GREEN OM ACADEMY

The Consorzio di Tutela del Conegliano Valdobbiadene Prosecco proposes the setting up of an incubator of activities aimed at the programming and subsequent achievement of concrete objectives in the sustainable management of the denomination's non-renewable natural resources. Looking to the future, it is becoming increasingly important to organise activities, planned along very specific lines, which lead to a single destination: sustainability. In fact, end consumers, especially in Northern Europe and America, are only willing to acknowledge a product's added value if they are convinced of the real value and effectiveness of the actions taken. It is therefore necessary to provide proof of the environmental benefits obtained from the activities carried out, through the development of a clear and effective marketing and communication campaign.

Time Objective: 2025

Spokesperson: Fondazione Symbola

Symbola is a foundation that, through research, events and projects, promotes and brings together companies and institutions that believe in green economy, innovation and social cohesion. The Consorzio di Tutela is already a member of the foundation, and has been involved in planned activities regarding the use of biodegradable mulching film and a natural herbicide (ac. Pelargonic). That which Symbola proposes, namely to give life to an "economy of quality" model that is linked to the territory and its identity, is perfectly aligned with the objectives of the Consorzio di Tutela's Green Academy.





Objective: to set up a study in order to forecast, mitigate, and contain the effects of climate change on the vineyard that result in: i) decreasing production, ii) increasing uncertainty regarding annual results, iii) the loss of quality and typicality of the product, iv) increasing costs.

Activities: to study climate change, with forecasts for 2030/2050/2100 regarding the frequency and intensity of extreme climatic events. Activity has already begun in collaboration with Banca Prealpi (the project financier) and the Spanish university of Cantabria. The study will be based solely on historical records of the hills' climate data, as already provided by Arpav Veneto and Condifesa. Initial results expected: second half of 2023

A collaboration has been launched with a group of internationally renowned Egyptologists, whose research is expected to reveal facts that may lead to ideas upon which to reflect today, starting from ancient Egypt when, about 5,000 years ago - in order to cultivate the vine in a climatically hostile environment - the pergola, as well as water collection and transport systems, were invented.



With its extremely dry weather trend, the 2022 vintage once again drew attention to the effects of climate change and, more specifically, to the clear and critical problem that is increasingly affecting the hills territory: water.

Therefore, urgency is required in taking immediate action regarding what is under development:

- The creation of a series (about fifteen) of demonstration micro-reservoirs, in which rainwater may be collected and used for irrigation in hilly areas that do not have hydraulic pipe water supply. If approved, this activity will be financed using funds from the *V° bando* supply chain tender (expected amount €850K, in partnership with the University of Padua)
- The initiation of experimentation that will allow for the monitoring of the water status of the vines using new generation sensors, and for interventions using appropriate watering systems (e.g. sub-irrigation) that will guarantee these operations' maximum effectiveness and efficiency

- The initiation of a collaboration (see Protocol of Intent) between local institutions (see Municipal Administration), the Consorzio di Tutela del Conegliano Valdobbiadene Prosecco, the trade associations, and the Consorzio di Bonifica Piave, in order to verify the possibility of reinforcing already formulated water supply projects using water deriving from the Piave river, as well as new ideas that can render hill top vineyards less dependent on the weather alone.



This topic is elaborated through:

- 1) the Conegliano Valdobbiadene Viticultural Protocol
- 2) the CO₂ balance calculation

The **Viticultural Protocol** has already been in force for a decade. Over the last ten years, the Conegliano Valdobbiadene Prosecco territory has taken its place among the most virtuous denominations in terms of reducing chemical molecules used in the sanitary defence of its vineyards. However, more recently there has been a rapid evolution in techniques, certification protocols, and active ingredients no longer being allowed. Therefore today, other certifications (see SQNPI) have caught up with, if not overtaken the Conegliano Valdobbiadene Viticultural Protocol, which has lost some of its relevancy. It has therefore become necessary to give it a makeover that will result in it being the forerunner once again in terms of content and distinction of activities, as proposed below:

- the subdivision of the Conegliano Valdobbiadene production area into 3/4 zones, each of which is fairly homogenous regarding: i) rainfall ii) relative humidity-leaf wetting iii) morphology iv) soil type
- the differentiation of zones according to the number, timing, and type of defence treatment. This will be done on the basis of historical data and weather data, as recorded by the Consorzio di Tutela's weather stations
- The defence bulletins will therefore be diversified and targeted according to the above, also thanks to the use of the forecast models already installed on some of the stations
- The integration of the Viticultural Protocol with a series of good agronomic actions, also aimed at reducing the emission of CO₂ into the atmosphere (see reduction/exclusion of the use of nitrogenous chemical fertilisers)

The above is already under discussion by the wine commission, and the new proposal will be applied within 2023. It should be noted that glyphosate will continue to be banned throughout the denomination territory, while the use of Folpet and antibotrytics is strongly discouraged.

The revised Viticultural Protocol will be an integral part of the Consorzio di Tutela's annual *Sustainability Report* that will be published for the first time in 2023. An analysis of the Conegliano and Valdobbiadene territory's vineyards is being implemented (to be concluded in March 2023) in order to determine the degree of environmental and social sustainability of viticultural practices.

