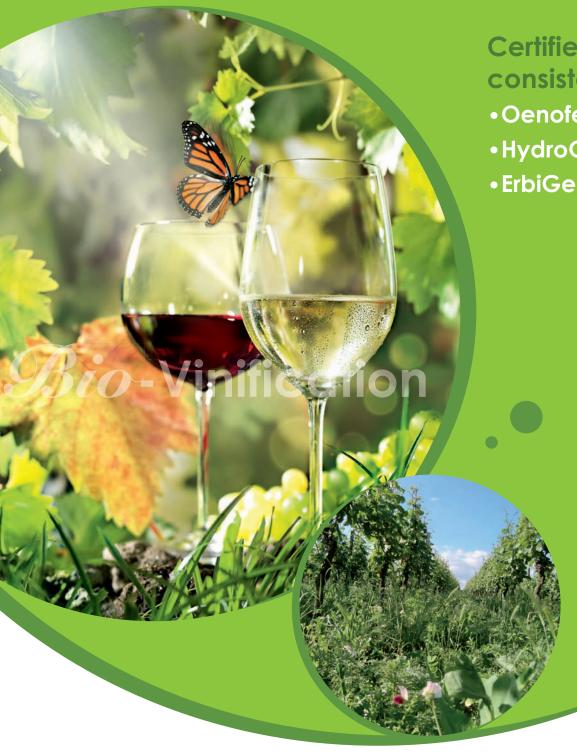
Erbslöh Bio-Vinification



Certified, consistent, safe

- Oenoferm® Bio
- HydroGum Bio
- ErbiGel® Bio

ERBSLÖH

Bio-Vinification: On Certified, consistent, safe

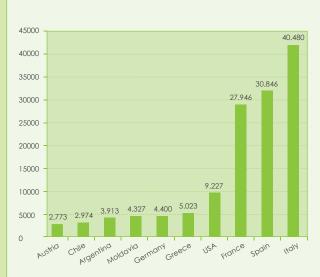
In the last few years, the organic wine sector has developed a fascinating dynamics. Since 2000 the global wine-growing area under organic cultivation has more than doubled. Meanwhile the growing customer demand leads to a significant rise in organic farming with strongly expanded crop areas in all European wine-growing countries. For Erbslöh exactly this dynamical movement is the motivation to push forward organic vinification. Our commitment is to advise and assist the organic wine producers in the best possible way. The yeast Oenoferm® Bio is the central product of the organic product line and represents the ecological idea. In the drafts of the oenological directive on organic wine the use of certified organic yeast and other oenological products in organic quality is recommended. Already now the regulation of the European Union on organic products – Council Regulation (EC) No. 834/2007 on organic production and labelling of organic products - provides the reliable legal framework for all Erbslöh Bio-Vinification products.

Oenoferm[®] Sio: M[®] Sio: The first certified organic wine yeast

The Erbslöh Geisenheim AG has succeeded in producing Oenoferm® Bio as the first certified organic wine yeast. The yeast strain was selected from the vineyards of the Margrave of Staufenberg and then propagated exclusively on certified organic nutrient media. The subsequent careful and gentle drying process as well as the packaging were conducted according to Regulation No. 834/2007 of the European Union.

The yeast strain Oenoferm® Bio - Selection Klingelberg - emphasizes the typical attributes of the grape variety and supports the natural terroir. Organic wine producers benefit from the first organic wine yeast as central part of a consistent organic vinification. Oenoferm®Bio assures the usual safe fermentation course of a selected pure culture yeast and is 100 % in conformity with the ecological philosophy. Yeast purity and fermentation capacity were supervised and confirmed by specialized laboratories and oenological institutes.

Surface area of organic viticulture* (ha)



* Source: FiBL 2010, including crop areas in conversion to organic cultivation

Characteristics of Oenoferm $^{ ext{@}}oldsymbol{\mathcal{Bio}}$:

- New selection from grapes
- Produced under certified organic conditions
- High fermentation capacity and clean wine aromas
- Saccharomyces cerevisiae (var. bayanus)
- Alcohol tolerance up to 15% by vol.
- Very low sulfite formation during fermentation
- Medium nitrogen demand
- Accentuates varietal character and terroir



Moreover also for export-oriented winemakers Oenoferm® Bio offers new ways and possibilities on a global scale: the yeast was classified as "approved for the production of NOP (National Organic Program /USA) -certified organic wines" by the French Institute EcoCert. In addition, Oenoferm® Bio is listed in the FIBL (Research Institute of Organic Agriculture) list Eco-processing 2010 for the ecological food industry in Germany. During the last two wine harvests Oenoferm® Bio was very successfully applied in the traditional wine-growing regions of Germany, France, Italy, Austria and Switzerland. In contrast to spontaneous fermentation, the yeast assures a continuous course of fermentation and reduces the formation of undesirable by-products, such as hydrogen sulphide (H₂S), volatile acid or acetaldehyde. Sulfite formation during fermentation is very low. Typical strain characteristics of Oenoferm® Bio are a start of fermentation after up to two days and a subsequent strong fermentation with a tolerance towards alcohol of up to 15 % by vol. Winemakers from the most different wine-growing regions have produced excellent wines with Oenoferm® Bio, both fresh white wines and full-bodied red wines with distinct terroir characteristics.



Analysis of commercial wines, fermented with Oenoferm $^{\circ}$ $\mathscr{B}io$

Origin	Alcohol [% by vol.]	Reducing sugars [g/L]	pН	Total acid [g/L]	Malic acid [g/L]	Lactic acid [g/L]
2009 Klingelberger Riesling Baden, Germany	13.3	6	3.1	8.4	2.9	n.d.
2009 Coullioure Blanc, France	15.0	0.8	3.4	4.6	1.3	n.d.
2009 Puilly Fuissé Cuvée classique, France	13.2	0.4	3.3	5.6	0.05	1.8
2009 Riesling Rheingau, Germany	13.0	0.9	3.2	7.5	3.0	n.d.
2008 Grüner Veltliner, Austria	13.9	2.1	3.3	7.3	3	0.5
2008 Rheinriesling, Austria	12.3	1.9	3.2	8	4.1	n.d.
2009 Gamay Beaujolais, France	13.7	0.5	3.6	5.3	0.15	1.6
2008 Bordeaux Cuvée, France	13.2	0.3	3.6	5.14	0.2	1.6
2008 Bordeaux Supérieur, France	13.7	0.3	3.6	5.2	0.24	1.7
2009 Chianti classico, Tuscany, Italy	15.3	0.5	3.3	5.7	0.3	1.5

n.d.= not detectable

HydroGum *Bio*: M *Sio*: Certified gum arabic from organic cultivation

ydroGum Bio is derived from controlled organic cultivation. It is a natural product extracted from dried Acacia sap and very carefully processed. Since it is a liquid product, its application is very easy, it can be added directly to the wine. HydroGum Bio provides the wine with mouthfeel and structure. Produced according to Regulation (EC) No. 834/2007 on organic products.

ErbiGel® *Bio*: *Sto*Certified edible gelatine from organic farming

rbiGel® Bio is a well soluble, ground edible gelatine made of 100 % pork skin. It has a good clarifying effect in wine and reduces polyphenols at the same time, thus assures optimal stabilisation towards colloidal haze. Produced according to Regulation (EC) No. 834/2007 on organic products.

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