

## Genomics of resistance to *Fusarium circinatum* in *Pinus radiata*

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Around the world *P. radiata* is one of the most susceptible specie to *Fusarium circinatum*, the cause of the disease resinous canker or also known as "Pitch Canker". In nurseries located at the Biobío region in Chile, the fungus produces the death of hedges. However, a set of studies of controlled inoculations using some families of *P. radiata* have shown genetic differences in resistance to *F. circinatum*, indicating the potential use of genomic tools to control the pathogen.

Accordingly, this project focuses on studying the mechanisms of genetic resistance to *F. circinatum* in *P. radiata*. Our objectives are to develop protocols for evaluating the resistance to *F. circinatum* on seedlings of *P. radiata* and genomics tools to predict and increase the genetic resistance to this pathogen. Finally, it is expected to identify candidate genes for resistance that could be validated through genetic transformation methods.

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