

'Laboratory of Glycobiology and Phytochemistry' will unlock research for Sustainable Agriculture

OKAYAMA, JAPAN, January 15, 2026 /EINPresswire.com/ -- Nagase Viita Co., Ltd., a Japan-based company with 140 years of expertise in glycoscience, and Okayama University, one of the leading academia for sustainability research (in Japan), launched the Laboratory of Glycobiology and Phytochemistry, a pioneering research course in November 2025. This collaboration will discover

“

The course seeks to deliver solutions for sustainable agriculture, contributing to food security and environmental conservation.”

Dr. Ooi Lia, Principal Investigator

how plants, their symbiotic microorganisms and bio-compounds interact with the environment to advance sustainable agriculture through cutting-edge glycobiology and phytochemistry research.

Nagase Viita Co., Ltd. (Head Office: Kita-ku, Okayama City; Representative Director and President: Takahiko Mandai) and Okayama University (Location: Kita-ku, Okayama City; President: Yasutomo Nasu) are joining forces to establish the Laboratory of Glycobiology and Phytochemistry, a unique platform for industry-academia collaboration.

Since 2020, the two organizations have partnered on open innovation projects aligned with the Sustainable Development Goals (SDGs). Building on this foundation, the new course will explore how environmental changes, including global warming, influence plant-microbe interactions and the role of bioactive compounds such as carbohydrates in promoting plant health and resilience.

Jiro Kishimoto, Executive Officer and Head of Research, Technology & Value Creation Division at Nagase Viita, added: “We proposed this collaborative program to evolve our sustainable research into a unique global initiative. Through this course, we aim to foster pioneering research bridging academic perspectives with visionary industrial innovation”

Research themes include:

1. Investigating the plant holobiont's role in maintaining productivity under stress.
2. Exploring external application of bio-compounds to enhance plant growth and yield.
3. Developing high-throughput screening assays to evaluate bio-compound functionality.

Dr. Ooi Lia, Principal Investigator of this course from Nagase Viita emphasized: “The course seeks to deliver solutions for sustainable agriculture, contributing to food security and environmental conservation.”

Currently, agricultural science is one of the main focus areas of Nagase Viita. Trehalose, its signature product is known for its ability to boost the productivity of crops, such as soybeans. Soybeans rely on symbiotic microorganisms like rhizobia for healthy growth, and its seeds are pre-coated with rhizobia to enhance its healthy growth. In nature, both microorganisms and plants use trehalose to protect themselves from dryness, and they are used to extend seed storage life and promote soybean growth—ultimately leading to enhanced productivity. Validated in field trials and already adopted in South America, this approach delivers stronger crops and higher yields.

The establishment of this joint laboratory will further accelerate the company’s dedication to agricultural science, aiming to develop fundamental solutions from the natural functions and interactions of plants, bio-compounds and microbes. Biotechnology at its core, Nagase Viita strives to enhance human well-being while promoting ecosystem and environmental conservation.

Learn more about Nagase Viita’s [sustainability initiatives](#) and Okayama University’s [research programs](#).

[Watch the Campaign Live here.](#)

About Nagase Viita Co., Ltd.

Founded in 1883 in Okayama, Nagase Viita combines a 140-year heritage with cutting-edge biotechnology to create functional saccharides and carbohydrate-based materials that enrich lives and support a sustainable future. The company pioneered large-scale production of trehalose—a natural sugar that protects organisms under stress—and continues to innovate across food, personal care, pharmaceuticals, and agriculture. To advance the future’s circular economy and resilient food systems, they are developing unique nature-derived materials that are biodegradable and environmentally friendly. Recognized with EcoVadis Platinum rating for its dedication to sustainability, Nagase Viita strives to reducing environmental impact and advancing global well-being.

For more information, visit <https://group.nagase.com/viita/en/>

Claudia Gahan
Acumen Media
+44 20 3553 3664
[email us here](#)

This press release can be viewed online at: <https://www.einpresswire.com/article/883480131>

EIN Presswire's priority is source transparency. We do not allow opaque clients, and our editors try to be careful about weeding out false and misleading content. As a user, if you see something we have missed, please do bring it to our attention. Your help is welcome. EIN Presswire, Everyone's Internet News Presswire™, tries to define some of the boundaries that are reasonable in today's world. Please see our Editorial Guidelines for more information.

© 1995-2026 Newsmatics Inc. All Right Reserved.