



OIV-OENO 541B-2021 Use of Aspergillopepsin I to remove haze forming proteins in wine

THE GENERAL ASSEMBLY

IN VIEW of the Article 2 paragraph 2 b) ii of the Agreement of 3<sup>rd</sup> April 2001 establishing the International Organisation of Vine and Wine,  
UPON THE PROPOSAL of the “Technology” Expert group,  
CONSIDERING the opinion of the “Food Safety” Expert group,  
DECIDES, following a proposal made by Commission II “Oenology”, to introduce the following practices and oenological treatments in part II of the *International Code of Oenological Practices*:

**Title**

Use of Aspergillopepsin I to remove haze-forming proteins in wine.

**Definition:**

The addition to wine of Aspergillopepsin I from *Aspergillus* spp. to remove haze-forming proteins.

**Objective:**

To prevent protein haze in still white and rosé wines and sparkling wines.

**Prescription:**

- a) After addition of Aspergillopepsin I preparation, one short-term wine heating must be applied as it contributes to the unfolding of haze-forming proteins and facilitates their enzymatic degradation by proteases, as well as leads to a denaturation of the protease itself.

This single heat treatment must take into account:

- the activity of the Aspergillopepsin I preparation as regards temperature
- the quantity of Aspergillopepsin I used

The minimum temperature of treatment should be at or above the denaturation temperature of the proteins, generally comprised between 60 and 75 °C.

- the heating time, generally around 1 minute. Too long heating time could induce negative organoleptic impact.

This loss of three-dimensional conformation of TLPs (Thaumatococcus Like Proteins) is



reversible, so the heating has to be simultaneous to the addition of enzymes for optimal efficiency.

- b) The wine is immediately cooled to an appropriate temperature.
- c) A filtration must be performed to remove the residual proteins (including added proteases and other proteins).
- d) The enzymes used must comply with the prescriptions of the *International Oenological Codex*.

**Recommendation of OIV:**

Admitted.