

# “CODE OF GOOD ORGANIC VITICULTURE AND WINE MAKING”



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**This Code of good organic viticulture and Wine-making  
has been developed as part of the EU project  
“ORWINE Organic viticulture and wine-making:  
development of environment and consumer friendly  
technologies for organic wine quality improvement  
and scientifically based legislative framework”**

- The ORWINE Code is a complementary tool to the new regulation for organic wine implementing rules.
- It gives wine-producers a clear guidance how to produce wine of high quality while reducing the use of additives.
- The aim of this code is to contribute to the further development of the practice of organic viticulture and wine-making in terms of increased safety, quality, transparency and success.
- The code summarizes different traditional and innovative viticultural and oenological practises suitable, approved and acceptable for the organic production.

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**The Code is structured in such a way that the most relevant tasks or important features which exist in the relevant areas of activity are outlined in separate chapters and will be disseminate in 5 languages:**

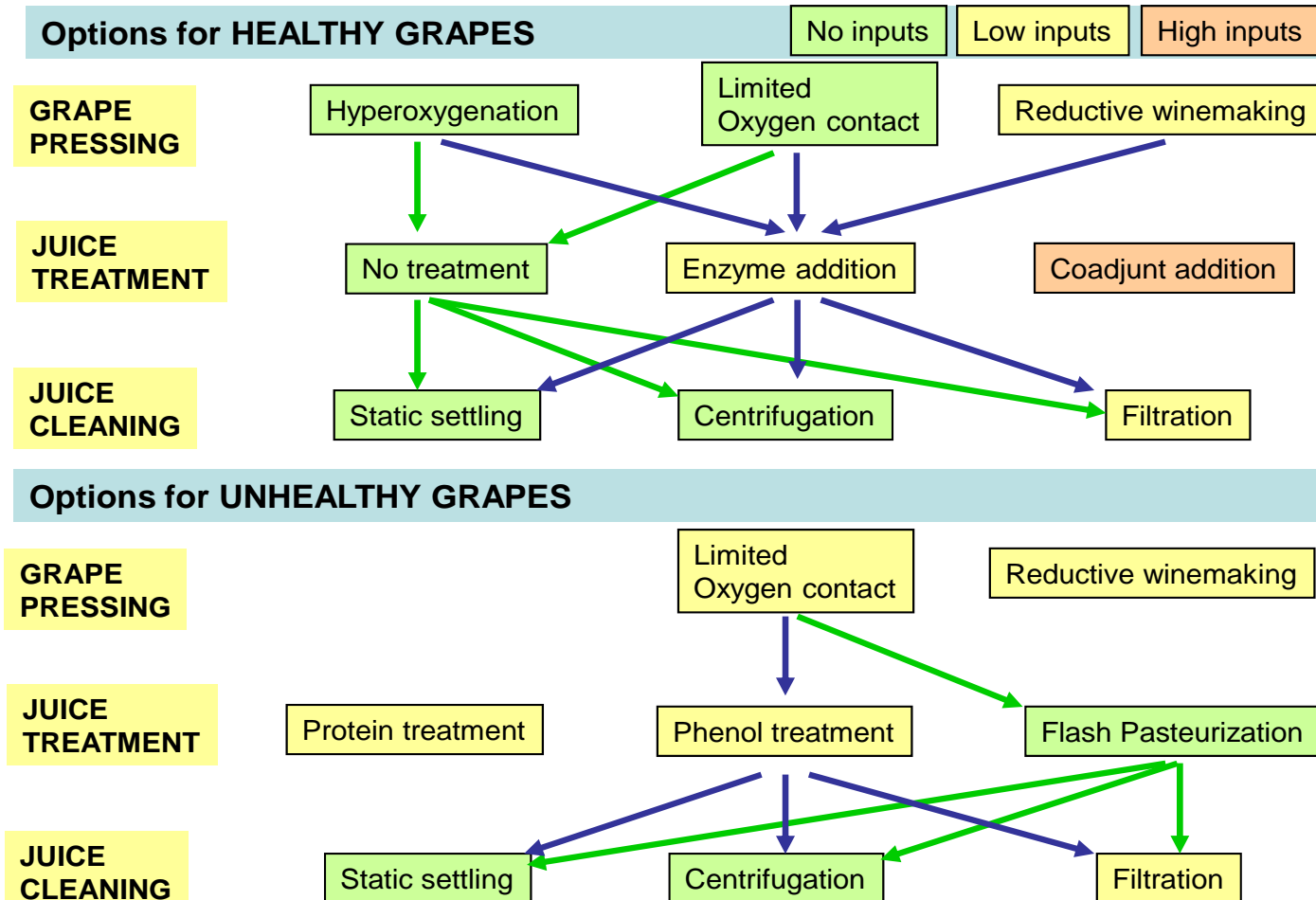
- Overview of relevant regulatory frameworks**
- Organic viticulture**
- Organic wine-making**
- Technical notes**
- Practical hints**
- Research results**
- Fact sheets**

