

## Goal

Integrating CRISPR and other gene-editing tools in crop improvement to enhance productivity and nutrition while protecting biodiversity, the environment, and food supply.

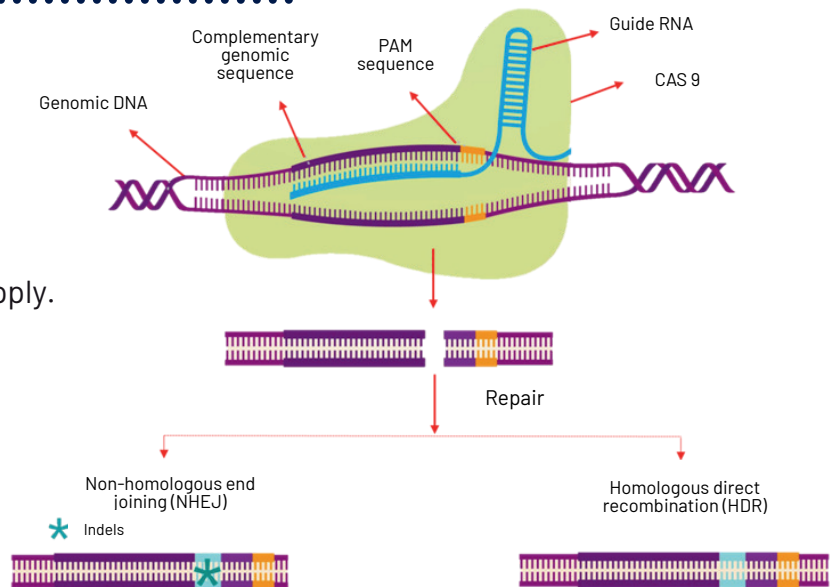


Image reference:  
<https://piel-l.org/blog/41864>

## Rice highlights

Editing the *Gn1a* gene in Llanura 11 rice using CRISPR tripled grain production in field conditions.

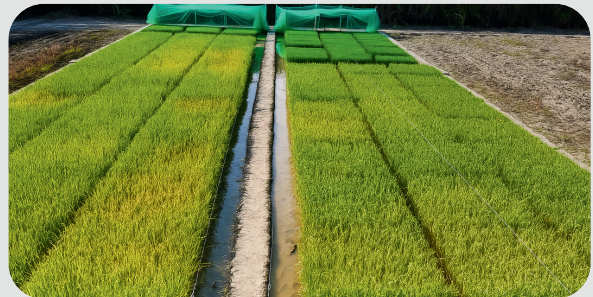


Llanura 11 (Control)



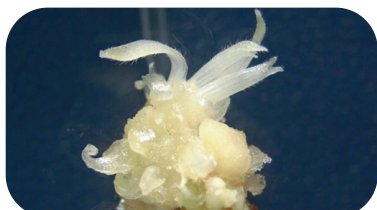
Llanura 11 (Edited)

Since 2020, Colombia has recognized the CRISPR-edited rice varieties IR64 and Ciherang-Sub1 as conventional, both resistant to *Xanthomonas*.



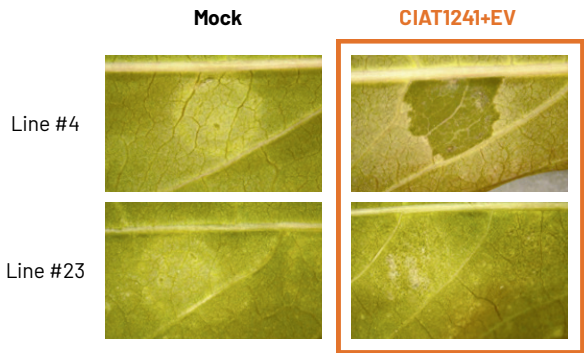
Cadmium concentration in edited rice lines was reduced by **82.8%** compared to the control.

## Forages highlights



Validation of the CRISPR methodology in the *PDS* (*Phytoene Desaturase*) gene for its application in methane emission reduction projects.

# Cassava highlights



Cassava plant edited in the *MeSWEET* gene, showing resistance to the *Xanthomonas* bacterium (strain CIAT1241), compared with an unedited control plant.



Cassava line edited in the *GBSSI* gene (non-transgenic) producing waxy starch, stained with iodine and compared with a normal cassava plant used as control.

# Recognitions and research



Responsible management and quality control in agricultural biotechnology throughout its entire life cycle.



From 2016 to 2025, the Gene Editing Platform has conducted six courses and one webinar to strengthen knowledge and dialogue on genomic editing.

# Our collaborators



Scan the QR code to learn more about the Gene Editing Platform



Scan the QR code to learn more about the Carbon Sequestration Project.



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