





WinEra - Fostering EU wine through a new era of specialized training for organic and biodynamic wine-producers in EU

WinEra course in a nutshell

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Module 2.1: Cultivation techniques

Summary of the training content	In this section, the techniques of organic vine cultivation are explored and in depth analyzed. The training content focus on the first year of vineyard cultivation technique, Vineyard management, planting strategies, training system, irrigation and pruning. The content was developed to carefully evaluate how agronomic technique and management affect the first year of vineyard cultivation. The aim was to provide
	knowledge for a suitable vineyard management in the first year of vineyard development.
Most	Goals for the First Year
important	Strong roots
take-outs	Watering the Vines
	Weed control
	Controlling pests
	Fertilizer application
	 Training in the first year - Soil preparation for planting; Vineyard layout and trellis design; Spacing; Timing of fertiliser application; Vine growth stage
	Irrigation Scheduling of Grapevines
	Pruning
Some tips	The training material most important tips are related to planting strategies and cultivation technique, training system, pruning and pest, disease and disorders

Module 2.2: Pruning

Summary of the training content	Advices for pruning promoting practical and scientific results on the subject of optimizing grapevine training systems for influence on vine growth and fruit composition with prevention of trunk diseases in organic viticulture. Highlighted topics are wine quality, microclimate, canopy division, the threshold leaf area, impact on air movement/diseases, canopy temperature, vine balance and yield, practical example of alternative pruning in regard with sap flux.
Most important take-outs	 The relevance of vine photosynthesis within the context of training systems lies in the ability of the total leaf area to exploit all sources of photosynthetically active radiation (PAR).
	 By the third year of growth the training system has been formed so usually in the organic production the strategy of balancing a fine equilibrium of quantity and quality starts
	 Impacts of training on vine winter hardiness are likely a function of light penetration into the canopy resulting in good periderm formation and increased carbohydrate storage due to improved light interception.
	The pruning potentially induces a 1.5 times larger necrosis in comparison to pruning wound size





Some tips	 To reduce the damages of Grapevine Trunk Diseases the alternative pruning respecting the sap flux is adopted. Having a better flux of sap in the plant might reduce the clogging of sap due to the GTDs pathogens.
	 Pruning of Guyot can also be modified not to shorten the sprouts but to prune every other bud using the longer sprout to achieve first of all better air flow.

Module 2.3: Weed Control

Summary of	The main content and structure aimed at explain the Weed damage, the instruments
the training	for weeds identification, and the weed control strategies. Weed management is an
content	integral part of an overall vineyard management system. Plants on the vineyard floor
	influence the presence of other pests such as vertebrates, insects, mites, nematodes,
	and diseases. A weed management program should start before new vines are
	planted. The basic of Weed management in organic vineyard, the summer and winter
	weed survey, the weed identification are provided. Practical application of the
	principles of organic farming to vineyards for sustainable viticulture
Most	Weed management in organic vineyards
important	 Monitoring for weeds
take-outs	 Summer weed survey
	 Winter weed survey
	 Weed management in new vineyards
	 Weed management before planting
	Soil solarization
	 Weed management after planting – Cultivation; Mulches; Herbicides;
	Flaming; Animals
	 Vineyard irrigation – special considerations
Some tips	Focused on weed management and weed identification and don't underestimate this
	task

Module 2.4: Diseases and pests

Summary of	The aim of this unit is to provide information about the various pests and diseases that
the training	cause problems for proper cultivation. The unit will outline the different issues posed
content	to the vineyards and the health of the vine, the role and effects of the climate change,
	as well as the various ways to protect increase the resilience of the grapevines,
	including crop protection and pest management techniques.
Most	Pests
important	Diseases
take-outs	Protecting Grapes Organically
	Chemical Pest Control





	 Pest Control Application
	 The role of climate change
	 Managing diseases
	Integrated Pest Management
	Fine-tuning and optimization of organic vine protection
Some tips	Years ago, organic vine protection was based on copper, sulfur and plant extracts or teas with great financial pressure of mechanical weed control and climatic extreme years
	 Now, new technologies are used in order to protect the plant and ensure resilience to the various diseases. Such technologies include drones and satellites to monitor the pests and diseases, new pruning techniques, applications, and more effective weather stations.
	Sustainability is compromised by the pressure of production costs, so each producer chooses his own path
	When farmer decide to use products that are not registered as plant protection yet still registered as fertilizers/bio-stimulators, they need to consult the relevant authorities prior to purchasing them and applying them to the vineyard.

