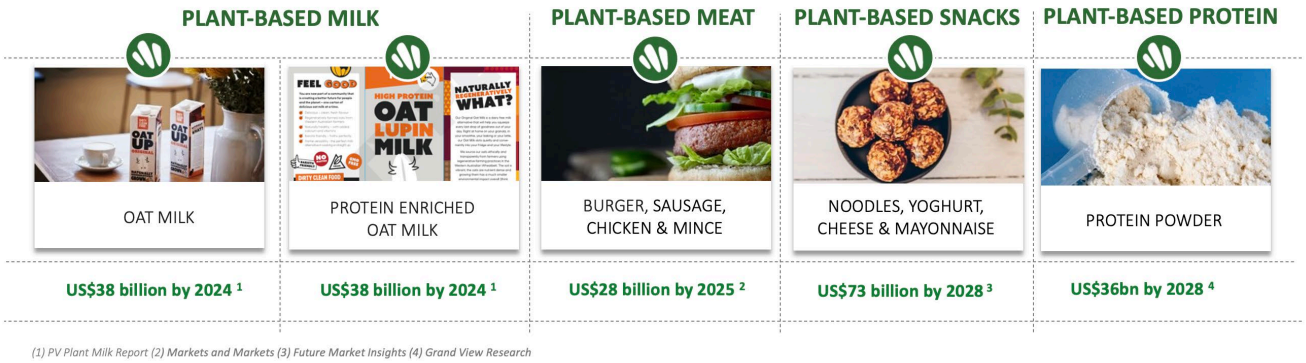
New product development (NPD) and sampling to external partners

WOA's internal NPD team has recognised the exciting potential of modified lupin protein and is rapidly progressing prototype development of two products that include high protein, flavoured drinks (20gr/100ml) and an oat milk with protein levels similar to dairy milk (3gr/100ml).

The Company has also identified a number of global food and ingredient companies and is now supplying samples to these potential partners across Europe, North America and Australia. Each potential partner has been chosen based on a specific food or drink category. The future intent is that

a number of food and ingredient companies will become off-take partners for the modified lupin protein across a variety of food and drink categories.

WOA is targeting four plant-based food and beverage sectors (see below):



Modified Lupin Protein Specifications

WOA is conducting competitive analysis studies to determine competitive strengths, with the below table showing specifications of legume plant protein concentrate available across the plant protein market. The table highlights that WOA's modified lupin protein (MLP) has a higher protein concentration than traditional legumes, this combined with its high gelation properties alongside environmental and nutritional credentials, provides an encouraging competitive edge.

Specifications	MLP	Soy protein	Pea protein	Faba protein	Ref
Nutritional					
Protein concentration %	≥ 80	70	70	67	(Bühler et al., 2020)
Kernels protein content %	45	45	20.9	31.2	(Sá et al., 2020)
Protein digestibility %	≥ 90	≥ 90	≤ 70	≤ 73	(Bishnoi, 1994) (pea),
Protein digestibility inhibitors	No	Yes	Yes	Yes	(Luo & Xie, 2013) (faba) (Nikmaram et al., 2017) (Hall & Moraru, 2021)
Genetically modified versions available on market	No	Yes	No	No	(ISAAA, 2021)
Phytoestrogen	No	Yes	No	No	(Murkies et al., 1998)(Sirtori et al., 2005)
Flavour & Colour					
Flavour	Neutral	Slight beany taste	Beany/ Starchy taste	Starchy taste	
Colour	Creamy/yellowish	Creamy/yellowish	Dark yellow /Brown	Creamy/yellowish	

Food Application					
Dairy analogues	Yes	Yes	Yes	Yes	PIFs
Meat analogues	Yes	Yes	Yes	Yes	PIFs
Gluten-free	Yes	Yes	Yes	Yes	PIFs
Sport supplements	Yes	Yes	Yes	Yes	PIFs
Agronomy					
Nitrogen fixing ability	Yes	Yes	Yes	Yes	(Asseng et al., 1998)
Water requirement	Low	High	Medium	High	GRDC legumes growing requirement
Soil acidity (pH) range	4-8.5	5.2-6.5	5.5-8	6-9	(GRDC, 2017c) (GRDC, 2017a) (GRDC, 2016) (GRDC, 2017b)

An updated Product Information Form (PIF) for modified lupin protein can be found as an appendix to this announcement. We encourage shareholders to read this form to gain a further understanding of how WOA's patented production process is used to create a specialised plant protein ideally suited to a broad range of food and beverage applications.

Highly credentialed team in place to advance product development

WOA has secured the co-inventor of the improved lupin protein technology, Dr. Hayder Al-Ali as the Company's in-house Senior Food Scientist. Dr. Al-Ali has a PhD in lupin protein chemistry and has a proven capacity to develop new technologies that unlock new and important techno-functions of Australian Sweet Lupin. Dr Al-Ali is supported by a proven and experienced engineering team including a project manager and project engineer.

Site confirmed for lupin manufacturing facility with first equipment arriving

WOA has identified the site for its in-house, pilot manufacturing facility to be located at the Company's Distribution Centre in Kewdale, Western Australia. The site has a number of advantages, including access to technical and product development team members and Dirty Clean Food's commercial kitchen.

The first tranche of pilot equipment has been received and will unlock the ability to test the manufacturing technology to enhance gelation and build new trade secrets and know-how for potential patent applications. The facility will eventually allow WOA to develop plant-based proteins for a range of food and beverage products for both Dirty Clean Food and future off-take and strategic partners.

The pilot plant will also enhance opportunities for strategic partnerships and produce food grade quantities of modified lupin protein to generate initial revenues, along with the opportunity to explore applications of the patented technology for other regenerative pulses grown in Australia.