The $\mathbf{CO_2}$ balance calculation - which for now regards only the green part of the denomination - is aimed at quantifying the exact surface area of forest and other crops as opposed to vineyard areas (as of today the latter accounts for 8,700 Ha). The next step is to calculate the $\mathbf{CO_2}$ absorbed by the total plant mass (the arboreal composition of the forest will also have to be studied) compared to that emitted along with vineyard management activities (fertilisers, agricultural machinery, vehicles, pesticides, etc.) and other existing crops. Based on the expected results for 2023, any mitigation/compensation actions must be identified.

This activity has already been initiated in collaboration with Unesco and the University of Florence, as represented by Prof. Mauro Agnoletti. The quantification of land use regarding the core zone has already been carried out, while that which remains is being managed, with the aim of covering the entire denomination.



Soil has long been considered a non-renewable resource, especially in the context of earthworks carried out while planting vineyards. The goal is to move towards soils that are increasingly rich in organic matter and microbial life, essential conditions for more resilient soils that are capable of supporting and mitigating impacts related to climate change, which will result in higher quality grapes and healthier vines. It has become increasingly urgent to work in two directions:

- 1) Safeguarding and restoring organic substance
- 2) Safeguarding and restoring **biodiversity** above and below the ground

Regarding **organic substance**, it is well known that in these terms the vine is among the most demanding and expensive crops, so much so that over the last 30 years, the soils of the denomination have seen a decrease in their amount of organic substance. This is due to the difficulties in replenishing it (scarcity of procurement, distribution costs), as well as to the ease and effectiveness of chemical fertilisers.

In this regard, our awareness of the countless benefits of organic substance and its related stable humus (see better vine balance, increased soil water retention capacity, improved microbiological richness, and greater resilience to climate change, etc.), has led us to propose the progressive abandoning of the use of chemical nitrogen in favour of using only material of organic origin (compost, manure, manure-like pellets or other organic types, etc.). After an adjustment period of three years, we expect the use of these materials to be standard. Above all, the creation of compost from vineyard pruning residue, together with pomace and cellar stalks, could be a virtuous way of recycling and creating a circular economy that could provide positive benefits for the soil and its organic make up.

Priority has been placed on feasibility studies regarding the creation of collection centres for the management of vineyard/cellar waste (winter pruning wood, stems, pomace, etc.) in order to transform waste into: compost or biochar.



With regard to **biodiversity**, we believe that we should work to conserve existing biodiversity (forests, hedges, and meadows etc.), however one might consider enriching this through the practice of green manuring in the vineyard. Once again in this case the advantages are clear, and range from enriching the soil's organic matter, to improving its physical and structural characteristics, as well as enhancing the rhizosphere etc. Some of the secondary advantages include its importance regarding bee fauna, and its contribution to improving the beauty of the landscape.

In this regard, the Consorzio di Tutela will be able to study different floristic formulations, passing on their findings to winemakers for the first three years, while also guaranteeing assistance with sowing. After the initial period, this should become a normal practice to which winemakers will dedicate a fixed portion of their vineyard surface areas.

In order to achieve an overall vision of the territory and its future, the Green Academy will also have to address:

- a) Variety Studies: obtained through intraspecific crossing of Glera with varieties that are resistant to peronospora and powdery mildew. To date, two new crosses aimed at this purpose are already available; obtained by Rauscedo cooperative nurseries, Glyres and Resilia will be planted in two test vineyards. We expect this experimentation to confirm whether these crossed varieties are able to adapt to our environment, and if they meet expectations in terms of quality. An agreement is being drawn up with two companies regarding testing and representation of the Conegliano and Valdobbiadene areas.
- b) **Bee Dissemination** as indicators of the environment's wellbeing. This aspect is also increasingly important, as tourists consider the presence of hives to be a positive sign. We therefore intend to institute a regulation (e.g. 1 hive every 5 Ha, with the possibility of giving the task to another winery). To date, it seems that more than 30 wineries already have beehives in their vineyards. To encourage this operation, a conference is being organised in the month of March.



Training and awareness raising activities regarding these issues are fundamental, and can be addressed by:

- 1) Organising an annual conference with the founders of Fondazione Symbola regarding these themes
- 2) Organising field trips to certain Italian companies, not only in the viticultural field, which are particularly virtuous and attentive to sustainability issues
- 3) Establishing a scholarship for the best research project/thesis/idea regarding the issues of recycling and reuse of waste in the vineyard and/or cellar (Cerletti/ Cà Foscari University)
- 4) Organising a brief yet in-depth study on the theme of preservation and, if necessary, on the possible restoration of the beauty of the landscape, with the identification of its aesthetic canons and identifying icons



Informative and communicative events will be researched and proposed alongside the on-going work and experiences of the Green Academy. This is important not only in enhancing the efforts and financial and human commitment of the Conegliano Valdobbiadene Prosecco DOCG Denomination and its individual companies, but above all in establishing a unanimous and by now widespread vision regarding the values of sustainability throughout the territory of Conegliano Valdobbiadene.