

## Broadening and improving biodiversity for a more competitive and sustainable viticulture in the Colli Piacentini area

### Riferimenti

Tipo di progetto

Gruppo Operativo

Acronimo

Valorin Vitis

Tematica

Biodiversità

Information

Time frame

2016 - 2019

Durata

36 months

Partners (no.)

10

Regione

Emilia-Romagna

Comparto

Viticultura

Localizzazione

ITH51 - Piacenza

Costo totale

€376.475,00

Fonte di finanziamento principale

Programma di sviluppo rurale

Programma di sviluppo rurale

2014IT06RDRP003: Italy - Rural Development

Programme (Regional) - Emilia Romagna

Parole chiave

Climate and climate change

Pest /disease control

Water management

Food quality / processing and nutrition

Genetic resources

Agricultural production system

Sito web

<http://www.valorinvitis.eu>

Project status

completed



### Objectives

This project aims at boosting sustainable competitiveness of the Colli Piacentini viticulture area by providing solutions to the following pressing issues: i) adaptation to global warming through introduction and valorization of local biotypes; ii) evaluation and adoption of new rootstocks tolerant to drought; iii) finding a realistic solution to the alternate bearing pattern of the native cv Croatina by promoting the use of the cross-bred cv. Ervi; iv) achieving a significant reduction in the use of pesticides by evaluating adaptability of new downy and powdery mildew resistant genotypes and v) strengthen the adoption of ICT technologies in vine protection.

### Activities

i) The grapevine commodity will be made available of a series of tools mostly deriving from the introduction or valorization of new genotypes which, from one hand, will allow facing challenges imposed by the climate change, on the other, will increase growers' income; ii) promote full vineyard mechanization; ii) implement new strategies for plant protection trying to compromise the needs for vine health and secured crop, reduction in pesticides and environmental impact and iv) promote the culture of "working in a vineyard" targeting two main working profiles: young generations and immigrants from overseas countries.

# Ampliamento e valorizzazione della biodiversità per una gestione competitiva e sostenibile della viticoltura piacentina in un contesto di mutate condizioni climatiche e sociali

2/5

<https://www.innovarurale.it/pei-agri/gruppi-operativi/bancadati-go-pei/ampliamento-e-valorizzazione-della-biodiversita-una>

## Partenariato

| Role    | Azienda                                                                                                                        | Address                                                    | Telephone   | E-mail                            |
|---------|--------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------|-------------|-----------------------------------|
| Leader  | Università Cattolica del Sacro Cuore - Dipartimento di Scienze delle produzioni vegetali sostenibili (DI.PRO.VE.S.) - Piacenza | Via Emilia Parmense 84<br>29122 Piacenza PC<br>Italy       | 0523 599269 | diproves-pc@unicatt.it            |
| Partner | Villa Rosa Vini                                                                                                                | Via Micheloni 5<br>29010 Vernasca PC<br>Italy              | 0523 895224 | info@villarosavini.it             |
| Partner | Azienda Agricola Tenuta Borri di Andrea Pradelli                                                                               | Loc. Margherita Fraz. Pillori<br>29020 Travo PC<br>Italy   | 338 4693571 | pradelli_a@virgilio.it            |
| Partner | Cantina di Vicobarone                                                                                                          | Via Creta 60<br>29015 Ziano Piacentino PC<br>Italy         | 0523 868522 | c.bassanini@cantinavicobarone.com |
| Partner | Cantina I Salici                                                                                                               | Viale Trebbia 7 Perino<br>29020 Coli PC<br>Italy           | 0523 964016 | info@cantinaisalici.it            |
| Partner | Vinidea Srl                                                                                                                    | Piazza I° Maggio 20<br>29028 Ponte dell'Olio PC<br>Italy   | 0523 876423 | info@vinidea.it                   |
| Partner | Mossi 1558 Aziende Vitivinicole                                                                                                | Località Albareto 80<br>29010 Ziano Piacentino PC<br>Italy | 0523 860201 | amministrazione@mossi1558.com     |
| Partner | Il Poggiarello Vini                                                                                                            | Loc.Poggiarello 1<br>29020 Travo PC<br>Italy               | 0523 957241 | info@ilpoggiarellovini.it         |

# Ampliamento e valorizzazione della biodiversità per una gestione competitiva e sostenibile della viticoltura piacentina in un contesto di mutate condizioni climatiche e sociali

3/5

<https://www.innovarurale.it/pei-agri/gruppi-operativi/bancadati-go-pei/ampliamento-e-valorizzazione-della-biodiversita-una>

| Role    | Azienda                      | Address                                        | Telephone    | E-mail                    |
|---------|------------------------------|------------------------------------------------|--------------|---------------------------|
| Partner | Azienda Agricola La Pagliara | Via Saragat 9<br>29020 Travo PC<br>Italy       | 0523 950541  | mazzocchi.mauro@libero.it |
| Partner | HORTA s.r.l.                 | Via E. Gorra, 55<br>29122 Piacenza PC<br>Italy | 0523 1860024 | f.passuello@horta-srl.com |

## Pratiche abstract

### Description

#### 1 - Bibliographical research and evaluation of the state of the art

The action provides a bibliographic research and an evaluation of state of the art as concerning local varieties (with particular attention to Piacenza's local genotypes) and breeding (intra and interspecific crossing). In particular the action aims to evaluate the competitiveness of "Colli Piacentini" viticulture area according two different ways: studying local varieties and new genotypes obtained from crossing and analyzing innovative viticultural management as a response to critical aspects related to climate change and social issues. The activity also aims to collect informations regarding the most advanced techniques of vineyard management paying specific attention to mechanization and decision support systems (DSS).