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Plant Protection strategies			Related documents
Downy mildew			
- no risk	low infection pressure	high infection pressure	References: canopy management
<p><i>Planting of high resistant grape varieties (PIWI) reduces the use of copper treatments.</i></p> <p>Two plant treatments with low copper content or plant strengtheners (like sulphuric acid clay) before and after blooming</p> <p>Well structured canopy</p>	<p><i>Dry weather conditions, low rainfall, no dew, low humidity &lt; 40%; late primary infection (after blooming)</i>  <i>day temperature &gt; 30°</i>  <i>night temperature &lt; 10°</i></p> <p>Weather forecasting system            Well structured canopy            Application methods, timing of the treatments</p> <p>Spraying every second row            Treatments with low copper content (100 – 500 g Cu/ha per spray) or plant strengthener</p>	<p><i>Wet and warm weather conditions, high or permanent rainfall, dew, high humidity &gt;95%</i>  <i>early primary infection</i>  <i>day temperature &lt; 30°</i>  <i>night temperature &gt; 20°</i></p> <p>Weather forecasting system            Well structured canopy            Application methods, timing of the treatments</p> <p>Spraying every row, weekly treatments with high copper content (500 – 1000 g Cu/ha per spray),            3 applications of Potassium-phosphonate between pre-flowering and fruit set            maximum use of Copper:            6kg Cu/ha (30 kg in the average of 5 years)</p>	
<p><b>Regulatory framework:</b>  <b>Regulation (EC) No 834/2007:</b> Article 12: (g) the prevention of damage caused by pests, diseases and weeds shall rely primarily on the protection by natural enemies, the choice of species and varieties, crop rotation, cultivation techniques and thermal processes;            (h) in the case of an established threat to a crop, plant protection products may only be used if they have been authorised for use in organic production            Authorised organic plant treatments included in Annex IIB,  <b>National regulations of plant protection</b></p>			
<p><b>Additional comments:</b>            Selective harvesting, sorting and destemming are necessary, infected berries can influence the quality of the wine (mush-fermentation by red wine)            Copper has a <b>negative role on the expression of sulphuric aromas such as the « thiols »</b>.            Copper treatments increase the skin thickness; this thickening favours a better resistance to the diseases occurring at the end of the year: grey rotting and acid rotting.</p>			
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## WHITE WINES: PRE-FERMENTATION STEPS

*Lowest input tracks*  
*Safe low inputs tracks*






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## RED WINES: FERMENTATION

No input

Low input

High input

 Possible tracks for non contaminated grapes  
 Suggested tracks for contaminated grapes  
 Options which can be used together

