



Optimal moment for the application of treatments against downy mildew in grapevine to minimize residues in wine

What is PLASMOWINE?

Downy mildew is a fungal disease that affects vines which, in humid regions like Galicia, can seriously damage both the production and the quality of the wine, in addition to the important economic outlay that its treatment entails for winegrowers



OBJECTIVE



The main objective of the project is to develop a **decision-making support system** to determine the optimal moment for the phytosanitary treatments application against mildew, for the first treatment of the campaign and next ones

ACTIVITIES

1



Installation and launching of spore collectors and the meteorological stations in experimental plots

2



Spore counting in the laboratory

3



Data collection and weather forecasting

4



Control of the mildew oospore maturation

5



Field inspections (phenology, disease symptoms) and phytosanitary treatments

6



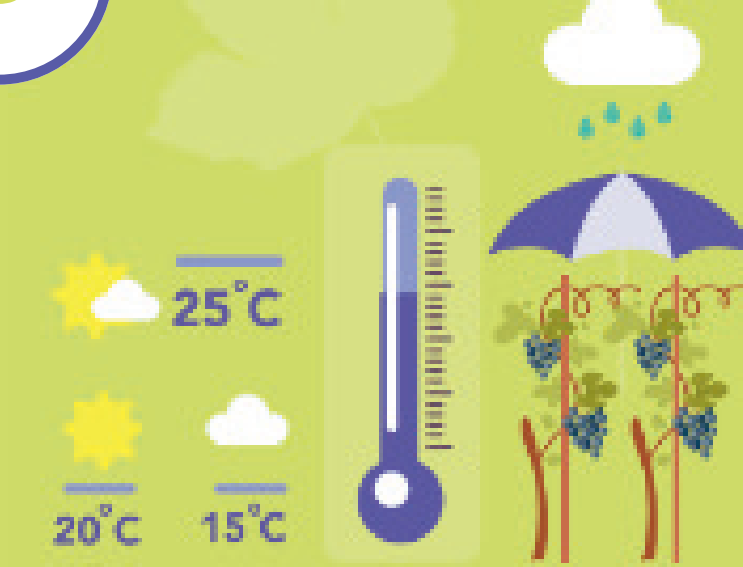
Grape and wine multiresidue analytics before

7



Development of the artificial intelligence model that determines the optimal timing of treatment application

8



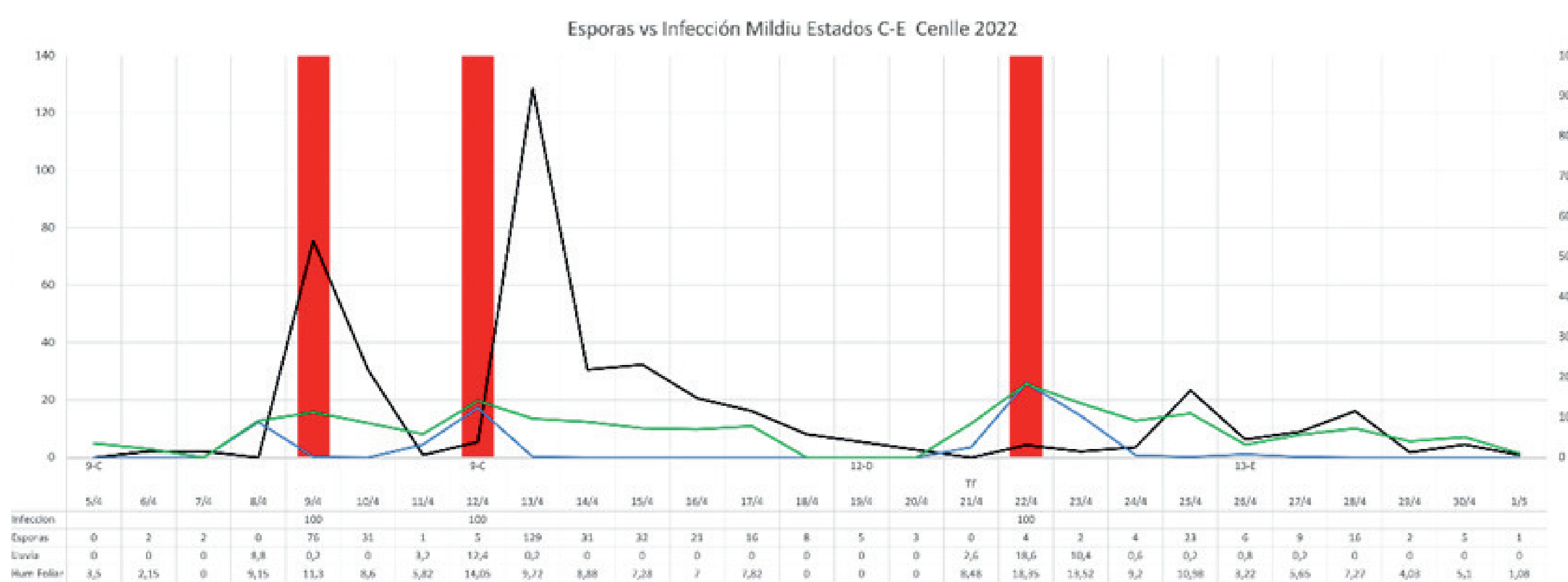
Assess the climate change influence on the impact of downy mildew in viticulture



RESULTS



Development of mathematic models to identify the optimal moment for applying treatments against mildew in the vineyard. The graph displays the data about mildew infection risk, spore count, rainfall, and accumulated hours of foliar humidity during the beginning of the 2022 campaign for an experimental plot of DO Ribeiro.



Who is it for?

- Wineries and Cooperatives
- Certificates of Origin Regulation Councils
- Machine and technology builders related to the sector
- Independent winegrowers
- Public Administrations related to agriculture, environment and rural development
- Research centers
- General public

Who are the partners of PLASMOWINE?



TOTAL BUDGET: 179.999,99€ (100% FUNDED)

CO-FINANCING EU: 75% EAFRD