

## Biopeptide application guided by an infection prediction system for the management of bacterial diseases of fruit trees (SUMACROP)



Bacterial diseases in stone fruit trees and almond trees, especially bacterial spot caused by *Xanthomonas arboricola* pv. *pruni* (Xap), represent a serious problem for growers, affecting both quality and yield, with fruit production losses ranging from 20% to 75%. Current control methods are limited and rely mainly on plant-protection products with moderate effectiveness, whose use is increasingly restricted. The solution proposed by SUMACROP integrates the use of defense-eliciting peptides (Pep1 and Pep2) and the predictive system XapCAST, which determines the optimal timing for treatment application, maximizing its effectiveness and minimizing the number of applications required.

## COMPETITIVE ADVANTAGE

- Reduced dependence on phytosanitary products.
- Improved efficacy in the control of bacterial spots.
- Low environmental impact and toxicity.

## OBJECTIVE MARKET

- Phytosanitary industries.
- Public administrations on plant protection.
- Companies dedicated to implementing disease-management tools

## POTENTIAL APPLICATIONS

- Integrated crop management systems.
- Development of new products for the phytosanitary sector.

## ROADMAP / TIME-TO-MARKET

- Projects R+D 2013 Challenge Program (**AGL2013-41405-R**).
- Projects R+D 2018 Research Challenges (**AGL2017-85121-R**).
- Projects R+D+I Proof of concept 2021 (**PDC2021-120778-I00**).
- Patent application: EP24382728.4

## RESEARCH GROUPS

Plant pathology  
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