Module 2.5: Maintenance of the Soil

Summary of the training content	This unit is focused on the importance of maintaining a healthy soil in the grapevine, regarding quality production and sustainable. It provides guidelines as to how grapevines can meet nutritional requirements in an informed, sustainable fashion. Moreover, the unit puts emphasis on the basic principles of fertilization and nutrient function, ways to assess and provide vine nutrients, the process of sampling and analysis, as well as when and how to best fertilize the soil. Moreover, the implications of climate change on the healthy growth of the vines, and its impact upon nutrient management is discussed.
Most important take-outs	 The concept of soil health – Nutrients; Fertilization & Soil heath assessment Managing soil health - Organic matter and Other products Using new technologies Cover crops Tillage Soil health and climate change
Some tips	 Soil fertility and maintenance are among the most importance aspects in order for a farm to be self-sustained. A healthy soil contributes to a higher quality of the product. There is a lack of local research regarding soil health and fertility. It is a good practice for vine growers to balance the soil quality, focusing on the condition of their vines in relation to all environmental conditions, and in particular, on soil and leaf analysis.





Module 2.6: Vinification Process

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Summary of the training content	In European Union, the term « organic wine » and the recognition of an « Organic » vinification process has been established by regulations since August 1, 2012 (Regulation (EU) No 203/2012). "Organic" vinification, following the same logic as organic viticulture aims to reduce the inputs during the grape transformation processes and particularly the inputs from synthetic chemistry. But it authorizes, by supervising them, a large number of techniques in progress in traditional winemaking. A distinction should therefore be made between "Organic" vinification processes and those used in so-called "natural" or "biodynamic" wines, which are much more strict and limited in processing techniques. The course aims first of all to describe in a synthetic way the vinification processes used in organic viticulture. It addresses both the subject from a regulatory perspective (which is authorized and prohibited by European AB regulations) and from the perspective of "best available practices" (which is recommended depending on production conditions, grape varieties and the character you want to give to your wine). This unit is complementary to the "Methods of conservation and storage of wine in organic viticulture".
Most important take-outs	 There are many alternative technical alternatives to the use of chemical inputs during winemaking; Even more than traditional winemaking, organic winemaking is primarily based on the quality of the grapes during the harvest; The prevention of any degradation during winemaking is also a key factor: the cleanliness of the cellar and the control of oxidation risks are of prime importance.
Some tips	 The trend is towards natural wines: learn the techniques and processes that will allow you to reduce the use of sulphites Favor manual harvesting and manual sorting of the harvest to guarantee the quality of the grapes Watch out for any risk of unwanted oxidation throughout the winemaking process Don't hesitate to make your own yeasts, to give your wine more character

Module 2.7: Conservation and storage

Summary of	The training unit covers the last stages of organic wine production: aging and storage
the training	of wine in the cellar, bottling and labeling.
content	The "EU" regulations for organic wine impose rules on the visibility of the organic brand
Content	during labeling, and technical standards on the filtration and conservation processes
	before bottling.





