Leia o texto para responder às questões de 23 a 28.

Dr. Mariangela Hungria will receive the \$500,000 award for her work to utilize biological processes to sustainably improve crop¹ nutrition, yields² and productivity. The scientist whose discoveries helped Brazil become a global agricultural powerhouse has been named the 2025 World Food Prize Laureate.

Dr. Mariangela Hungria, a microbiologist from São Paulo, has developed dozens of biological seed and soil treatments that help crops source nutrients through soil bacteria, significantly increasing yields of major crops while also reducing the need for synthetic fertilizer. Her products are estimated to have been used across more than 40 million hectares in Brazil, saving farmers up to US\$40 billion a year in costs while avoiding more than 180 million metric tons of CO<sub>2</sub> equivalent emissions per year.

Dr. Hungria's work has helped improve yields of wheat, corn, rice, common beans, and other major crops, including soybean, which is now Brazil's top agricultural export. Over her 40-year career with the Brazilian Agricultural Research Corporation (Embrapa), national soybean production increased from 15 million tons in 1979 to an anticipated 173 million tons in the next harvest<sup>3</sup> in 2025.

Dr. Hungria, who overcame prejudices against women and young mothers in academia to be named one of the 100 most powerful women in agriculture in Brazil by Forbes magazine in 2021, said she was inspired by Dr. Norman Borlaug, the father of the Green Revolution and founder of the World Food Prize. "I like to say that he made the Green Revolution possible, and we had this great opportunity to start a 'micro green revolution' — a green revolution, but with microorganisms," she added. "I can't quite believe I am now receiving the World Food Prize. Many people questioned me and my abilities throughout my career but I believed in what I was doing and persevered. The role of women in agriculture, from farming to science, deserves more recognition. I hope my achievement inspires others to pursue their passions in science."

(www.worldfoodprize.org, 13.05.2025. Adaptado.)

## QUESTÃO 23

According to the text, Dr. Hungria's research showed positive results in

- (A) Green Revolution petrochemical development.
- (B) agricultural production improvement.
- (C) genetically modified soybean seeds.
- (D) effective synthetic fertilizers.
- (E) elimination of soil bacteria.

¹ crop: cultivated plant that is grown as food, especially grain, fruit or vegetable.

<sup>&</sup>lt;sup>2</sup> yields: the full amounts of an agricultural product.

<sup>&</sup>lt;sup>3</sup> harvest: the crops that are cut and collected.

## **RESOLUÇÃO**

## **ALTERNATIVA: B**

O texto sobre a Dra. Mariangela Hungria descreve como suas pesquisas aumentaram a produtividade das plantações e reduziram o uso de fertilizantes químicos. Logo, seus estudos contribuíram diretamente para **melhorar a produção agrícola**, o que corresponde à alternativa **(B) agricultural production improvement**.