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ASX Release - Company Announcement

Nufarm expands its bioenergy platform; acquires assets and signs long term alliance with GranBio to accelerate global expansion of energy cane

Highlights

- Nufarm group acquires energy cane assets from GranBio
- Accelerates development and global expansion of energy cane
- Bolsters Nufarm's growth strategy of investing in innovative, sustainable technologies
- Significant potential to contribute to medium to long-term earnings growth

Nufarm Limited (Nufarm, ASX:NUF) today announces that the Nufarm group has acquired energy cane assets and entered into a long-term technology access and license agreement with GranBio Investimentos SA (**GranBio**) group, a leading Brazilian industrial biotechnology group, to accelerate the development and global expansion of energy cane.

The Nufarm group has acquired GranBio group's energy cane production assets, including germplasm, breeding materials and related know how, products in various stages of development, and customer contracts, for US\$25 million.

Energy cane is a novel cane crop specifically developed to create a greater than 150% increase in biomass compared to conventional sugar cane and is a step change in biofuel and bioelectricity generation. Increased global demand for biofuels is being driven by the need to achieve global greenhouse gas (GHG) reduction targets.

Nuseed, a division of Nufarm, plans to develop energy cane as a renewable, advanced agricultural feedstock for supply to downstream energy partners. The acquisition and related exclusive long-term technology access and license agreement gives GranBio rights in the second-generation (2G) field.

Nufarm CEO, Greg Hunt said, "This agreement is a tangible example of Nufarm's growth strategy in action – investing in sustainable innovative technologies that help growers get more from their land.

"This acquisition bolsters Nuseed's *Value Beyond Yield*[™] strategy. The acquisition is expected to deliver modest underlying EBITDA¹ in the short-term however it has significant potential to contribute to Nufarm's earnings growth over the medium to long-term as global expansion ramps up to meet demand for sustainable biofuels."

¹ Earnings before interest, tax, depreciation and amortisation

Nuseed Group Executive Brent Zacharias said, “This acquisition presents a unique opportunity for, and is highly complementary to, Nuseed’s existing bioenergy platform which includes its proprietary low-carbon renewable energy feedstock, Nuseed Carinata.

“Energy cane is a proven technology and innovation that is ready to deploy and scale. Adding energy cane, and leveraging our existing Nuseed Carinata platform and established model, enables Nuseed to provide advanced feedstocks to a broader suite of energy forms.”

GranBio CEO, Bernardo Gradin said, “The long-term alliance with Nuseed will accelerate and improve the agricultural and technological advancement of energy cane worldwide. It will create a very powerful global solution to secure large-scale, non-food biomass as a reliable feedstock to biofuels such as Net Zero 2G ethanol and 2G sustainable aviation fuel (SAF).”

Energy cane has been developed over the past 10 years by GranBio from traditional hybrid plant breeding focused on improving its energy output equation. The result is a more robust cane, with higher fibre content and productive potential which is ideal for the production of biofuels and biochemicals, and for the generation and/or cogeneration of bioelectricity. Energy cane has been developed specifically for bioenergy production and has been bred to be planted in lower-quality soil areas not traditionally suitable for primary agriculture crops where it is unlikely to compete with food crops and will provide farmers in more marginal areas a means to improve their economic productivity.

Energy cane provides a significant opportunity to enable advanced agriculture feedstock generation for energy transition, including:

- A significant boost in productivity for the existing Brazilian sugar cane biofuel industry. Research indicates energy cane can increase ethanol output by 20-30% per hectare and increase bioelectricity generation by 2-4 times. Brazil currently produces 32 billion litres² of ethanol annually - almost entirely from sugar cane - with expected demand to increase to over 40 billion litres by 2030³.
- The combination of energy cane with advanced 2G processing can generate net-zero ethanol, biogas, and bioelectricity as well as green industrial products and new low-carbon feedstocks for SAF.

Brazil is currently the largest sugar cane market in the world. Nuseed intends to commence work in Brazil and expand energy cane R&D into other large existing cane growing countries, including the US, Australia and Asia.

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² <https://www.sugarcane.org/sugarcane-products/ethanol/>

³ https://www.epe.gov.br/sites-pt/publicacoes-dados-abertos/publicacoes/PublicacoesArquivos/publicacao-255/topico-542/EPE-DPG-SGB-Bios-2020-Executive_Summary_Ethanol_Supply_Scenarios.pdf

About Nufarm

Nufarm is a global crop protection and seed technology company established over 100 years ago. It is listed on the Australian Securities Exchange (ASX:NUF) with its head office in Melbourne, Australia. As an agricultural innovator, Nufarm is focused on innovative crop protection and seed technology solutions. Nufarm division, Nuseed, is the first company to develop and commercialise plant-based Omega-3 and has also developed and commercialized advanced bioenergy feedstock technology.

Learn more at [**nufarm.com**](http://nufarm.com)

About Nuseed

Nuseed is unlocking the full potential of canola, carinata, sorghum and sunflower to deliver VALUE BEYOND YIELD®. Nuseed provides new, sustainable plant-based solutions to growers, industry, and end-use customers, adding value at every step and for each participant in the Nuseed Value Chain.

Over 300 Nuseed employees work across global locations, including three world-class Nuseed Innovation Centers.

Established in Australia in 2006, Nuseed has grown to offer industry leading germplasm, advanced molecular capabilities, regional R&D and commercial trials with dedicated teams in Australia, Europe, North America and South America, and sales in more than 30 countries.

Nuseed is a division of Nufarm Limited (ASX:NUF).

Learn more at [**nuseed.com**](http://nuseed.com)

About GranBio

Founded in 2011, GranBio is a 100% Brazilian industrial biotechnology company, controlled by GranBio Investimentos S.A., which creates solutions to transform biomass into renewable products. A pioneer in the production of cellulosic ethanol, or second-generation (2G), in the Southern Hemisphere, the company operates from the beginning to the end of the production chain - from raw material to the distribution of the final product - integrating its own technologies and of partners. With investments focused on the renewables industry, it keeps its efforts focused on the supply of biochemicals and biofuels that combine economic competitiveness and low-carbon emissions, in order to combat climate change in the world.

Learn more at [**www.granbio.com.br**](http://www.granbio.com.br)