	Apart from these specific rules, these last stages of the wine manufacturing process do not benefit from a specific regulatory framework linked to the organic label. Nevertheless, the choices of conservation and bottling strongly depend on the technical processes during the previous stages of harvest, sorting and vinification, and their respective qualities. Thus, the more the winegrower wishes to limit inputs and additives during winemaking, the more he will have to pay particular attention to these conservation and bottling stages, which are likely to considerably alter the characteristics of the wine if they are poorly carried out. This module only deals with aging and bottling conditions. It does not deal with the storage conditions of wine after bottling in private cellars.
Most	Bottling is a risky step for the wine, due to possible oxidation. Wines with low
important	sulphite concentrations are particularly exposed and require a clean and monitored
take-outs	bottling process.
	• The organic label must be clearly visible on the label. if the estate is in the process
	of converting to organic labeling, this must also be clearly indicated.
Some tips	Control the temperature of your cellar and storage tanks throughout the year: no
	less than 5° C and if possible, no more than 20° C
	If you produce both organic wine and conventional wine (for example for a
	cooperative cellar), be sure to distinguish between storage areas and bottling
	flows: any risk of confusion can lead to fines, or even to the loss of the organic label.
	The quality of the harvest and the good control of the vinification are the best
	guarantees for successful storage and aging.





Module 3.1: Sociological and historical analysis of consumers

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Summary of	In this unit students will learn about the origins, the development and the existing
the training	status of worldwide organic wine production and consumption. After this introduction
content	to the sector mainly based on official reports and statistics offering interesting data to
	understand the current organic wine trends, students will learn the roots of customer
	segmentation. Customer segmentation is the process of dividing a heterogeneous
	market into smaller, homogeneous groups of consumers so that they respond
	differently to commercial actions. Then, students can read a full review of factors
	affecting organic wine consumption based on segmentation criteria such as gender,
	age, previous knowledge, health and they can get a deeper knowledge on how to
	conduct a successful segmentation strategy with the practical examples. The unit ends
	with practical tips to cater organic wine consumers effectively, as well as with two
	different case studies illustrating the benefits of offering innovative and alternative
	experiences to wine customers.
Most	The more we know our customer, the better we can satisfy their needs
important	Segmentation is essential to address customers' needs properly
take-outs	Organic wine consumers differ from traditional wine lovers
Some tips	Establish a strategic marketing plan
	Use experiential marketing
	Create separate strategies depending on gender
	Use different communication styles depending on your customer
	Create local alliances with other local products and services
	Use vido marketing

Module 3.2: Marketing Strategies Adapted to organic wines

Summary of the training content	The module focuses on what are the advisable marketing strategies put in practice nowadays, what are the advantages and added value of their usage. This chapter include includes more information in the economic-wise model/business model of an organic winery, in order to facilitate if one would replicate the good practices/to share the model/technical experience which could be put in practice, considering of course regional, country market specifics, etc.
	It also informs about existing details and references that are connected with the EU organic market — requirements, evaluation and further sector development, and marketing trends for better performance.
Most important take-outs	 Most of the fundamental actions towards building a marketing strategy are the creation of a strategic plan and programme that present the economic mix, reflecting the winery's fundamentals, incentives and strategic goals, bounded with resources.
	 So if a company employs two separate communication strategies for the two audiences, it will have to favour textual language with the professional





	operators and photographic language with the general tourists. Conversely, if the company chooses to devise a single attribute as communication tool, this will have to give importance to both types of language.
	 The EU regulation on organic production and labelling of organic products ensures that the same quality standards are respected all over the European Union.
	 Marketing strategies for the sectors: use techniques to surprise the customers; use techniques to motivate customers to create and share branded videos shot by their cameras, Facebook stories; monetise the wine origin and brand story; launch loyalty programme & be creative and be where your customers are.
	Sales Strategies include offer free bottles/samples; use email marketing; get social with social media; cut costs with cross-promotion.
Some tips	 That innovative approach for designing own brand image excite customers, and moreover one could associate in a different way, like with the eternity sign ∞, related to their culture, symbols, etc. Nowadays, historical myths and artefacts impress the world with their fine production dating back to the roots of human civilization.
	 Marketing of wines could include direct sales strategies in combination with art sessions – music festivals, art and photographic exhibitions, thematic night events.
	 Combination with wine tourism experience at the domain and the local wine region promises unique and stupendous results thanks to the effective marketing plan and positioning.
	 To spread the word via digital marketing methods like podcasting, voice/visual search optimization, and brand storytelling occupied center stage in the new marketing trends