### Description

#### ACTION 2 - Evaluation of varietal adaptability of local varieties

Evaluation of viticultural and oenological performances of different local varieties in Colli piacentini area and their adaptability to climate change. The experimental site is located at Mossi estate in Ziano Piacentino. A collection of some local grape varieties has been planted in 2003. The goal is to identify alternative genotypes to Ortrugo and Malvasia di Candia aromatica by characterizing some local varieties through evaluation of vegetative and productive parameters and grape composition, under a context of climate change. Collected data will be also useful in order to submit a request for registration in the "National Grapevine Catalogue". The activity also will provide a genetic profile of local varieties identifying cases of synonymy / homonyms in order to preserve local biodiversity and to perform a metabolomics characterization.

### Description

#### 3 - Evaluation of the crossbred ERVI as compared to parental varieties Barbera and Croatina

Evaluation of vegetative, yield and oenological performance of cultivar ERVI as compared to its parental (Barbera and Croatina) through the characterization of three vineyards located in "Colli Piacentini" area. The study will be performed by considering new mechanizable trellis systems as alternative to cane pruning. The promotion of innovation and competitiveness of red wines sector will be possible thanks to the valorization of cultivar ERVI; it will also give a solution to the problem of irregular production in cv. Croatina by promoting full mechanization in viticulture.

### Description

#### 4 - Adaptability of new downy and powdery mildew resistant genotypes to "Colli Piacentini" environmental conditions.

A collection of new downy and powdery mildew resistant genotypes will be planted in Vicobarone in order to assess their adaptability to soil and climate conditions of "Colli Piacentini" area. This action also aims to promote the adoption of ICT technologies in vine protection by testing the use on either resistant and susceptible genotypes (namely cvs. Barbera and Croatina) of the decision support system vite.net as a tool to schedule timing, number and type of sprays according to

# Ampliamento e valorizzazione della biodiversità per una gestione competitiva e sostenibile della viticoltura piacentina in un contesto di mutate condizioni climatiche e sociali

4/5

<https://www.innovarurale.it/pei-agri/gruppi-operativi/bancadati-go-pei/ampliamento-e-valorizzazione-della-biodiversita-una>

infections forecast given by outstanding epidemiological models.

## Description

5 - Adaptability of new drought tolerant rootstocks to soil and climate conditions of "Colli Piacentini" area

Evaluation of adaptability of new rootstocks (M serie) to soil and climate conditions of "Colli Piacentini" area by the comparison with traditional genotypes. The purpose is to compare traditional and new rootstocks in soil and climate conditions that more and more frequently show summer multiple stresses (drought and high temperature).

The experimental site will be located in Val Trebbia ("I salici" estate). The vineyard will be planted in 2017 as part of replanting in soil and climate conditions predisposing water stress of vines. The action considers the comparison of four different rootstocks namely: M2, M4, Kober 5BB and 110 Richter.

## Description

6 - Monitoring of grape ripening in mountain and sub-mountain areas

Preliminary evaluation of viticultural potential of rural areas with development problems (zone D) present on the territory of Appennini. In particular, this action aims to check the ripening kinetics of the most important grape varieties in Piacenza (Ortrugo, Malvasia di Candia aromatica, Barbera and Ervi) grown in different sites of Trebbia Valley and compared with the ripening kinetics of the same grape varieties cultivated in typical viticultural areas such as Val Tidone and Val d'Arda.

## Description

7 - Promotion of knowledge of local wine tradition between students and immigrants

The action aims to emphasize the opportunities provided by wine sector; the strategy to achieve this goal is based on the promotion of Piacenza's wine tradition between students and the employment of immigrants in wine sector. The categories involved will be:

- i) groups of secondary school students who will participate in visits in vineyard during the vegetative phase of vine and the harvest and will take part in demonstration activities focused on local varieties, in order to emphasize the idea of tradition and promotion of territory;
- ii) groups of immigrants that looking for a job. The project aims to establish contacts between farms and this category of worker, and to teach them basic vineyard work.

## Link utili

| Titolo/Descrizione                  | Url                                                                                                                                                       | Tipologia       |
|-------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|
| Sito web del progetto               | <a href="http://www.valorinvitis.eu">http://www.valorinvitis.eu</a>                                                                                       | Sito web        |
| Poster del progetto                 | <a href="http://www.valorinvitis.eu/intranet/libretti/0/libretto16175-01-1.pdf">http://www.valorinvitis.eu/intranet/libretti/0/libretto16175-01-1.pdf</a> | Materiali utili |
| Video di presentazione del progetto | <a href="https://youtu.be/msk_DqvFRsY">https://youtu.be/msk_DqvFRsY</a>                                                                                   | Materiali utili |

## Ampliamento e valorizzazione della biodiversità per una gestione competitiva e sostenibile della viticoltura piacentina in un contesto di mutate condizioni climatiche e sociali

5/5

<https://www.innovarurale.it/pei-agri/gruppi-operativi/bancadati-go-pei/ampliamento-e-valorizzazione-della-biodiversita-una>

| Titolo/Descrizione                                   | Url                                                                                                                                                                                 | Tipologia       |
|------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|
| Risultati del progetto ValorInVitis ad ENOFORUM 2019 | <a href="http://www.valorinvitis.eu/it/novita/ampliamento_e_valorizzazione_della_biodive...">http://www.valorinvitis.eu/it/novita/ampliamento_e_valorizzazione_della_biodive...</a> | Materiali utili |