ONSET OF  
FERMENTATION

Spontaneous  
fermentation

Direct inoculum of  
Selected yeasts

Activation of selected yeast  
Starter culture

NUTRIENT  
MANAGEMENT

No nutrients

1/3 of sugar depleted

Beginning of fermentation

OXYGEN MANAGEMENT

Pumping over with aeration

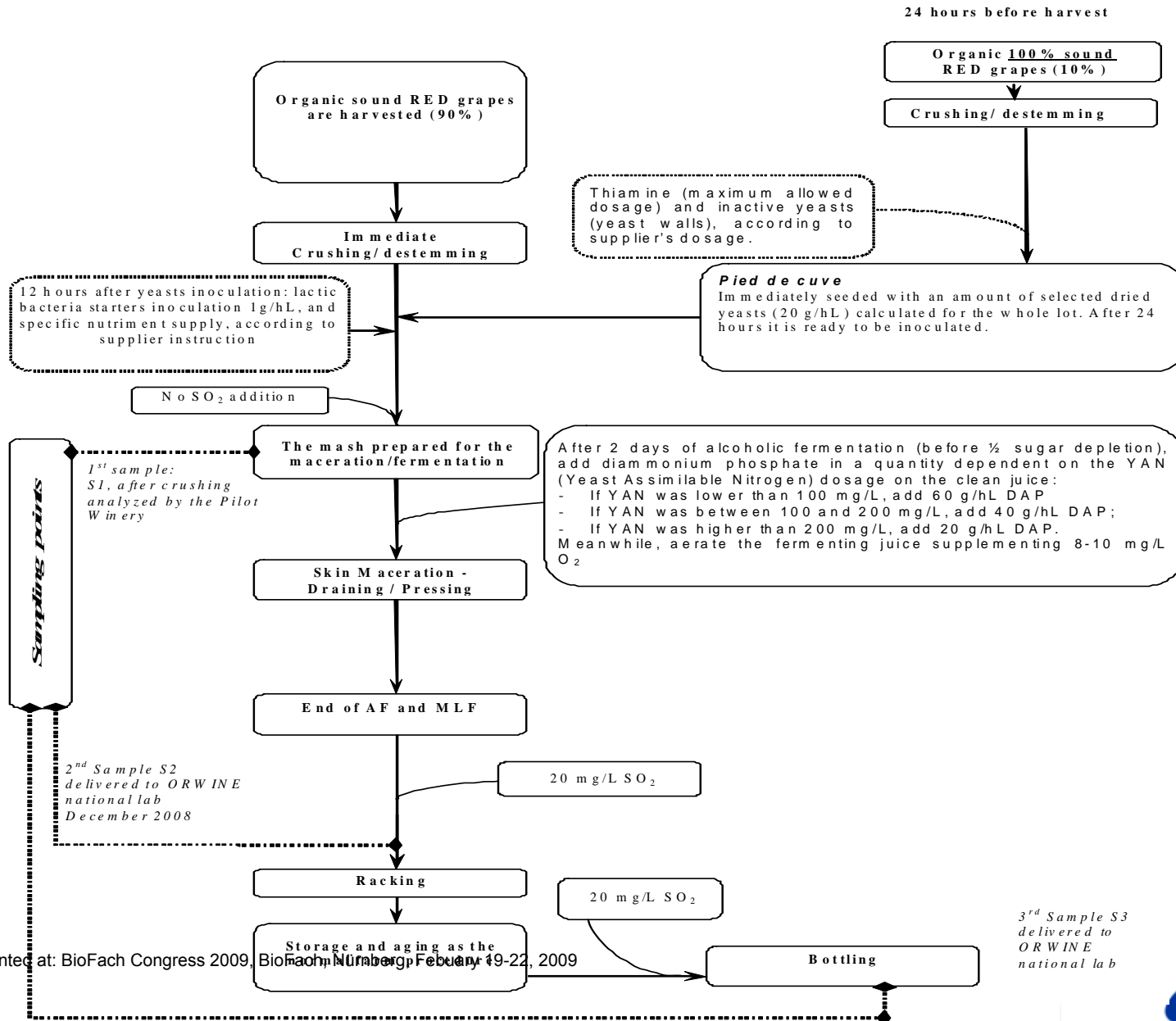
Macro-oxygenation

ENRICHMENT

No sugar addition

Self-enrichment

Addition of sugars



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3<sup>rd</sup> Sample S3 delivered to ORWINE national lab





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