Module 3.3: Communication tools

Summary of the training content	The module focuses on the communication tools put in practice nowadays, what are the advantages and added value of their usage, as well as best practices for social media positioning, to wider the networking, also fairs and events participation and marketing for better networking and performance.
	It depicts different principles and tools to enhance communication and cooperation techniques and the current status quo in Europe, then to the benefits and challenges of being presented on wider audience at fairs and events, as well as the specifics for the organic wines presence online.
Most important take-outs	 Nowadays the consumers are passionate about know the story behind every single bottle of wine – so use it.
	• The marketer's toolkit has focused on the "4 P's" – Price, Product, Promotion, and Place. But it turns out that a fifth "P" should be added: Perception.





	 Storytelling is essential to communicate in an effective, authentic, entertaining way your wine origin, organic nature and specifics, and to bring attention and underline the quality of the wine.
	 By getting to know what matters to consumers on an emotional level and addressing it in the way they market (active evaluation), wine marketers everywhere will be helping turn that vast sea of wine choices into an easy decision that not only impact the bottom line, but also gives the consumers an emotional boost.
	 Traditional forms of communication are still relevant and useful in reaching a target Audience - Face-to-Face Communication; Telephone Communication; Print Media; Broadcast Media
	 Social media tools (SM), which are currently most used by buyers of wines, as well as wineries, are: Facebook, Twitter, YouTube (video sharing), Instagram.
	 Participation in fairs and trade exhibitions can be so powerful that it can influence such important areas as reputation, visibility and connection with the target audience.
	 Networking can also be used as effective communication tool through networking and bandwagon effects, horizontal networks between wineries, or networks and clusters comprising companies vertically integrated in the supply chain, word-of-mouth marketing, influencers, ideas sharing, benchmarking, readiness to grab opportunities, etc.
Some tips	The effective communication should affect the customer's emotions
	 You should put some "magic" in your marketing strategy & Understand and value the customer's journey and communicate the wine brand uniqueness equal to the best quality.
	Social media offers a new possibility of interact.
	 Word of mouth can be a powerful sales tool and its power could be hyper- amplified by the social media.
	Networking activities that can be quite useful.

Module 3.4: Economic models in organic viticulture

Summary of	The training content provide basic knowledge of organic and biodynamic vineyard from
the training	an economic point of view for identify the most important economic costs and
content	opportunity of organic and biodynamic grapes and wine in organic vineyard.

Wine is commonly recognized as a particular type of processed agrifood product, showing several different characteristics. Above all a close relationship seems to exist between wine and land of origin, the environment and the ecosystem in general (including not only natural aspects but also human skills, tradition, etc.) based on a complex web of interrelation between all the involved elements/operators. Since 70s the interest on "clean wine-growing" has been increasing among the operators; this fact has also caused the development and the improving of organic processes for wine production . Consumers recognize the close connection between this product and the





	environment and they like to know that the wineries adopt green and clean practices to sustain the environment and support natural habitats and wildlife.
Most important	Management Effects on Production Costs and Efficiency
	Sustainable wine: consumers perceptions
take-outs	Production costs of organic grapes and wine
	Production costs of biodynamic grapes and wine
	Winemaking organic and biodynamic costs
	Conclusion
Some tips	Economic dimensions of the model of organic viticulture which would explain in particular the additional costs of organic, biodinamic and conventional production.