WOA invited to participate in program to take sustainable protein innovations to Asia

WOA is pleased to announce that it has been invited to join the X-Protein Lab, an initiative of the new Western Australian Food Innovation Precinct (WAFIP) which aims to expand the state's market reach in the burgeoning alternative protein space, with a particular focus on Singapore.

Under the mentorship program, WOA will focus on technology readiness, product-market fit, market acceptance, investment potential and global relevance. The Company will also be presented with opportunities to liaise with Singaporean start-ups and forge connections with key members of the regional and global alternative protein sector.

Concept drawing of the Western Australian Food Innovation Precinct

[ENDS]

This announcement has been authorised and approved in accordance with the Company's published continuous disclosure policy and has been approved by the Board.

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About Wide Open Agriculture Ltd

Wide Open Agriculture (WOA) is Australia's leading ASX-listed regenerative food and agriculture company. The Company's innovative Dirty Clean Food brand markets and distributes food products with a focus on conscious consumers in Australia and South-East Asia. Products are chosen based on their market potential and the positive impact they deliver to farmers, their farmland and regional communities. The company is based in Australia and operates under a '4 Returns' framework and seeks to deliver measurable outcomes on financial, natural, social and inspirational returns.

WOA is listed on the Australian Securities Exchange (code: WOA) and the Frankfurt Stock Exchange (code: 2WO) and is the world's first '4 Returns' publicly listed company.

www.wideopenagriculture.com.au www.dirtycleanfood.com.au

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WOA Lupin Protein Concentrate

WOA Lupin Protein Concentrate uses a patented process to create a versatile specialised plant protein ideally suited to a broad range of food and beverage applications.

Lupin is gaining popularity as an attractive plant protein source both from a manufacturer and consumer perspective. Our lupins are grown in the WA Wheatbelt using regenerative farming practices, designed to increase biodiversity, enrich soil, improve water cycles and enhance ecosystems. Lupins are an idea 'break' crop in a regenerative farming program, sequestering nitrogen back into the soil, with a very low environmental footprint and minimal use of inputs.

Additionally, lupin has higher protein content (35-40%) and lower anti-nutritional properties than most other legumes, it is non genetically modified, gluten free, possesses lower level of phytoestrogen and has excellent nutritional value with the potential to reduce various health related risk factors.*

The lupin seeds are cleaned and dehulled. An extraction, centrifugation and drying process is used to produce a shelf-stable protein-rich concentrate powder. Within this process we have implemented a unique patented step that, for the first time gives the resulting protein concentrate a neutral flavour and highly enhanced gelling and viscosity functionality, opening up a raft of new applications.

Product Applications

Lupin Protein is versatile, delivering a unique combination of nutritional functions and technical properties. The optimised performance and almost neutral flavour offer many advantages over competitor products:

- Enhanced gelling and viscosity
- Excellent dispersibility & solubility
- Excellent nutritional value
- Regeneratively farmed with transparent supply chain
- Clean label — soy, nut, lactose & GMO free
- Neutral flavour
- Add structure, moisture retention, oil binding etc to Plant-based 'meat- mimics', eg burgers, sausages
- Base for Health & Wellness shake blends, snack foods incl bars and balls, dietary foods
- Develop uniquely textured extruded snack products
- Add texture and nutritional function to plant-based drinks, yoghurts, soft cheese, ice cream, sauces
- Fortify foods with additional health benefits, eg high protein noodles, pasta, baked goods, cereals, confectionery, etc
- Vegan emulsifier/egg replacer in multiple applications

Sensory

Colour	Pale yellow
Texture	Flowing powder
Smell	Neutral, slight grain
Taste	Neutral

*(Aguilar-Acosta, Serna-Saldivar, Rodriguez-Rodriguez, Escalante-Aburto, & Chuck-Hernandez, 2020).

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Typical Nutritional and Compositional Analysis (av./100g)

Energy	1530kJ
Protein, Total	76g
Fat, Total	1.6g
- Saturated	0.3g
- Polyunsaturated	< 0.2g
- Monounsaturated	0.8g
- Omega 3 fatty acids	0.06g
- Omega 6 fatty acids	0.5g
Carbohydrates*	11.8g
- Sugars	1.5g
Dietary fibre	9.2g
Sodium	1000mg
Alkaloids	4mg
GMO	Free

Typical Essential Amino Acid Profile (mg/g protein)

Contains all the essential amino acids that cannot be manufactured by the body and are essential for life.

Histidine	26
Isoleucine	40
Leucine	71
Lysine	44
Methionine + cysteine	9
Tyrosine + Phenylalanine	82
Threonine	31
Tryptophan	6
Valine	35

Allergen declaration: Contains Lupin. May contain Wheat

Vegetarian	Yes
Vegan	Yes
Organic	No

Techno Functional Properties

Solubility - HIGH	80%
Emulsifying Capacity - HIGH	61.8 ± 1.0%
Emulsifier Stability - HIGH	68.7 ± 1.8%
Gel Strength - HIGH	141.0 ± 6.1g
pH value	Neutral
In-vitro digestibility (IVPD)	75.3 ± 2.0%

*Values determined using standard methods under specific laboratory conditions

Pesticides Residuals and Typical Microbiological Analysis

Pesticides	Not detectable
Standard Plate Count (CFU/g)	<1000
Yeasts & Moulds (CFU/g)	<100
Salmonella (CFU/25g)	Negative
Staphylococcus aureus (CFU/g)	<100
E.Coli (CFU/10g)	Negative

*Available Carbohydrate plus oligosaccharides

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