

LIFE – FAGESOS



Phytophthora-induced decline of Fagaceae ecosystems in Southern Europe exacerbated by climate change: preserving ecosystem services through improved integrated pest management

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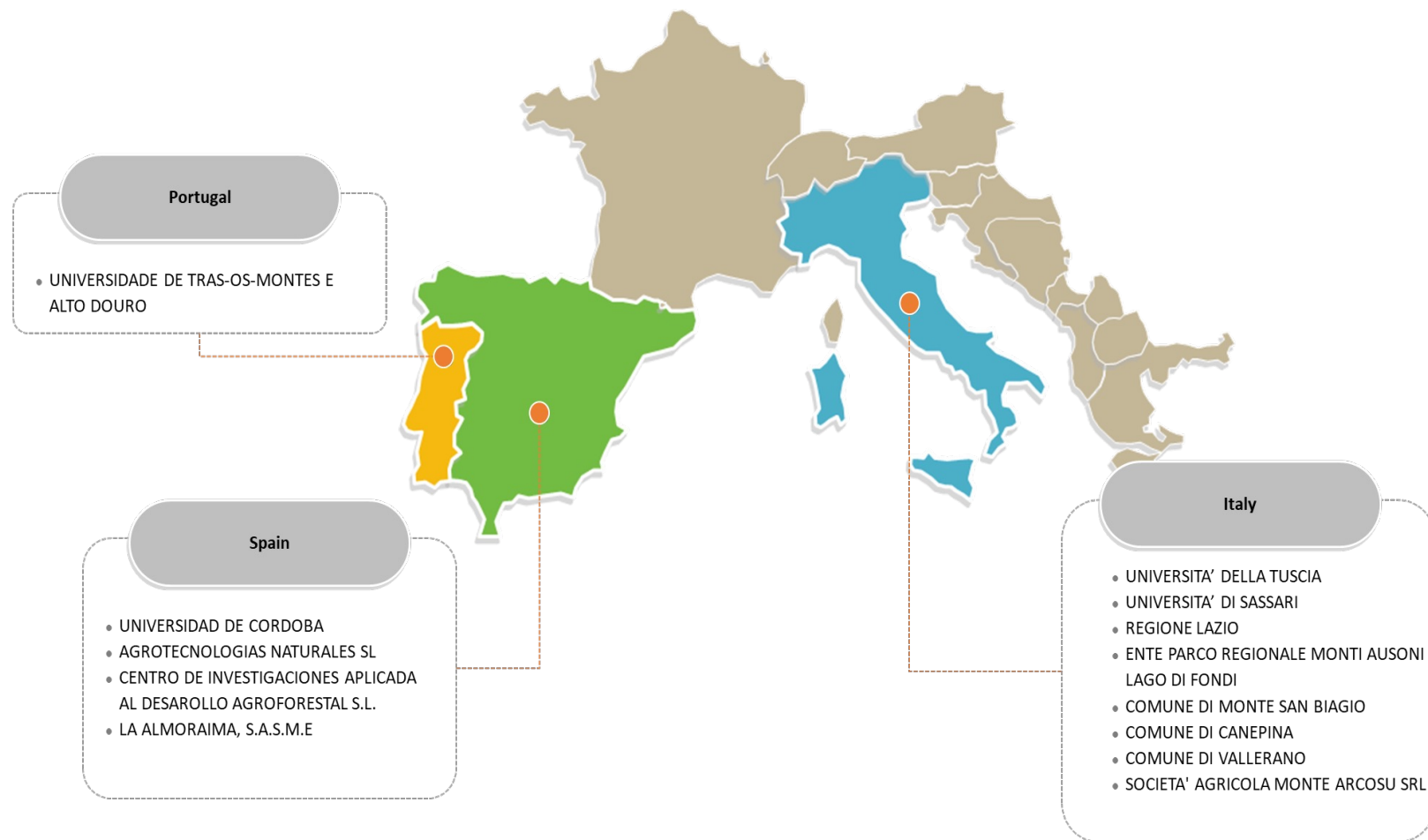
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The numbers of FAGESOS

