What's 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.

The **PLASMOWINE** Operational Group aims to develop a decision-making support system that determines the optimal moment for the treatment against downy mildew to be applied, indicating when the first treatment is needed and when it shall be renewed. The proposed system will assess the risk of disease based on meteorological and agronomic parameters, and observations of the crop status. It will also consider the real duration of the protection given by the most used antifungal treatments. The tests will be carried out in 3 Galician Certificates of Origin: Rías Baixas, Ribeiro and Valdeorras.

Thus, **PLASMOWINE** will minimize the impact of downy mildew on Galician vineyards, betting for a quality, profitable, sustainable, and environmentally respectful viticulture.

To whom is PLASMOWINE aimed to?

The **PLASMOWINE** project is oriented towards all the agents of the viticulture sector:

- **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**
- **Investigation centers and general public**

PLASMOWINE

Do you want to know more about PLASMOWINE?
To know more about the PLASMOWINE project,
send us an email at **debora@monet-ti.com**
or call **+34 659 10 18 88**.

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AXENCIA GALEGA DA CALIDADE ALIMENTARIA
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PLASMOWINE

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

Total budget: €179.999,99 **Total grant: €179.999,99** **Co-financing EU: 75% FEADER**

PLASMOWINE is funded by grants for the execution of operational groups of the European Innovation Partnership (EIP), 75% co-funded by the European Agricultural Fund for the rural Development (EAFRD), in the framework of the 2014-2020 Galician Rural Development Program (RDP). Total budget: €179,999.99 (100% funded). The Consellería do Medio Rural is the Galician Administration authority responsible for proposing and executing the general guidelines in the rural scope and encompasses powers in agriculture, livestock, rural development, and regional planning, rural structures, agri-food, and forestry industries, mountains, and prevention and defense against forest fires.

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Objectives of the project

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, both for the first treatment of the campaign and of the next. Furthermore, **PLASMOWINE** seeks to determine the impact and behavior trends of downy mildew in the last years and to determine the impact that the different climate change scenarios predicted by IPCC will have over the vines in the areas under study (CCOO Rías Baixas, Ribeiro and Valdeorras).

Expected results of the project

As a consequence of the plan work developed by **PLASMOWINE** a mathematician model that determines the optimal moments for the antifungal treatments and for the real duration of the treatment's protection will be obtained.

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.

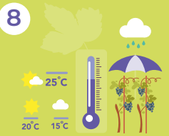
Field inspections (phenology, disease symptoms) and phytosanitary treatments.

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.

Transfer of the results to the sector and development of dissemination actions.

Whose PLASMOWINE comprised by?

PLASMOWINE is comprised by a multidisciplinary team of Galician companies led by **Monet Tecnología e Innovación** that counts with the participation of **Viña Costeira, FEUGA, Universidade de Vigo** (Plant, Soil and Subproducts Use research group), and the **Estación Fitopatolóxica Areeiro** (Deputación de Pontevedra).

Monet viticultura

Viña Costeira

feuga fundación empresa universidad gallega

Universidade Vigo

DEPUTACIÓN PONTEVEDRA
ESTACIÓN FITOPATOLÓXICA AREEIRO