



Operational Group:

IntenSusVITI - Sustainable intensification of viticulture through mechanical pruning

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

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

Agri Association

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 increases 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.

Start: january/ 2017
End: december/ 2021

Budget: 482 000.00



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