



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

IntenSusVITI - Intensificação sustentável da vitivinicultura através da poda mecânica.



Supported by:



Start: January/2017
End: December/2021

Budget: 482.000 €

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 Vitivincultores 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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