

Product 1 – Skills & knowledge catalogue

Viticulture

Wine growers educated / working on EQF level 4 have the following knowledge and skills in the field of viticulture.

1	<p><u>Grape varieties</u></p> <ul style="list-style-type: none"> • Recognizing all local and regional grape varieties • Recognising the most important European grape varieties from catalogue • Description of those varieties • Description of soils and climates of varieties
2	<p><u>Rootstocks</u></p> <ul style="list-style-type: none"> • Recognizing main rootstocks (leaves and shoots) out of the given list • Requirements of the rootstocks (e.g. soil, humidity, limestone content, resistances) • Genetic origin of the different rootstocks • Perform Omega grafting
3	<p><u>Grapevine training and pruning</u></p> <ul style="list-style-type: none"> • Calculating the plantation density • Practice of different systems of pruning • Recognize and name the pruning systems • Name the advantages and disadvantages of the different systems
4	<p><u>Plant nutrition</u></p> <ul style="list-style-type: none"> • Name the essential nutrients and define their effects • Recognize nutrient deficiencies in leaves and grapes • Name and recognize the fertilizer given in the list
5	<p><u>Irrigation of the vineyard</u></p> <ul style="list-style-type: none"> • Calculating the water necessities of grapevine • Describing irrigation systems (drop irrigation, sprinkler irrigation)
6	<p><u>Pests and diseases of the grapevine</u></p> <ul style="list-style-type: none"> • Identifying damages produced by different pests • Identification of beneficial species • Naming diseases that affect the grapevine • Identify diseases and their symptoms

7	<p><u>Handling pesticides</u></p> <ul style="list-style-type: none"> • Describing indicators for the timing of pesticide application • Selecting pesticides, fungicides, insecticides, miticides, herbicides • Calculating doses of pesticides • Preparing the treatment • Carrying out conventional and low volume spraying • Security and hygiene in the handling of pesticide products
8	<p><u>Quality improvement measures</u></p> <ul style="list-style-type: none"> • Leaf thinning, green pruning, shoot trimming, tipping, side shoot removal • Cluster thinning, green harvesting • Selective harvest

CATALOGUES - VINE GROWING / VITICULTURE

1) Grape varieties	
Name	Synonyms
Blafränkisch	Limberger, Lemberger, Kékfrankos, Frankonia, Frankovka, Franconia
Cabernet franc	Acheria, Bouchet, Trousseau noir, Cabernet, Kaberne frank, Cabernet bresciano, Cabernet franco, Gros Cabernet
Cabernet - Sauvignon	Bidure, Petite Vidure, Bordeaux, Burdeos tinto, Kaberne-Sovinjon, Petit Cabernet
Chardonnay	Morillon, Pinot Chardonnay, Gentil blanc, Pinot blanc Chardonnay
Furmint	Nemes Furmint, Kyrály Furmint, Fourminte, Tokaisky, Moslavac, Sipon, Zapner, Gelber Moster, Luttenberger, Weißlaber, Mosler
Gamay	Bourguignon noir, Petit Bourguignon, Gamay noir, Gamay Beaujolais, Blauer Gamet, Game
Gelber Muskateller	Muscat blanc à petits grains, Moscato bianco, Tamaioasa Romaneasa, Rumänische Weihrauchtraube, Tamianka
Grenache	Abundante, Alicante, Tinto de Navalcarnero, Tocaï rosso, Cannonau, Cannonau, Grenach Crni, Grenacha tinta, Garnacha tinta, Garnatxa negra, Gironet, Lladoner, Granaccia, Guarnaccia
Grüner Veltliner	Weißgipfler, Green Veltliner, Zeleni Vetlinec, Veltlínské Zelené, Veltliner
Kadarka	Cadarka, Cadarka neagra, Nemes Kadarka, Fekete budai, Gâmza, Schwarzer Kadarka
Merlot	Merlot noir, Sémillon rouge, Merlo, Petit Merle, Bigney rouge, Plant Medoc
Müller Thurgau	Rivaner, Rizvanac Bijeli, Rizvanec
Nebbiolo	Chiavennasca, Spanna, Lampia, Prugnet
Palomino	Listao, Palmينو fino, Alban, Listán blanco, Merseguera, Palamino, Malvasia Rei
Pinot blanc	Blanc de Champagne, Pinot bianco, Beli Pinot, Feherburgundi, Weissburgunder, Pinot blanco, Rulandské Bílé, Klevner
Pinot gris	Tokay d'Alsace, Pinot gris d'Alsace, Malvoisie, Pinot grigio, Szürkebarat, Ruländer, Rüländer, Grauer Burgunder, Grau Burgunder, Pinot cendré, Sivi Pinot, Rulandské šedé
Pinot noir	Blauer Burgunder, Blauer Spätburgunder, Pinot nero, Burgundac Crni, Kisburgundi Kék, Pinot tinto
Rheinriesling	Petracine, Riesling renano, Rajnai Rizling, White Riesling, Weißer Riesling, Riesling, Klingelberger, Riesling de Rhin
Sangiovese	Sangiovese, Niellucciu, Nielluccio
Sauvignon blanc	Blanc Fumé, Fumé, Sauvignon jaune, Muskat Sylvaner, Sauvignon petit
Syrah	Shiraz, Neretto di Saluzzo, Serine, Syrac, Petite Syrah
Tempranillo	Aragonez, Tinta Santiago, Verdiell,
Traminer	Termeno Aromatico, Gentil Rose Aromatique, Fermentin Rouge, Traminer aromatico
Welschriesling	Rizling laski, Olasz riesling, Riesling Italico
Zweigelt	Blaue Zweigeltrebe, Rotburger

