

Genomic location of resistance to Yellow Rust and Spot Blotch in Barley

URUGUAY, PERÚ, SYRIA, UNITED STATES



Webstory



Technological solution

Identification, characterization and localization of QTLs for resistance to Yellow Rust (*Puccinia striiformis*) and Spot Blotch (*Cochliobolus sativus*).



Technological description

A barley population of 330 lines was phenotypically characterized for resistance to Rust and Spot. Genotypic characterization was carried out using 1536 SNPs.



Impacts and results

- 22 QTLs were detected for resistance to Spot and Rust, the majority in genomic regions without previous reports, which allows to conclude that they are new resistances.
- A resistance gene pyramid construction process was started using the already known resistance and some of the new resistance detected.
- A network of collaboration and technical support was consolidated between the project participants and other collaborators.
- Human resources were trained in the use of genomic tools in support of genetic improvement.



9

Spot Blotch resistance QTLs



13

Spot Blotch resistance QTLs



2

Scientific Publications



15

Conference Presentations

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