Module 4.1: CSR and ethics

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Summary of the training content	The module focuses on the relationship between the organic wineries and the environment. The major topics that are discussed in the module below are as (i) Climate changes and how it affects and is affected by the agricultural and production process in the organic wineries and (ii) Corporate social responsibility and how it fits the development strategy of the organic wineries; why it is implemented and how the organic wineries can benefit from the CSR application.
	Regardless of the fact that the wine is an organic one, the processes producing it may not be eco-friendly and can influence negatively on the environment. Thus, it is important for each manager to assess the environmental status of his/her winery and to take the appropriate adoption and mitigation measures in due time. Thus, the module also focuses on the sustainability and what actions should be taken by the organic wineries in order to ensure their long-term survival.
Most important take-outs	 The organic wine sector is very vulnerable to climate change due to the dependence of vines & grapes on the changing climatic and environmental conditions. A review of the impact on organic wine production is the first step to developing adaptation measures to fight the climate change. The factors affecting organic winery adaptive capacity are both intrinsic (such as producer age and educational level) and extrinsic (such as the institutional, political and climatic conditions).
	 Consumers seem to place higher value on corporate social responsibility (CSR) and consider it to be an important factor determining their patronage. CSR activities designed to appeal to consumer interest in and demand for contained into a social talks.
	sustainability could take many forms. These include incorporating product features that are environmentally friendly, minimizing waste, energy conservation, reduction of pollutants, socially conscious designs that address the needs of diverse populations, adopting socially-conscious marketing and human-resource practices and supporting the needs of the community by donating both money and time.
	 Sustainable vitiviniculture is defined by the International Organization of Vine and Wine as a "global strategy on the scale of the grape production and processing systems, incorporating at the same time the economic sustainability of structures and territories, producing quality products, considering requirements of precision in sustainable viticulture"
Some tips	 One suggestion for entry into sustainability is to start small and keep adding sustainable measures and ensure your customers are aware of them.
	 Be committed to creating value for the society and environment in which you operate, trying to be a contribution to the development and quality of life of the surrounding communities.
	 Identify the indicators that could effectively measure the achieved results, to promote information and communication to internal and external stakeholders.





- It is critical for wine producers who want to start a sustainability program, to implement common indicators to compare the obtained results, share experiences and clearly communicate to the final consumer.
- The importance of promoting integration among different methods and programs, that may be potentially complementary, should be recognized.

Module 4.2: An ambassador of nature and biodiversity

Summary of the training content	Climate change is one of the main environmental challenges facing the planet. It is caused by emissions of carbon dioxide (CO2), methane (CH4) and nitrous oxide (N2O). Viticulture, like other agricultural sectors, will be affected by the increase in temperatures which will lead to greater evapotranspiration, greater incidence of pests, alterations in the cycle of the vine and in the qualities of the grape, etc. There is now greater environmental awareness among producers and consumers about the winemaking process. This, together with the legal requirements of ecological
	protection, has motivated the inclusion of the environmental variable in the entire winemaking process.
	The treatment of wine-growing soils has changed a lot in the last thirty years. There has been a shift from tilling vineyards to controlling weeds, then to the widespread use of herbicides and, lately, it is produced with great respect for the environment, taking into account the CO2 footprint, the responsible use of water, and with the use of new materials and high-tech machinery.
	In short, organic farming, in contrast to so-called conventional farming, is the result of the emergence of a new culture linked to the protection of human rights and, within these, to the right to health and to respect for and care for the environment.
Most	Organic farming has its own global pillars.
important take-outs	 Producing wine with sustainability criteria has become an essential requirement for all sectors of economic activity
	 The soil, the organic matter and the sustainable use of water are some of the essential elements of organic wine production
	 General principles of sustainability applied to viticulture (OIV) should be known and applied to organic viticulture
Some tips	Olan versatile installations for the whole useful life of the building (reuse construction materials, use the natural slope of the land, use recycled materials, encourage the entry of natural light)
	Use of reversible units (heat pump) instead of air conditioning and heating.
	 Use renewable energy sources: solar panels on roofs and walls, biomass and geothermal energy installations.
	 Implement a complete wastewater management using plant beds (landscape assessment).
	Reduce as much as possible the movement and transport distance (internal and external) of acquired materials, by-products, waste and finished products.





