

Diversity analysis in a durum wheat collection of wheat germplasm from the Southern Cone, to derive breeding strategies enhancing the use of genetic diversity.

Project Title: P1369 - Support operation of phenotyping platforms

Description of the innovation: Linkage disequilibrium patterns, population structure, and diversity analysis in a worldwide durum wheat collection. The collection was structured in five sub-populations clearly differentiated. This study contributed to a better understanding of the complexity of wheat germplasm in the Southern Cone (South America), and to derive future breeding strategies enhancing the use of genetic diversity in a more efficient and targeted way.

New Innovation: Yes

Stage of innovation: Stage 3: available/ ready for uptake (AV)

Innovation type: Production systems and Management practices

Geographic Scope: Regional

Number of individual improved lines/varieties: <Not Applicable>

Region:

- South America

Description of Stage reached: Completed analysis.

Name of lead organization/entity to take innovation to this stage: CONICET - Consejo Nacional de Investigaciones Científicas y Técnicas

Names of top five contributing organizations/entities to this stage:

- CIMMYT - Centro Internacional de Mejoramiento de Maíz y Trigo / International Maize and Wheat Improvement Center
- INTA - National Institute of Agricultural Technology / Instituto Nacional de Tecnología Agropecuaria

Milestones: No milestones associated

Sub-IDs:

- 12 - Increased conservation and use of genetic resources

Contributing Centers/PPA partners:

- CIMMYT - Centro Internacional de Mejoramiento de Maíz y Trigo / International Maize and Wheat Improvement Center

Evidence link:

- <https://bmcbgenomics.biomedcentral.com/articles/10.1186/s12864-021-07519-z>

Deliverables associated:

- D10269 - Coordination of Precision Wheat Phenotyping Platforms (**Not disseminated**)

Contributing CRPs/Platforms:

- Wheat - Wheat