



**MICROBIOLOGICAL
EXCELLENCE
FOR WINEMAKING**

enartis

Inspiring innovation.

Four Key Benefits of CERM

CERM is not just about research - it's about practical applications. Its mission is to provide winemakers with reliable tools to improve their production processes through a tailored, scientific approach.



1

**PRECISION IN THE
SELECTION OF YEASTS
AND BACTERIA FOR
FERMENTATION**



2

**EFFICIENCY AND
PROBLEM-SOLVING
DURING
FERMENTATION**



3

**SAFETY AND
RELIABILITY**



4

**DEVELOPMENT
OF CUSTOMIZED
SOLUTIONS TO
ACHIEVE STRATEGIC
ENOLOGICAL GOALS**



A Program of **Excellence** and **Innovation**

The Centre of Excellence for Research in Microbiology (CERM) is the core of Enartis' **biotechnology research and development dedicated to winemaking microbiology**. Established in 2024, CERM is the result of long-standing collaboration between Enartis and Italiana Biotechnologie. Its goal is to **elevate the standards of research, development, and innovation in enological biotechnology**, transforming scientific discoveries into practical tools for producers. CERM's methodology guides the research and development for Enartis' microbiology labs worldwide.

Through **advanced genetic analysis, cutting-edge technologies, and a rigorous scientific approach**, CERM combines expertise, innovation, and technology to support the progress of the wine industry.

- High-level scientific research
- Advanced technologies for microbial selection and characterization
- Development of innovative yeasts, yeast derivatives, and bacteria for fermentation
- Tailored solutions for every winemaking need
- Rigorous testing and quality validation of microorganisms

Tangible Scientific Support for Outstanding Wine

CERM acts as an innovation accelerator, leveraging state-of-the-art equipment and targeted studies that improve analytical precision and dramatically reduce research times.



MICROORGANISM SELECTION AND CHARACTERIZATION

- Isolation and selection of yeasts and bacteria from natural matrices such as must and grapes.
- Molecular characterization of strains.
- Identification of the best-performing strains for specific winemaking applications.



GENETIC RESEARCH AND BIOINFORMATICS

- Genome analysis: identification of genes influencing metabolic activity and fermentation performance.
- Transcriptome analysis: study of gene activation or repression under specific conditions.
- Data interpretation of select microorganisms with desired traits.

Our Activities



DEVELOPMENT AND OPTIMIZATION OF FERMENTATION PROTOCOLS

- Laboratory fermentation simulations: study of microorganism behavior in various musts, evaluating fermentation kinetics, alcohol yield, and aromatic profiles.
- Chemical-aromatic analysis: use of advanced instrumentation to monitor compound production.
- Operating condition optimization: temperature, nutrients, oxygenation, and pH.

Before commercialization, each strain is tested multiple times to verify its stability and performance under real-life conditions. Based on these insights, CERM recommends the most suitable yeast for each grape variety or wine style, maximizing aromatic and qualitative expression.



INDUSTRIAL-SCALE APPLICATION

- After validation, strains are propagated on a large scale according to a specific and unique protocol to ensure maximum stability and vitality.
- Replication of optimal conditions for microorganism propagation with customized drying systems.
- Quality and safety checks: molecular tests to confirm strain identity and microbiological and compositional testing.

In Wine, Every Detail Matters

CERM is the answer for those seeking **innovation, reliability, and advanced technical solutions** in winemaking.

Harnessing science to improve wine is no longer the future - it is the present.

Discover
CERM-Validated
Products



enartis
Inspiring innovation.