

BNP-FRUITRESCUE

Project Title: *Assessing the risk of maladaptation to climate change in temperate and Mediterranean fruit trees*; BNP Paribas-Climate & Biodiversity Initiative-Call

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Project Duration: 2023-2027

Project links:

<https://vimeo.com/tulipesetcie/review/877929481/bba78479f0>

https://www.youtube.com/watch?v=QzP_HPDUeBA

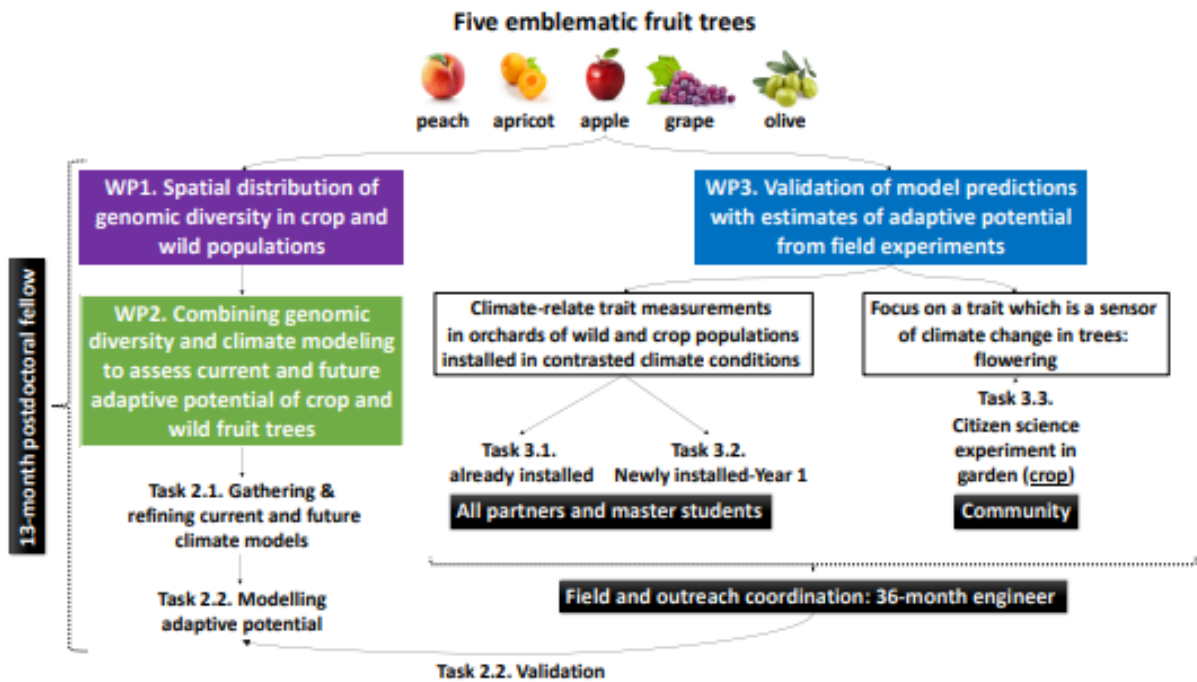
<https://www.youtube.com/watch?v=72HYVNH-TrA>

<https://www.ideev.universite-paris-saclay.fr/le-verger/>

Project summary

Climate change poses a significant threat to biodiversity and food security. To mitigate its impact on food production, it is crucial to harness the diversity of crops and their wild relatives. This is especially true for tree crops that were planted in orchards years ago under different climate conditions. Using novel approaches, FRUITRESCUE, a European **consortium of experts**, will **predict the adaptive potential to climate change** of crop and wild populations of **emblematic fruit trees (apple, apricot, peach, olive and grape) combining population genomics, climate modeling and phenotypic data. This project benefits from the range of skills of those involved and the availability of data acquired over the years. New data will be generated and analyzed over the next three years by experts in genomics, climate modeling, fruit tree evolution and breeding, policy decision-making, with contributions from community science initiatives.** This project will provide (i) a comprehensive assessment of the vulnerability of fruit tree crops and their wild relatives to climate change, as well as a list of varieties that may be cultivated in different parts of Europe in the future, (ii) reservoirs of crop and wild genetic diversity in orchards across Europe that will be used for future breeding programs to meet the demands of food production in the context of climate change, (iii) increased public awareness of the impact of climate change on fruit trees, agrobiodiversity conservation, through community science initiatives.

FRUIT RESCUE:
Assessing the risk of maladaptation to climate change in temperate and Mediterranean fruit trees



Understanding the response of crop and wild plants to climate change
Key results for breeding programs, food production, and society

