

WP 3 - Scale-up bioprocesses at pilot level - 30.12.2022

Tasks:

Task 3.1 - Obtaining dry yeasts at pilot level

Task 3.2 - Testing active dry yeasts at pilot level, in order to obtain wines with outstanding sensory properties (partially)

Task 3.3 - Dissemination of information

Estimated results:

- Scale-up report
- Specifications of finished products (yeast biomass, wines)
- Organoleptic characterization of products - analysis reports
- Publications/Participation in fairs/conferences/exhibitions

The main objective of the stage consisted in testing isolated and identified yeasts in order to obtain dry yeasts at pilot level and in testing active dry yeasts in order to obtain wines with outstanding sensory properties.

Other yeast strains were identified by the MALDI-TOF (Matrix Assisted Laser Desorption Ionization Time-of-Flight) technique

Results achieved

- the creation of batches at pilot level with the addition of an additional nitrogen source, yeast extract, in order to increase the content of yeast biomass, was pursued;
- The technological flow at the pilot level was realized;
- Following the EN analysis - The clear separation of musts from wines could be observed while also the two different wines (*Cabernet* and *Feteasca regala*) present a clear separation;
- In order to preserve the typicality of the wines, yeasts obtained on a sterile medium of grape must were mainly used;
- the dissemination of information was achieved by publishing articles and participating with posters at national and international conferences and congresses.

