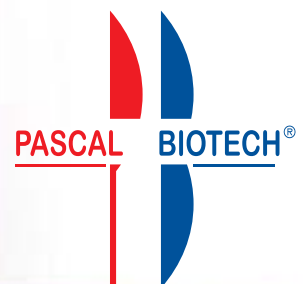


The refinement of wines



Refining agents for wines

Refining agents for wines

Tannins' role in directing the action of oxygen

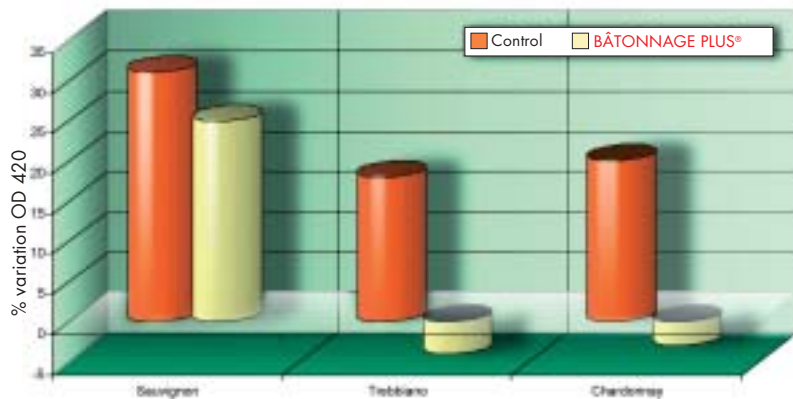
Wine refinement, also referred to as **maturation** or **élevage**, is an important stage of the post-fermentative oenological process, which sensibly improves the wine's organoleptic characteristics.

The refinement consists in giving a precise direction to the action of oxygen as it spreads throughout the wine during racking and traditional cellar operations; this promotes the polymerization of the anthocyanins with the proanthocyanidins and of these latter ones amongst themselves.

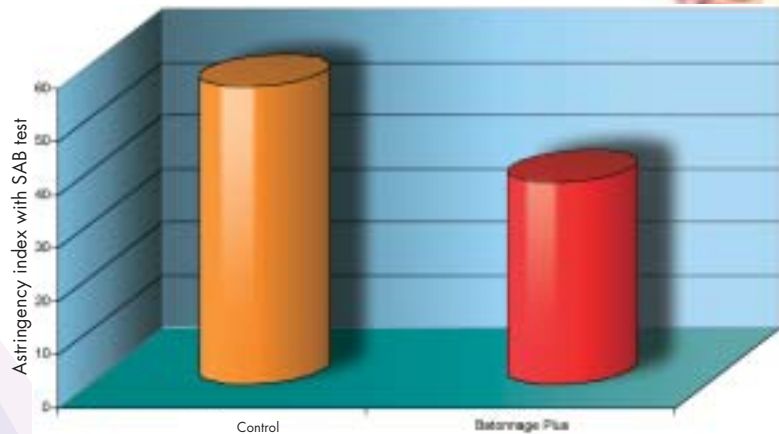
For the action of the oxygen to take place in a correct way, two types of tannins are needed:

- **proanthocyanidinic tannins**, naturally found in grapes,
- **ellagic tannins**, similar to the ones released by barriques.

The proanthocyanidinic tannins act as final oxygen receptors, ensuring that wine develops correctly throughout the entire refining process. Their presence adds structure to wine and is indispensable for fixing the anthocyanins in a stable way. In poorly structured wines (TPI below 50) the ratio of proanthocyanidinic tannins must be increased. In order to fashion great wines, significant quantities of both tannins are necessary.



BÂTONNAGE PLUS® ÉLEVAGE reduces the tendency of white wines to oxidize, which, in these experimental trials, was established as an increase in optical density at 420 nm, after oxidation test at 35°C.



BÂTONNAGE PLUS® ÉLEVAGE reduces wine astringency. In this experimental trial the astringency of a vintage Pinot Noir has been measured by observing wine turbidity after the addition of a protein (bovine serum albumin).

Ellagitan®

Enhances the refinement and promotes polyphenols polymerization

- Type: ellagic tannin.
- Origin: vegetable.
- Action: produces the ethanal needed for binding the anthocyanins to the proanthocyanidins; captures the free radicals which oxidize the aroma.
- Application : to stabilize colour and mellow astringency.
- When to use: at the end of fermentation and at every racking.
- Dosage: 5-10 g/hL at every racking.

Ellagitan® Chêne

It builds up the potentiality of wine

- Type: highly prized ellagic tannin.
- Origin: oak wood.
- Action: forms the ethanal necessary for binding the anthocyanins to the proanthocyanidins; highly effective in capturing the free radicals which cause oxidation.
- Application: to stabilize colour, mellow astringency, preserve and highlight varietal aromatic nuances, without contributing excessive woody overtones.
- When to use: at the end of fermentation and at every racking.
- Dosage: 5-10 g/hL at every racking.

Bâtonnage Plus® Élevage

Adds extra body and balance to wines

·Origin: enzymatically pretreated yeast hulls preparations, naturally rich in mannoproteins.

·Action: adds mannoproteins and builds up a barrier for the protection of oxidizable compounds.

·Application: for obtaining rapidly and safely the same advantages of a long stay on fine fermentation lees; for stabilizing wine colloidal structure; for improving taste complexity and balance.

·When to use: best results are obtained with early additions.

·Dosage: approx. 40 g/hL.

·Possible counter-indications: add at least 1 month before any filtration.



Protan® Raisin

Improves wine structure

Type: proanthocyanidinic tannin.

