

PRESS RELEASE**AGRICULTURAL COMPANIES JOIN FORCES TO DEVELOP BIOLOGICAL SOLUTIONS FOR PLANT NUTRITION**

Innovative products resulting from the partnership between Symbiomics and Nitro are expected to reach the market by 2028/2029

July 28, 2025 (Florianópolis, SC, Brazil)

The development of new biological products has experienced strong growth in recent years. According to the Brazilian Ministry of Agriculture and Livestock (MAPA), between 2020 and 2024, 631 new inoculants were registered – representing approximately 87% of the current total. Today, Brazil has approved 737 products, distributed among 67 companies authorized for activities such as production, import, commercialization, or export of inoculants. However, most of these solutions are based on the same biological components, with little introduction of new microbial strains or species over the years.

Government data shows that products based on microorganisms of the *Bradyrhizobium* genus account for approximately 62% of registrations, while those formulated with strains of *Azospirillum brasilense* represent around 10% – highlighting the predominance of a few species in the Brazilian market. “Most biological products launched use similar or even identical technologies and strains. At Symbiomics, our work is to discover new microorganisms with multiple applications. We are developing a new generation of biologicals to offer the market innovative and effective alternatives for the field,” says Rafael de Souza, CEO and co-founder of Symbiomics.

To accelerate the availability of these new biologicals, [Symbiomics](#) has entered into a commercial partnership with [Nitro](#), a Brazilian multinational operating in the agricultural inputs sector since 2019. Nitro offers solutions for plant nutrition and physiology and is already among the main companies in the sector. “Our focus on innovation is what sustains this accelerated growth. In this context, we believe that combining Brazilian biodiversity with our expertise in industrial biotechnology will be one of the central pillars in delivering a robust portfolio to our customers,” comments Celso Santi Junior, R&D Manager at Nitro.

Founded in 2021, Symbiomics develops high-performance biological products for agribusiness, focusing on tackling one of today’s greatest challenges: increasing productivity sustainably in response to the growing global demand for food. Both companies received funding from Finep in 2024 to advance research and studies in the sector. Now, they are joining forces to accelerate the development and availability of innovative biological products to Brazilian farmers.

The companies also aim to diversify the key crops targeted by these biologicals. Most inoculants currently registered in Brazil focus on legume crops, especially soybeans (415 products) and beans (87 products). The goal is to develop biologicals for non-leguminous plants, such as corn (81 products) and sugarcane (6 products). Another objective is to

work on plant nutrition in regions subject to greater climatic stress, such as the Cerrado. These areas, which suffer from droughts and high temperatures, were once considered unsuitable for large-scale cultivation until advances in agricultural technology – such as soil acidity correction with limestone and the use of chemical fertilizers – enabled large-scale production from the 1970s onwards. Today, the biome accounts for 60% of Brazil's agricultural production and is vital for the country's food security.

However, much of the chemical inputs used in Brazilian agribusiness, such as fertilizers and pesticides, are largely imported. According to the National Association for Fertilizer Dissemination (ANDA), Brazil is the largest importer of fertilizers in the world, and in 2023, imports reached a record 39.4 million tons of synthetic fertilizers. "Brazilian agribusiness depends on importing chemical products that are essential for food production. This has a major impact on producers – fertilizers alone account for about 50% of costs. Offering plant nutrition solutions developed in Brazil will reduce farmers' high expenses and enable a more sustainable activity," adds Rafael.

In this context, biological products are key to managing agricultural systems in these regions, as they provide a more sustainable alternative for farmers and, in some cases, reduce the use of chemical inputs. This makes it one of the most promising markets in agribusiness, growing at an average annual rate of more than 16%. According to the National Association for the Promotion and Innovation of the Biological Industry (ANPII Bio), in 2024, the biological inoculants market handled around 18.3 million liters/kilograms, corresponding to revenues of approximately R\$ 527.5 million (Brazilian reais). These figures refer only to member companies of the association, indicating that the total market is potentially even larger.

The partnership will also make the process of developing new solutions faster. While under traditional methodologies a new biological product can take up to 10 years to reach the market, the two companies expect that together, this timeframe will be reduced by up to two-thirds. The first products are expected to be launched within 2 to 3 years.

ABOUT SYMBIOMICS

Symbiomics is a Brazilian biotechnology company. Founded in 2021, its goal is to globally transform agriculture with next-generation biological products. The company develops high-performance solutions to sustainably increase agricultural productivity, with less environmental impact. The products contain microorganisms used for multiple applications such as plant nutrition, biocontrol, carbon sequestration, and biostimulants. The company's Research and Development department works with cutting-edge advancements in genomics, microbiomes, and data analysis to enhance agricultural crop productivity through multiple approaches such as biofertilization, increasing resilience to environmental stress, and biological control. More information at: www.symbiomics.com.br and www.linkedin.com/company/symbiomics/.

ABOUT NITRO

Nitro is a Brazilian multinational with nearly 90 years of history, operating in the agricultural inputs, chemical specialties, and industrial chemicals segments. The

company entered the agricultural sector in 2019 and, in just five years, has established itself as one of the top three companies in plant nutrition and biologicals in the industry. Nitro has six production units in Brazil and four Research and Development centers, in addition to distribution centers, international operations, and its corporate headquarters in São Paulo (SP).