



Supported by:

PDR  
2020  
PROGRAMA DE  
DESENVOLVIMENTO  
RURAL 2014-2020PORTUGAL  
2020UNIÃO EUROPEIA  
Fundo Europeu Agrícola  
de Desenvolvimento Rural  
A Europa Investe nas Zonas RuraisStart: January/2017  
End: December/2021

Budget: 482.000 €

## Operational Group: IntenSusVITI - Sustainable intensification of viticulture through mechanical pruning.

*IntenSusVITI - Intensificação sustentável da vitivinicultura através da poda mecânica.*

### Practical problem

Portuguese vineyards have one of the lowest yields in the world, around 4 t/ha/year, severely limiting the sector's competitiveness. This low productivity is mainly due to the lack of innovative processes, especially in terms of pruning, and to the low fertility of vineyard soils.

### Partners

#### Type:

Research /Teaching  
Agri Enterprise

Agri Association

#### Name:

ISA - Instituto Superior de Agronomia  
ACA - Adega Cooperativa de Almeirim; Quinta do Gradil - Sociedade Vitivinícola, SA; Quinta da Aroeira S.A.G., Lda.; Quinta de Lourosa - Sociedade Agrícola, Lda.; José Maria da Fonseca Vinhos S.A.; Sociedade Agro-Alimentar Da mascata, Lda.  
AVIPE - Associação de Vitivinicultores do Concelho de Palmela; ATEVA - Associação Técnica dos Viticultores do Alentejo

### Project

#### Objectives:

Produce grapes with low ecological footprint  
Increase productivity through mechanical pruning and soil organic matter improvement  
Develop new methods of risk estimation for sustainable pest protection  
System optimization with precision viticulture techniques.

#### Expected results:

Wines from grapes with low ecological footprint. Mechanical pruning model relating pruning intensity with spatial variability. New practices to increase carbon sequestration in vineyard soils and ensure plant nutrition. Efficient methods for pest detection and risk estimation. Biotechnological and biological tools to control mealybugs.

#### Results so far/first lessons:

Mechanical pruning reduces costs and, potentially, increases yield. The yield increase is due to a higher number of bunches, though the berries were smaller. There seems to be a tendency for mechanical pruning to proportionate better conditions for the development of mealybugs.

#### Who will benefit:

Portuguese winegrowers, particularly ACA (250), ATEVA (2000) and AVIPE (300) members and the other project partners.

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