**ORWINE: towards a European regulation for organic wine-making**

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**Summary:** The project aims at solving the legislative problem of the lack of EU regulation on organic wine-making by producing a scientific data set to support the EU commission to develop the legislative framework. Data about currently applied practices, consumer and market needs in significant areas were gathered in all significant wine producing areas of EU and some new member states. Test series with suitable and innovative technologies to improve the quality of wines from organic viticulture, allowing using a low level of sulphites are conducted and validated on selected pilot wineries. Moreover the results and regulatory proposals are discussed with a participatory approach with stakeholders on national levels as well as on European level, ensuring a high acceptance of the proposed legislative framework. Besides a code of best practices as well as a simplified environment assessment tool will be developed to give guidance to produce high quality wine while limiting the impact on the environment.

**Key words:** organic wine, sulphite reduction, organic regulation.

**Introduction**
While all fresh and processed products derived from plant production may be labelled as organic since 2092 according to EU regulation, for wine this possibility is still missing due to the lack of a common regulation on wine-making. Nevertheless organic viticulture is an important part of the EU organic farming sector and covers an important percentage of the EU agricultural area as well as EU organic exports.

**Scope of the project**
The project scope is to produce the scientific basis for the EU regulation on organic wine-making but at the same time to assure a broad consultation with all involved stakeholders (not only producers but consumers and traders as well) in order to elaborate a proposals acceptable to all Member States and to all stakeholders.

Besides the regulatory proposals the project is developing an environmental assessment tool for the measurement of the impact of organic viticulture and a code of good practices for organic viticulture and wine-making.

**Project approaches**

**Technological approach**
Sulphites reduction in wine processing is considered as a primary objective in oenology, but actually there are no specific tools that could completely substitute this controversial additive. Such a concern becomes particularly important for organic wine. Different strategies to reduce or to avoid the use of sulphur dioxide and of other additives not in line with the concept of organic agriculture in oenological practice are evaluated both on laboratory scale and on-farm level, considering the principle of wine quality conservation and stability, not neglecting consumer’s health. Some of these strategies are already known, as the optimization of fermentation management, yeast nutrition, and starter culture use. Nevertheless, traditional technologies are often not enough to assure a proper behaviour for wine evolution and quality. In this case the introduction of innovative tools and technologies could be useful to reduce the overall amount of SO₂ used in the production process. Physical treatments are one of the most recent instruments introduced to control microbial population, and to obtain chemical and physical...
stability, then reducing sulphite needs; they have a very low impact on healthy aspects, but their
effects on wine quality need to be deeply investigated. Their application has to be thought in the
contest of present organic wine making. Moreover different aspects connected to yeast
metabolism are analysed as regards sulphite amounts reduction: natural production of sulphites,
sulphur compounds and off-flavors, are strictly related to yeast metabolism, with a potential
negative impact on wine flavor and quality. Finally, the possibility to consider some natural
products (glutathione, cysteine, lysozime) as partial alternative to SO₂ is evaluated.

Market approach
In the last years the market for organically produced wine has significantly developed. Main
importing country like United Kingdom, Scandinavian countries, Germany and Switzerland have
increased their imports of organic wines, mostly from the Mediterranean Countries.
In order to investigate the potentials and needs of the market a consultations with experts have
been made in each of the countries which are covered by the Consortium and in important
importing countries. The focus was on retail chains and specialized wine firms, which already trade
organic wines.

Consumer’s approach
The hypothesis is that organic wine producers in some areas are still facing quality image
problems, in particular with regard to taste. It was therefore investigated the quality image of
organic wines as well as the response to possible labelling schemes with qualitative consumer
research.

Participatory approach
Wine is a highly regulated product in EU and involves all countries either in production and in
consumption. For those reasons a broad consultation at MS level as well as at EU and
international level characterizes the project. Annually in each country involved in the Consortium a
national forum is held and twice during the project implementation a European Panel of Experts is
gathered and consulted.

ORWINE partners

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<td>UNIUD</td>
<td>Università degli Studi di Udine - Dipartimento di Scienze degli Alimenti</td>
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<td>ITAB</td>
<td>Institut Technique de l’Agriculture Biologique</td>
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<td>ECOVIN</td>
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