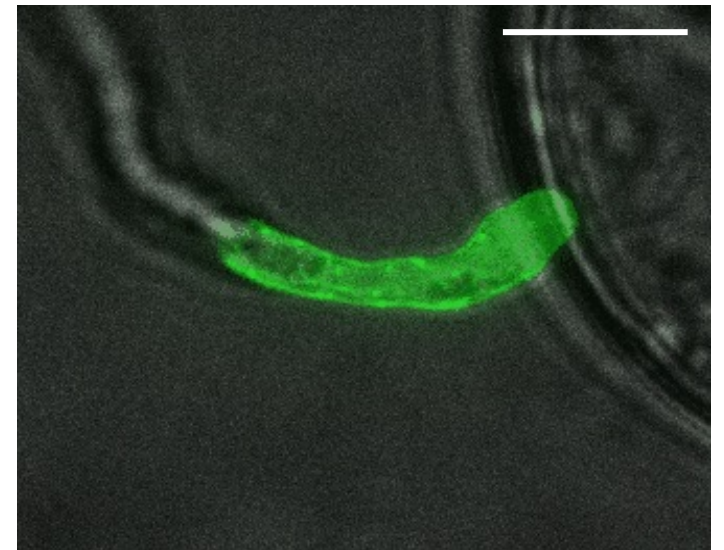
- 3 Southern European countries
- 13 official partners among research institutions, enterprises, local authorities, and growers
- 14 main stakeholders including growers, associations, local authorities, and enterprises that stated their interest
- 5-year project
- Over six million euros of the total budget



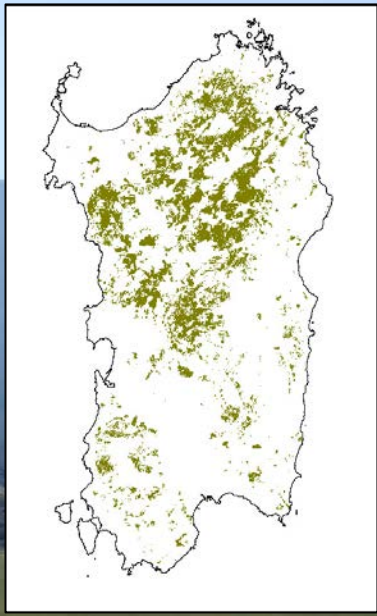
Why this project?



Decline mainly associated with *Phytophthora*



Cork oak in Monte Arcosu, Sardinia (Italy)





Phytophthora cinnamomi



Work plan

WP1: Project Management and Coordination

WP2: Creation of a GIS-based service platform for disease impact and risk assessment

WP3: Development of new treatment and ground-based monitoring protocols to be used in integrated pest management

