



## Implementation

SafeWax technology will be validated on the grapevine, a prominent traditional European crop, which is severely damaged by fungal-associated diseases. The proof-of-concept outcome will open the possibility of using SafeWax technology to treat numerous crop-bearing plants of the Mediterranean region, revolutionizing Europe's crop protection practices.

## Project Coordinator

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Funded by  
the European Union

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**WAX COATING FOR  
MULTI-FUNCTIONAL  
SUSTAINABLE  
CROP PROTECTION**

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## Challenge & Solution

Fungal pathogens destroy at least a third of global food crops annually. To protect crop yield plants against fungi, modern agriculture still relies on chemical fungicides, despite their severe adverse effects on the environment and human health.

**SafeWax** steps in to address this global urgency to increase the sustainability and security of the agri-food system and develop alternative green strategies for fungal control.

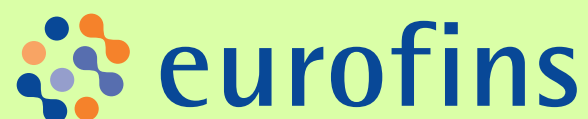
## What is SafeWax?

Our innovation **SafeWax**, draws inspiration from superhydrophobic plants like lotus and broccoli, to offer a sustainable shield against fungal threats in crops.

Using natural fatty acid sprayable formulations, **SafeWax** forms a self-assembled protective coating with anti-adhesive, self-cleaning, and antimicrobial properties and equips vulnerable crops with a wax-like defense.

**SafeWax** isn't just about protection; it's also designed for UV filtering, sun damage prevention, and dew condensation for water collection, vital in our changing climate.

## Consortium



## Novelty & Ambition

-  Antifungal activity
-  Bioinspired technology
-  Biopesticide formulations
-  Facile spray application

