

« OENO 2011 »
9ème édition du Symposium International d'Œnologie
Bordeaux 15, 16 et 17 juin 2011

Communication Poster.

Thème : Microorganisms grapes and wine.

**MOLECULAR CHARACTERIZATION OF INDIGENOUS YEAST STRAINS
ISOLATED FROM RIBERA DE DUERO SPANISH WINERIES**

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Mots clés : indigenous yeast, molecular markers, AFLP, population dynamic

Ribera de Duero Spanish wines are appreciated around the world because their high quality and organoleptic characteristics. Some wineries preserve these characteristics selecting the best grapes of the vineyard and allowing the indigenous yeasts present in the must to carry out the fermentation process. There are several *Saccharomyces* and non-*Saccharomyces* yeast strains involved in the process and the knowledge of yeast dynamics during alcoholic fermentation could be essential for the control of the vinification process and the improvement of the wine quality.

We are focused in the identification of indigenous yeast strains from Ribera de Duero and the subsequent study of the yeast population dynamics during the alcoholic fermentation. For this purpose, we have analyzed the indigenous yeasts present in different musts from two Ribera de Duero wineries, called Aster and Díaz-Bayo, during three different years. Isolation of yeasts was done using classical microbiological methods and the identification was done by molecular techniques: ribosomal ITS amplification and digestion, and D1/D2 domain amplification and sequencing. With the isolated yeast species we are now trying a more specific identification using AFLP molecular markers. The aim is to determine the usefulness of these markers to differentiate at the strain level and also their potential in studies of population dynamics during fermentation. The obtained AFLP profiles have been proved very useful for the molecular characterization of yeast at the strain level, the second objective is under study at this moment.

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