WP4: Large-scale application of new customized IPM protocols

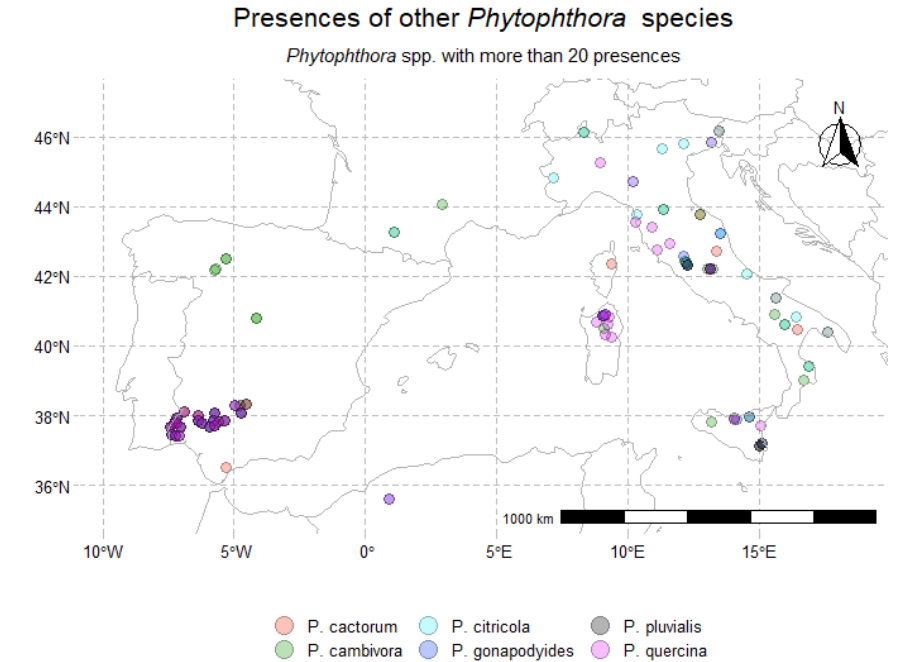
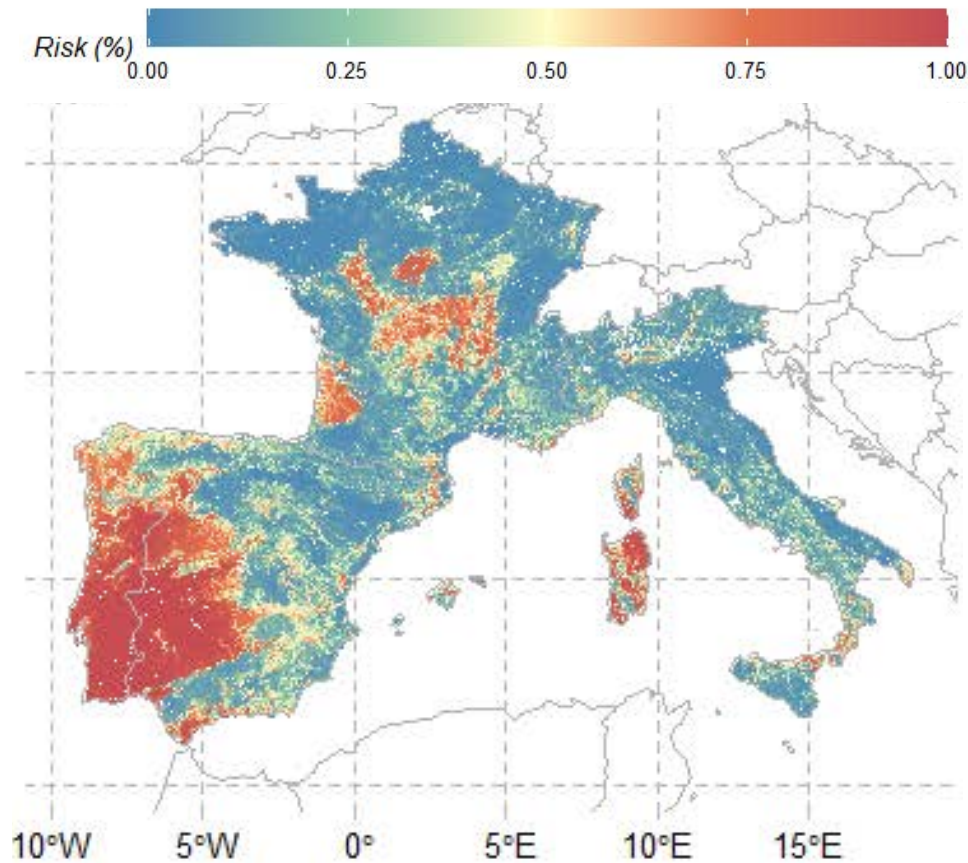
WP5: Communication, Dissemination & Awareness Raising

WP6: Sustainability, replication and exploitation of project results

WP7: Performance and impact monitoring and evaluation

WP2: Creation of a GIS-based service platform for disease impact and risk assessment (UCO)

$$Risk_{Total} = Risk_{Survival} Risk_{Rainfall} Risk_{Soil}$$



Task 2.2 Risk map of *Phytophthora* disease based on *Phytophthora cinnamomi* habitat and distribution model in Fagaceae ecosystems under different climate scenarios

WP3: Development of new treatment and monitoring protocols (UNISS)



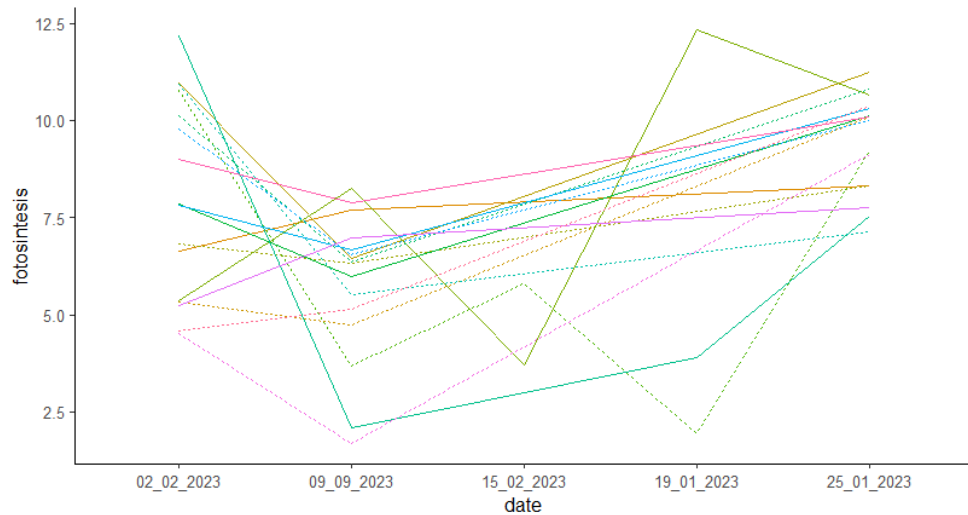
Quercus Ilex (UCO)



