



New approaches for protection in a modern sustainable viticulture: from nursery to harvesting



CONSORTIUM

The LIFE GREEN GRAPE project beneficiaries constitute a partnership that includes several components and has an adequately diversified expertise.

Coordinator:



Partner:



Società Agricola Elli Tagliente



CASTELLO di GABBIANO ESTABLISHED 1014

SUPPORT

The project dissemination, the networking actions and the deriving results will be supported by a network of partners, stakeholders and representative bodies of the sector and of the production chains represented in the experimental design:

- Associazione MIVA - Moltiplicatori Italiani Viticoli Associati
- FIVI - Federazione Italiana Vignaioli Indipendenti
- ODAF - Ordine dei Dottori Agronomi e Dottori Forestali di Arezzo
- OP Agorà - Organizzazione di produttori agricoli - Puglia, Basilicata, Calabria
- IRV-CIP - Internationaler Rebveredlervverband - Comité International des Pépiniéristes Viticoles

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PROJECT LIFE16-ENV-IT-000566



Title: LIFE GREEN GRAPES - New approaches for protection in a modern sustainable viticulture: from nursery to harvesting

Programme: LIFE 2016 Environmental and Resource Efficiency

Project Coordinator: CREA - Consiglio per la Ricerca in Agricoltura e l'analisi dell'Economia Agraria

Consortium: Italy - UNIFI - Dipartimento di Scienze delle Produzioni Agroalimentari e dell'Ambiente ; P.Ri.Ma. Forma - Progettazione, Ricerca e Management per la Formazione; Vivai F.lli Moroni; Consorzio VITITALIA; Castello di Gabbiano - Beringer Blass Italia; Società Agricola F.lli Tagliente. Cyprus - CUT - Cyprus University of Technology

Total Budget	€ 2.492.618,00	Duration	July 2017 – June 2021
EC Contribution	€ 1.349.354,00	Project Areas	Tuscany and Apulia Regions (IT) - Cyprus (CY)

THE PROJECT CHALLENGE

The project LIFE GREEN GRAPES proposes the development of protocols based on technical practices for vineyard and nursery management, using plant biostimulants and biocontrol agents that allow the reduction of chemical inputs, the preservation and increase of soil biodiversity and the improvement of the final product quality.

THE PROJECT GOALS

LIFE GREEN GRAPES is a demonstration project aimed at improving the defense response of grapevine and increasing the vineyard biodiversity, with the use of biostimulant and/or resistance induction products. The activities performed within the project will evaluate and prove the effectiveness of application protocols integrated with defense forecasting models/decision support systems (DSS) and with agronomic management techniques, throughout the whole wine production chain: from nursery to wine and table grape vineyards.

THE METHODS

LIFE GREEN GRAPES project will be composed by:

A) A preparatory phase for the systematization of data deriving from previous studies and for the evaluation of the existing conditions of farms and experimental vineyards. The application protocols will be defined and the strategies to control and verify the management activities outcome will be selected.

B) Six implementing actions for the realization of management strategies based on the different intervention protocols chosen, in nurseries and vineyards, during 3 productive seasons. The protocols will include the integrated use of agronomic practices together with plant biostimulants and biocontrol agents. The protocols will be employed in:

1. nurseries for the production of organic rooted grafts
2. nurseries for the production of michorized rooted grafts
3. wine grape vineyards
4. table grape vineyards in Italy (conventional viticulture) and in Cyprus (organic viticulture).

Finally, the optimal use criteria for products will be established and the guidelines for proper protocol applications will be drafted.

C) Three actions for an exhaustive study of environmental and productive impacts of the proposed solutions. The effectiveness and efficiency of the protocol applications will be evaluated and the socio-economic repercussions of the project results will be assessed.

EXPECTED RESULTS

The expected results of LIFE GREEN GRAPES project are the following:

- development of 3 experimentation cycles for the application of the defined protocols, in order to improve the grapevine defense strategies in nurseries, wine grape vineyards and table grapes vineyards;
- testing and demonstration of effectiveness and feasibility of the proposed strategies;
- training interventions for professional operators aimed at the introduction of defense treatments alternative to chemical products and at the illustration of innovative recommended protocols. Increase of farms that will implement protocols and/or undertake conversion to organic viticulture;
- rationalization and reduction in the use of synthetic fungicides, in viticultural propagation and productive stages;
- optimization of treatment timing and of dispersed product quantities, especially near the harvest;
- eco-sustainable environmental impact, through the increase of microbial/entomological vineyard biodiversity;
- strong treatment number reduction in wine grape vineyards, with a forecast of total greenhouse gas emissions decrease, expected as 24 kg CO₂ eq/Kg year⁻¹ less and an overall 10% enhancement of soil health;
- quantitative and qualitative improvement in the whole wine production chain; increase of 25-40% in rooted grafts thriving, compared to a standard cycle; consequent reduction of discarded product due to infections/fungal contamination and better rooting performance in new vineyards; lower content of chemical residues on grapes, in order to have greater food security and consumer health protection;
- Provision of alternative solutions for integrated defense management, in agreement with EU directives, through the drafting of regulatory guidelines for the Italian Ministry of Agricultural, Food and Forestry Policies.