




**WORLD
FOOD PRIZE
FOUNDATION**

2025 LAUREATE

MARIANGELA HUNGRIA

BRAZIL



She Let the Soil Speak **AND THE LAND CAME ALIVE**



DR. MARIANGELA HUNGRIA will receive the 2025 World Food Prize for her extraordinary scientific advancements in biological nitrogen fixation, transforming the sustainability of soil health and crop nutrition for tropical agriculture. The low-cost technologies and products that she has developed have increased crop productivity sustainably and affordably across 40 million hectares worldwide.

Hungria entered college in the late 1970s to study microbiology, at a time when soil science was overwhelmingly focused on the use of chemical fertilizers to recover and maintain soil fertility, and soil microbiology was considered of minor importance.

Her persistence, dedication and scientific rigor throughout her career greatly elevated the importance of soil microbes in the agriculture sector and demonstrated to farmers and scientists that soil fertility should be built with life, not just with chemicals.

Hungria saw an opportunity to use bacteria to supply nitrogen, an important nutrient for plant productivity, which would mitigate the environmental impact of agriculture and allow farmers to reduce their reliance on costly, imported fertilizers.

Over decades of research and development at the Embrapa National Soybean Center, Hungria built her field of study from the ground up, working directly with farmers to learn what they needed.

She led the development of more than 30 technologies related to microorganisms for soybeans, common beans, maize, wheat, rice, pasture grasses and other major crops. Many of the technologies she developed were microbial inoculants, products containing beneficial bacteria that are applied to seeds or soils.



Hungria's work has contributed significantly to making Brazil the global leader in the commercial use of biological inoculants. Today, the technologies she and her research group developed are used annually on 85 percent of Brazil's total cultivated area of soybeans, more than 30 million hectares—the highest inoculation adoption rate in the world.

These innovations have saved Brazilian farmers over \$25 billion annually in input costs, prevented the release of 230 million tons of CO₂-equivalent emissions, and boosted yields beyond what is possible with synthetic nitrogen fertilizer alone.

This achievement, along with other scientific advances, has propelled Brazil to become one of the world's leading soybean producer and exporter—laying the foundation for the country's agricultural and economic growth over the past several decades.

Hungria's brilliant scientific work, commitment to sustainable crop production and microbiological innovations have gained her global recognition as a transformative agricultural development scientist both at home and abroad. With authenticity and compassion, she shares her dual journey as a scientist and mother, mentoring and empowering women researchers to thrive through the complexities of both roles.

In a time of immense pressure to produce more food with less resources and lower environmental impact, Hungria's work on the use of microorganisms towards achieving regenerative agriculture uplifts and reinforces sustainable production, One Health, and above all, food security.



"Dr. Hungria was chosen for her extraordinary scientific achievements in biological nitrogen fixation that transformed sustainability of agriculture in South America. Her brilliant scientific work and her committed vision for advancing sustainable crop production to feed humanity with judicious use of chemical fertilizer inputs and biological amendments has gained her global recognition both at home and abroad."

- DR. GEBISA EJETA, CHAIR, WORLD FOOD PRIZE LAUREATE SELECTION COMMITTEE



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OCTOBER 21-23, 2025

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