Castanea sativa (UNITUS)



Quercus suber (UNISS)



- Treated
 - Untreated
- | treatment_name | |
|--------------------------|----------------------|
| Bacillus | LL017 |
| Bacillus_Pc | LL017_Pc |
| bactrium | new_kalex |
| bactrium_Pc | new_kalex_Pc |
| basalto | Quitosan |
| basalto_Pc | Quitosan_Pc |
| control | Tricoderma |
| control_Pc | tricoderma_gamsii |
| efecto_escudo_basalto | tricoderma_gamsii_Pc |
| efecto_escudo_basalto_Pc | Tricoderma_Pc |
| kalex | tricoten |
| kalex_Pc | tricoten_Pc |



Licor 6400

WP4: Large-scale application of new customized IPM protocols (UNITUS)



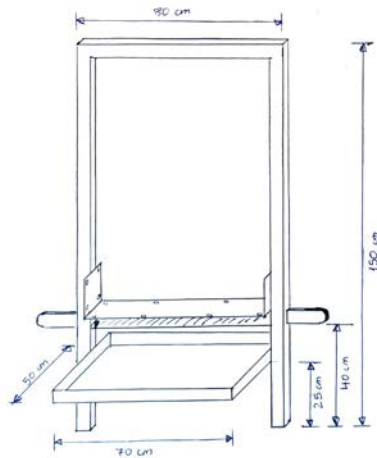
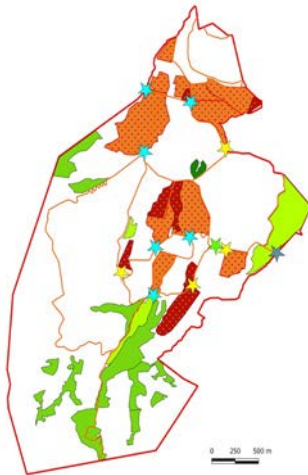
Monte Arcosu

- Farm border
- Country roads
- Phytophthora foci (Holm Oak): 29,00 ha
- Phytophthora foci (Cork Oak): 110,35 ha
- Cork Oak Reforestations: 146,46 ha
- Holm Oak Coppices: 79,00 ha
- Holm Oak Reforestations: 59,70 ha

Cleaning stations

- ★ Boots Cleaning Stations
- ★ Concrete + Boots Cleaning Stations
- ★ Mats Cleaning Stations
- ★ Mats + Boots Cleaning Stations

Boots Cleaning Stations n. 8
Mats Tires Cleaning Stations n. 10
Concrete Tires Cleaning Station n. 1

