II.2.1.3.2.3.1 De-acidification by yeasts

Definition:

Lowering of total acidity and real acidity (increase in pH) by using selected yeasts (Saccharomyces and non-Saccharomyces)

Objectives:

a) To make balanced wine from a gustatory sensation point of view;

b) To obtain a partial *or total* breakdown of malic acid by a biological pathway

Prescriptions:

Biological decrease of malic acid by yeasts can operate:

a) On musts (*see file II.2.1.3.2.3 'Microbiological de-acodification'*);

b) The objective under b) can be achieved during alcoholic fermentation using selected Saccharomyces or non-Saccharomyces strains. Strains of Saccharomyces genus are known for their partial breakdown capabilities. Strains of Schizosaccharomyces pombe are known for their total malic acid breakdown capabilities;

c) The use of Schizosaccharomyces yeasts has shown its efficiency for obtaining a rapid breakdown, whether partial or complete, of L-malic acid in musts and wines. Due to the great decrease of titratable acidity and the concentration of hydrogen ions, induced by the activity of these yeasts, their development can be undesirable for certain wines. So precautions should be taken to avoid contamination of the vats for which the development of these yeasts is undesirable.

d) Yeasts must comply with the prescriptions of the International Oenological Codex.

Recommendation of the OIV:

Admitted.