



INTERVIEW

WITH DOCTOR ANDREI PRIDA, R&D MANAGER SEGUIN MOREAU



CAN YOU EXPLAIN HOW THE ICÔNE PROJECT WAS BORN?

The ICÔNE project is based on 2 facts widely known to people in our field:

- 1) oak wood is a variable material due to its physical and anatomical characteristics, but above all due to its chemical composition.
- 2) our clients experience it on a daily basis: wood extractible molecules modify the organoleptic profile of wines aged in barrels.

Our teams therefore pursued two research goals derived from these two observations:

- 1st goal: to master this variability in order to reduce it as much as possible.
- 2nd goal: to make sure that the oaky expression sought by every winemaker is achieved with more certainty.

CAN YOU TELL US MORE ABOUT THE NATURAL VARIABILITY OF OAK?

Of course !

Oak is really a very variable material as a consequence of several factors: its origin, its species and the tree itself. Two trees growing side by side in the same forest may have completely different chemical characteristics.

We led several interesting studies on the field, in forests, and measured the contents in structuring and aromatic components of trees growing in the same plot.

Our findings were that contents could vary from 1 to 100 for trees growing side by side.

WHICH ACTIONS DOES SEGUIN MOREAU TAKE IN ORDER TO MASTER THIS VARIABILITY?

Coopers first worked on the basis of geographical selections through the notion of forests.

As you know SEGUIN MOREAU was the first cooerage to work with a selection by grain, thus introducing globally homogeneous oak profiles as far as structuring and aromatic contributions were concerned.

The ICÔNE project is a major evolution in the mastery of this variability, since we are literally getting into the heart of the material, into its chemical composition.



CAN YOU GO INTO MORE DETAIL?

Many analyses showed us that the most relevant unit of chemical variability was the tree itself, therefore the log.

Therefore, in order that our supplies in logs and rough staves match our requirements, we have established 2 protocols for characterizing the material.

For rough staves supplied by mills with whom we have a partnership, we have created a tool which enables us to automatically take samples on the production line. When a pallet of staves is placed at the beginning of the line, we take samples of wood in quantities proportional to the surface area that each stave will occupy in the barrel. This constitutes a representative sample of the barrel which is then analysed in our in-house laboratory.

Logs are processed differently since we take a representative sample of each log upon delivery to our staves mill. These samples are analysed thus enabling us to constitute batches of logs with homogeneous chemical characteristics. These batches of homogeneous logs are then turned into homogeneous pallets of rough staves.

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CAN YOU ALSO TELL US MORE ABOUT THE ORGANOLEPTIC IMPACT OF OAK ON WINE AGED IN BARRELS?

The evolution of wine during ageing mainly depends upon the extraction of aromatic and structuring substances and their transfer into wine.

At SEGUIN MOREAU, we speak of the “œnological Potential” of oak wood. We define it as its capacity to generate a specific oak profile for a given type of wine.

It is important to note that the œnological Potential of oak not only depends on its chemical composition but also on the type of wine with which it will be in contact. It is therefore paramount to think in terms of association between a type of oak and a type of wine and not in terms of oak on one side and wine on the other.

Depending on the initial concentration of molecules in oak, on their extraction rate and their interaction with wine, their organoleptic impact might differ widely.

For example, we were able to observe the results of synergy or elimination of different molecules interacting with each other :

- two aromas with an individual weak impact can, if put together, gain in strength and impart a strong aromatic note to the wine

- on the contrary, two aromatic molecules which are individually strong can neutralise each other once put together in wine.

HOW DID YOU DEVELOP THE ICÔNE PROCESS?

Our methodology can be summarised as follows: First we analysed thousands of oak samples with different molecular concentrations. We manufactured barrels from this oak. Then we conducted chemical analyses of wines aged in those barrels, followed by quantitative sensory analyses, since tasting remains the only determining factor for our clients and ourselves.

It is on this basis and from our knowledge of wine-wood exchanges that we were able to build the mathematical model, which is the keystone of the ICÔNE process.

AND FINALLY HOW WOULD YOU DEFINE THE ICÔNE PROCESS?

ICÔNE is a process whereby oak is selected by chemical analysis of its œnological Potential, ie. its capacity to generate a specific oak profile for a given type of wine.

Thanks Andrei !



100% ŒNOLOGIQUE

LE FRUIT DE DOUZE ANNÉES DE RECHERCHE
LE POTENTIEL ŒNOLOGIQUE
LA SÉLECTION ANALYTIQUE DU BOIS
LA MAÎTRISE DE L'IMPACT SENSORIEL
LA COMPLEXITÉ DU VIN DANS LE RESPECT DU RAISIN
LA PRÉCISION DU PROFIL BOISÉ
L'ASSURANCE DE LA REPRODUCTIBILITÉ