2) rootstocks
Teleki-Kober 5 BB: <i>V. berlandieri</i> x <i>V. riparia</i>
Selection Oppenheim nr. 4: <i>V. berlandieri</i> x <i>V. riparia</i>
Paulsen 1103: <i>V. berlandieri</i> x <i>V. rupestris</i>
Couderc 3309: <i>V. riparia</i> x <i>V. rupestris</i>
Ruggeri 140: <i>V. berlandieri</i> x <i>V. rupestris</i>
Fercal: BC 1 (<i>V. berlandieri</i> x <i>Colombard 1</i>) x 333 E.M. (<i>Cabernet S. x V. berlandieri</i>)
Couderc 161-49: <i>V. riparia</i> x <i>V. berlandieri</i>
110-Richter: <i>V. berlandieri</i> x <i>V. rupestris</i>
420A: <i>V. berlandieri</i> x <i>V. riparia</i>

3) pruning systems
Guyot (single and double)
Cordon

3) training systems
Goblet
GDC (Geneva double curtain)
Minimal pruning
Lyra

Additional training systems can be part of the Special Award.

4) Nutrients
nitrogen
phosphorus
potassium
calcium
magnesium
iron
boron
manganese
zinc

4) Fertilizers
Urea
Calcium ammonium nitrate
Superphosphate
Potassium sulphate
Magnesium sulphate
Boron folia fertilizer
Iron chelate
Manure
Compost

6) Diseases	
scientific name	common name
<i>Uncinula necator</i>	powdery mildew
various fungi, e.g. <i>Fomitiporia mediterranea</i> , <i>Phaeomoniella chlamydospora</i> , <i>Eutypa lata</i>	grapevine decline or esca complex

<i>Botrytis cinerea</i>	botrytis bunch rot or grey mould
<i>Penicillium expansum</i>	green mould
<i>Plasmopara viticola</i>	downy mildew
<i>Phomopsis viticola</i>	phomopsis cane and leaf spot
<i>Armillariella mellea</i>	armillaria root rot
<i>Phytoplasma vitis</i> , <i>Phytoplasma solani</i> , (<i>Candidatus</i> <i>Phytoplasma vitis</i> ; class: <i>Mollicutes</i>)	grapevine yellows (flavescence dorée) bois noir (black wood)
<i>Agrobacterium vitis</i>	crown gall
various yeasts and acetic acid bacteria, e.g. <i>Kloeckera apiculata</i> , <i>Hanseniaspora uvarum</i> , <i>Metschnikowia pulcherrima</i> , <i>Candida</i> spp., <i>Saccharomycopsis vini</i> ; <i>Acetobacter</i> spp., <i>Gluconobacter</i> spp., <i>Bacillus</i> spp.	sour bunch rot

6) Pests	
phytophagous species	common names
<i>Daktulosphaira vitifoliae</i>	grape phylloxera
<i>Lobesia botrana</i>	grape berry moth, vine moth
<i>Empoasca vitis</i>	green leafhopper
<i>Byctiscus betulae</i>	vine leaf roller
<i>Scaphoideus titanus</i>	flavescence leafhopper, American grapevine leafhopper
<i>Hyalestes obsoletus</i>	leafhopper
<i>Panonychus ulmi</i>	european red mite
<i>Eotetranychus carpini</i>	hornbeam mite
<i>Tetranychus urticae</i>	twospotted spider mite
<i>Calepitrimerus vitis</i>	rust mite

6) Beneficials species	
scientific name	common name
<i>Typhlodromus pyri</i>	predatory mite
<i>Syrphidae</i>	hoverfly
<i>Chrysopidae</i>	green lacewing
<i>Coccinellidae</i>	ladybird
----	Egg parasitoids