II.1.17 Treatment of crushed grapes with ultrasound to promote the extraction of their compounds

Définition :

Usage of ultrasound for a rapid extraction of grape compounds.

Objective :

To stimulate extraction of grape compounds during pre-fermentation maceration, after destemming and crushing, by using of ultrasound, with the following aims:

- To obtain a must with a higher concentration of phenolic compounds and other grape compounds
- To obtain wines with an adequate and stable phenolic composition, reducing the maceration time compared to a traditional process
- To limit the release of tannins present in the seeds (since maceration time is decreased), mainly when the treated grapes have a low phenolic maturation
- To accelerate the grape processing

Prescriptions :

a) The treatment must be carried out on destemmed and crushed grapes in order to increase the performance of the treatment

b) In order to avoid a temperature increase in the bulk of crushed grapes this treatment should be done with the bulk in movement

c) To boost an efficient cavitation process, the solid/liquid proportion in the bulk of crushed grapes must be adequate.

Recommendation of OIV

Admitted