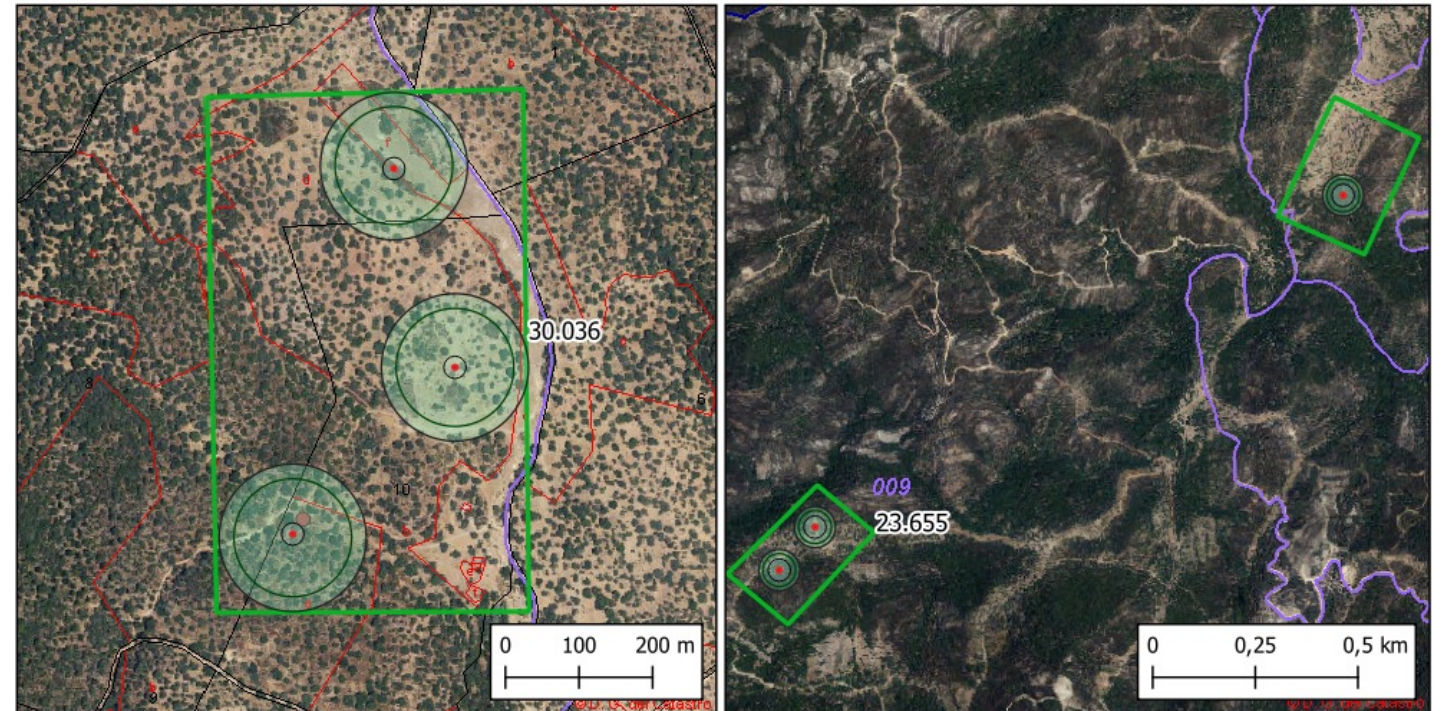
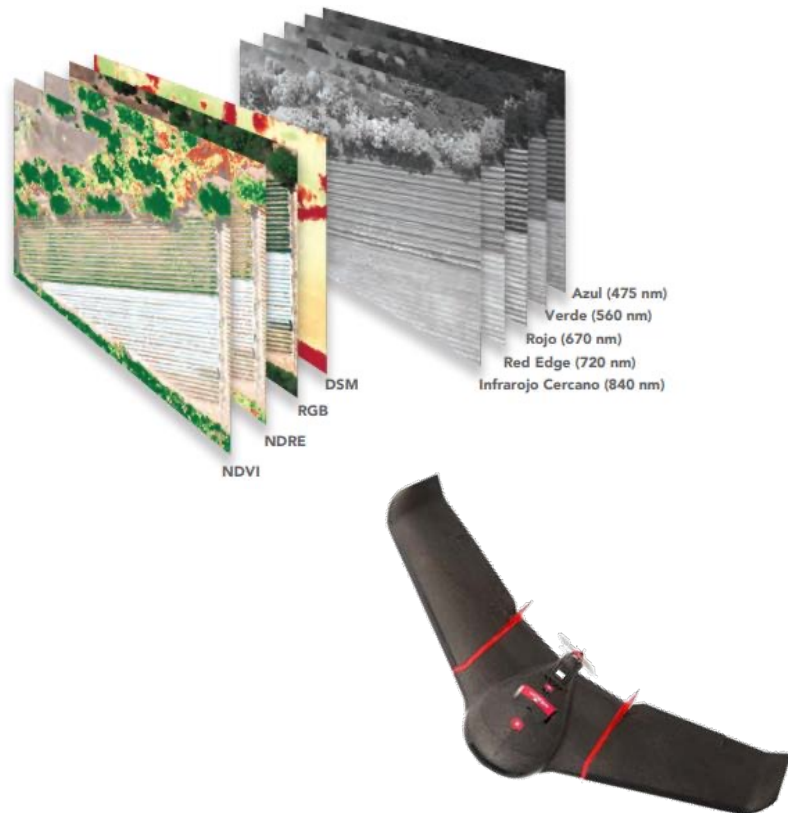


Successfully used to contrast the spread of Avian influenza (Bird flu) in the UK

WP5: Communication, Dissemination & Awareness Raising

WP6: Sustainability, replication and exploitation of project results

WP7: Performance and impact monitoring and evaluation



Thanks
grazie
gracias
obrigado