·Origin: white grapes' skin.

·Action: supplies soft skin tannins which integrate perfectly with the tannic structure of wines. No further refining required.

·Applications: for mellowing tannic astringency while increasing wine structure.

·When to use: before bottling or during refinement.

·Dosage: 3-30 g/hL.

Protan® Raisin BRIDGE

For the refinement of wines

Type: proanthocyanidinic tannin.

·Origin: unfermented grapes' skin.

·Action: supplies soft skin tannins which integrate perfectly with the tannic structure of wines. No further refining required.

·Applications: for increasing wine structure and rendering it more mellow and pleasant to the palate.

·When to use: during refinement.

·Dosage: 5-30 g/hL.

TANNINS ARE EXTRACTED FROM NON GMO VEGETABLES



Protan® Pépin

Stabilizes colour and naturally integrates the polyphenolic structure of wines

Type: proanthocyanidinic tannin.

·Origin: grape pips.

·Action: supplies noble grape tannins, which bind with anthocyanins; acts as final oxygen receptor.

·Applications: for increasing the structure of quality wines, for enhancing wines' ability to bind the anthocyanins and to receive oxygen, for stabilizing colour.

·When to use: in young wines and during maturation even through several additions.

·Dosage: 2-25 g/hL.

·Possible counter-indications: highly structured wines.

Protan® Pépin OXILINK

Ideal for micro-oxygenation

Type: proanthocyanidinic tannin.

·Origin: grape pips.

·Action: supplies noble grape tannins, which bind with anthocyanins; acts as final oxygen receptor.

·Application: for increasing the structure of quality wines, for stabilizing colour.

·When to use: the best result are obtained by combining the utilization of **Protan® Pépin Oxilink** with micro- and macro- oxygenation.

·Dosage: 5-30 g/hL.

Protan® Bois

Strengthens and amplifies the tannic structure

Type: proanthocyanidinic tannin.

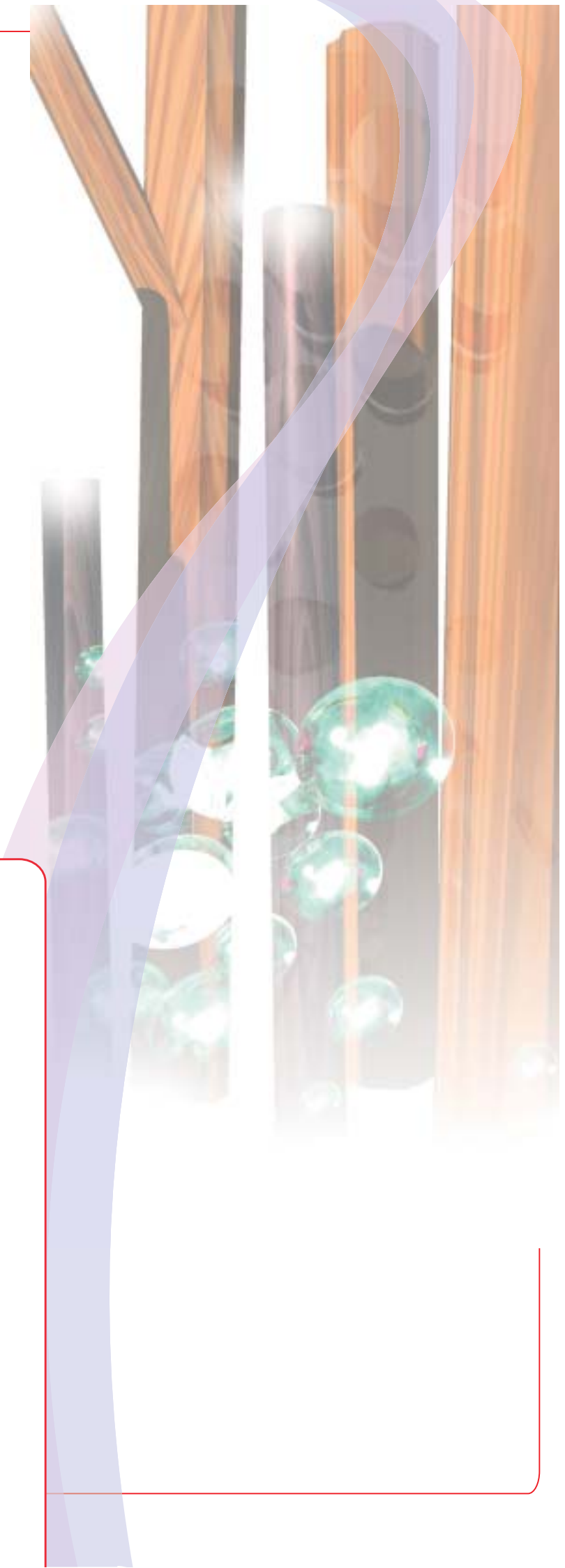
·Origin: extracted from Quebraco wood through a double purification process, which partially polymerizes the vegetable proanthocyanidins, mellowing their harshness.

·Action: performs as final oxygen receptor.

·Application: for preventing oxidation and colour loss in wines lacking in tannic structure; for increasing structure and for harmonizing and softening wines obtained from grapes not fully ripened.

·When to use: the best results are obtained with early additions.

·Dosage: 5-30 g/hL.



51292



AEB SPA
Via Vittorio Arici, 104 - S. Polo
25134 BRESCIA (Italia)

Tel. +39.030.2307.1
Fax +39.030.2307.281

E-mail: info@aeb-group.com
www.aeb-group.com