Module 4.3: Wine tourism

Summary of the training content	This unit offers an overview of wine tourism, its benefits and challenges, as well as good practices and strategies for developing a successful brand identity. The unit includes theoretical insights of how wine tourism was developed into an integral part of
	promoting wine products, and refers to the current status quo in Europe, as well as the different characteristics that comprise wine tourists. Finally, learners will be equipped with tips and strategies for developing wine tourism in the biodynamic and organic wine sector, through good practices and examples from different wineries across Europe and beyond.
Most	The definition of wine tourism
important	The benefits and challenges of wine tourism
take-outs	The characteristics of wine tourists
	Successful strategies, examples, and good practices
	Organic and Biodynamic Wine Tourism
Some tips	 In recent years, the concept of wine tourism has expanded considerably around the globe, especially in regions strongly associated with wine production. Wine tourism is a great source regarding the economic and social prosperity of the wineries and the regional areas. Wine tourism is strongly associated with the agricultural, cultural, environmental, and industrial industry. As an effort to attack more and more visitors, wineries/producers develop tailor-made touristic packages by combining different activities and facilities, e.g. gastronomy, rural lifestyle, wine-related cultural activities, events, seminars, festivals, etc. While there are many efforts made to outline the characteristics of wine tourists, wine marketers still lack important data about their behavior and attitudes. Among the most important elements of a successful wine tourism strategy, include a) a strong marketing approach, b) development of the winery's logo and identity, c) targeted communication, d) collaboration with regional facilities (accommodation, restaurants, etc.).





Module 4.4: Cultural heritage and wine

Summary of	The culture of wine has been present in many cultures, especially in Mediterranean
the training	societies, but also in ancient cultures such as Mesopotamian, Egyptian or Phoenician.
content	The existing culture behind each wine is the best business card, and even more so at a
	time when a revaluation of traditional aspects, cultural roots and nature is taking place.
	UNESCO itself, in the Mexico Declaration on Cultural Policies (1982) says that "Through
	culture man expresses himself, becomes aware of himself, recognizes himself as an
	unfinished project, questions his own achievements, tirelessly seeks new meanings and
	creates works that transcend him".
	The landscape is the visual expression of the order in which the natural and cultural
	elements of the territorial system are combined; in this context, the wine landscape is
	unique in its varieties, forms, customs and constructions. For all these reasons, it is
	necessary to preserve it so that future generations can enjoy it.
	In recent years, the wineries and the world of wine is yet another example of how
	architecture has transformed the sector. The most famous architects of the world have
	left their signature in the wineries in all the wine countries.
Most	It is important to know the history of wine to understand its actual cultural
important	relevance.
take-outs	Wine museums are a great way to promote wine culture
	The wineyard and the wineries create landscapes. Their enhancement through
	conservation and maintenance provides a series of benefits, such as their
	functionality, heritage conservation for future generations, increasing the
	attractiveness of the landscape for visitors and providing a refuge for
	numerous species of flora and fauna.
Some tips	Cultural heritage is important when producing and commercializing organic
	wine. It talks about nature, history, territory, architecture, gastronomyall in
	one product
	The recovery of cultural and ethnographic traditions and heritage adds value
	to the wine cellars.
	New winery architectures are synonymous of prestige where tradition and
	modernity coexist. They attract large visitors and media coverage.





Module 5: Biodynamics in viticulture and wine production

Summary of the training	1. Definition and Historical background describes how Biodynamics developed and why are the "preparations" the most crucial technical choice in BD.
content	2. The main principles of biodynamic contains the core guidelines to be followed.
	3. The certification process in BD leads to Demeter and its clear and precise standards.
	4. Some technical feedback and preparations contains the recipes for the preparations and their usage. They are explained in three groups, the ones for spraying, the ones for compost and others
Most important take-outs	 Biodynamic wines comply with all organic certification requirements. Special attention is dedicated to breeding animals which produce the necessary manure, so that the farm does not have to depend on outside inputs in that segment. The thing that crucially distinguishes biodynamic viticulture from other forms of organic agriculture is application of BD preparations. They bring and enhance life forces which connect plant – animal - man - Earth and Cosmos. In this way they bring in and/or amplify the life energy in the wine making it spiritual.
Some tips	 Biodynamic vine growing is a way of life. Biodynamic agriculture is more labour intensive than conventional farming methods, because it requires more attention to details. Workload increases mainly due to planning, organizing and preparing precisely calibrated natural treatments for vineyards.