

#10-18-G

Technology

Bio-input

Eco-Intelligent Soy Inoculant with Higher N₂ Fixation Efficiency and Lower Greenhouse Gases Emissions



Research Center for Agricultural and Veterinary Sciences (CICVYA)

Agricultural Microbiology and Zoology Rodrigo Rojo Mariana Puente

Institute of Agricultural Microbiology and Zoology. Research Center for Agricultural and Veterinary Sciences (CICVYA), National Center of Agricultural Research of Argentina (CNIA) INTA

#rhizobia | #N₂ | #inoculant | #gases | #greenhouse | #GHG | #nitrogen fixation | #soy

<https://www.argentina.gob.ar/inta/tecnologias/inoculante-eco-inteligente-para-soja-con-mayor-eficiencia-de-fijacion-de-n2-y-menor>

Only in Argentina, 20.5 million hectares of soy are planted annually. Nitrogen fixation in rhizobia is vital, since it naturally reduces the use of industrial nitrogen-based fertilizers without impairing yield and crop sustainability. Therefore, they are of utmost importance from the agricultural and environmental viewpoint.

The INTA Agricultural Microbiology and Zoology Institute is working on the identification and selection of *Bradyrhizobium sp.* with high atmospheric nitrogen fixation capacity that minimizes nitrous oxide emissions and other greenhouse gases.

Inoculant manufacturers who seek to include in their portfolio a growth promoter that improves crop productivity and reduces greenhouse gas emissions.

Naturalized rhizobia strains.

Eco-intelligent soy inoculant.

Mitigates N₂O emissions.

Naturalized non-transgenic strains of *Bradyrhizobium sp.*, identified and characterized with N₂ fixation properties. Requires physiological proficiency testing and N₂O emissions assessment in laboratory scale applications.

Scaling and marketing.

Photo x

rojo.rodrego@inta.gob.ar

BIO-INPUT/INOCULANT