Designing REsilient stone fruit trees via integrative phenotyping in low phytosanitary input orchards and Association genetiCS

OBJECTIFS

The broad research question addressed in this work is whether and how it is possible to breed for resilience in stone fruit. To answer this question, methods need to be developed to measure resilience, identify resilient ideotypes and control the inheritance of resilience in stone fruit. The PhD will pioneer these objectives by examining the use of genetic resources in two major Prunus species as a leverage to i) uncover the fundamental principles of resilience in stone fruit, ii) find genetic markers associated to resilience and/or resilience components, such as resistances and tolerances to individual pests and diseases iii)identify potential resilient progenitors useful for prebreeding activities. Thus, by increasing our understanding of stone fruit resilience at the phenotypic and genetic levels, this project will contribute in the long term to make resilience a concrete breeding target for breeders.

Responsable :

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