

OPEN-MINDEDNESS AND SUSTAINABLE DEVELOPMENT



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The House of Duval-Leroy

Created in 1859 by the alliance of the Duval and the Leroy families, Champagne Duval-Leroy won glowing acclaim at the Universal Exhibitions of Barcelona, Monaco, Moscow and Paris between 1888 and 1893, praised by critics for its charm, complexity and subtlety and admired by connoisseurs for its distinctive character and elegance.

Shortly after 1911, when the champenois area experienced its first revolution with the adoption of the official classification of champagne vineyards, Raymond Duval-Leroy created the first Premier Cru Champagne which he called "Fleur de Champagne" in homage to the finesse and the aroma of white flowers reminiscent of the grape vine blossom he discerned when he first tasted it. Nowadays this cuvee, still produced in Vertus, is exclusively available on the best tables and from the best wine retailers.

In 1994, Carol Duval-Leroy, always in search of precision and improvement, made Duval-Leroy the first Champagne House to receive the certification standard ISO 9002.

Since 2000, the vineyard teams have reduced by more than 50% the use of weed-killers and the vineyard is managed by sustainable vine growing.

The solar panel installation entrusted to Amperel

AMPEREL

The photovoltaic installation, over a total surface of 250 square metres, consists of 180 solar panels positioned on the façade of the Duval-Leroy winery, interconnected to three UPS's (Uninterruptible Power Supplies) capable of converting the constant energy from the panels into an alternative power source.

This electricity is physically re-introduced into the private network for on-site consumption. Therefore the site becomes the consumer of its own green electricity. It produces 19 000 kwh, sufficient for two households, and covers the electricity needs of the barrels room, the tasting room and the reception area.

Some information about the Duval-Leroy vineyards

The Duval-Leroy vineyard comprises 200 hectares under cultivation, i.e. one third of the requirements of the House. (Only 3000 hectares out of the total production area of 30 000 hectares belong to negociants). The other two thirds come from the acquisition of grapes and/or juice from more than 100 external press centres.

The Company's five press centres are spread across the whole Champagne area.

The vinification of all wines (produced from grapes from the Company's own vineyards or from bought-in grapes) is carried out exclusively at the Duval-Leroy winery in Vertus.

Duval-Leroy has a presence in all villages classified as "Grand Cru" in the Côte des Blancs and also in most villages classified as "Grands Crus" in the Montagne de Reims. 40% of the total production of our own vineyards comes from Grands Crus and Premiers Crus areas.

Duval-Leroy employees are always present at the different sites during the harvest: this is extremely important for the control of the quality of the grapes (necessary for the elaboration of quality wines).



The Duval-Leroy vineyard and its environmental commitment

Since the beginning, Duval-Leroy has incorporated the protection of the Environment in the management of its vineyard.

Above and beyond a reasoned vineyard management, we are developing a precise programme of vine growing taking into consideration every environmental and statutory constraint.

1) Development of the vineyard:

- Measures to combat the run-off of rain water in order to limit the pollution of both underground and superficial waters.
- Measures to combat erosion in order to respect the soil (allowing grass to grow between the vines and on the paths).
- Restoration of ecological 'niches' enabling the development of vine-helping organisms (by planting hedges of different shrubs: eg. Clos des Bouveries).



2) Soil nutrition:

- The whole vineyard is subject to regular soil tests.
- Integrated additions of fertilizers (use of organic products considered as natural enrichment)
- Respect of soil micro activities (preservation of microbial life)



3) Soil preservation:

- The use of weed-killers has been cut by 50%
- Gradual return to the working of the soil involving mechanical weeding and to the restructuring of the ground (making room for ploughs).
- Partial protection of the vineyard with a winter or permanent cover (selection of plant types).

4) Reasoned protection of the vineyard:

The main target is to reduce the use of phytosanitary products intended to protect the vineyard against the main diseases (Mildew, Oidium, Botrytis...) and pests.

In order to reach our qualitative targets, we have improved our working methods:

- Choice of the least toxic products (eg. Sulphur...)
- Optimization of our equipment (computer-controlled vineyard spraying which regulates the quantity of product spread, in-depth technical checks on the sprayer at maximum two year intervals...)
- Implementation of an alternative to the traditional insecticides (sexual confusion method = release of 'pheromones which disturbs the reproduction of pests).
- Varying the number of phytosanitary treatments utilized by monitoring the plots and weather conditions encountered.
- Implementation of tests in collaboration with the technicians of the Comite' Interprofessionnel des Vins de Champagne (reduction of doses and the use of natural defences stimulators).
- Traceability of products used in the plots (cartographic and computerized control)

5) Implementation of phytosanitary products:

Preventive actions are implemented in order to reduce the risks related to the use of these products to humans and to the Environment.

- Staff training
- Storage of these products in a specific room restricted to authorized personnel (tractor drivers)
- Compulsory personal protective equipment
- Protection of the tractor driver when spreading products (tractors are fitted with a hermetic and air filtered booth)
- Preparation of treatments in a leakproof area (no waste discharged into the natural environment).

6) Waste management:

Since 2001, Champagne Duval-Leroy has adopted a processing method of the waste produced by wine growing. Its target is to avoid any discharge into the natural environment:

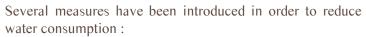
- Storage and processing of effluents used for viticulture (water used to clean tractors, bottom of vats...)
- Condition of specific industrial wastes (equipments contaminated by phytosanitary products).
- Empty packaging collected by our suppliers
- Recycling of cardboards, metals...
- Traceability of waste

Duval-Leroy production, leitmotiv: the conservation of resources

1) Water:

Oenology is a technique which involves a significant consumption of water :

- To wash tanks, wine-making equipment and floors
- To rinse empty bottles before bottling
- To wash bottles after disgorging and before the labelling process
- To sanitize the bottling and disgorging machine/equipment



- For the last two campaigns, the rinsing machine on the bottling line has been equipped with a water recycling system whereby the water that exits the rinsing machine goes through a filter with hollow fibres (0.02 μm) and undergoes a UV finishing treatment before starting to rinse a new cycle of bottles.

The retro-washing of the filter occurs every 3 hours together with the draining of the water. This allows for a 30% saving of water at the bottling stage.

- The disgorging line is equipped with a rinsing system of the bottles' necks which stops automatically when no more bottles are detected, and with a bottle washing machine equipped with a recycling system that allows a significant reduction in water consumption. This translates into a 20% water saving on the disgorging line.
- The optimal water consumption control also extends to the equipment of the cleaning system used for the filler and rinser on the bottling line and for the dispenser on the disgorging line.
- The cuverie (fermenting room) also benefits from water savings as the new extension has permitted the installation of electro-sheen stainless steel tanks which allow for the discharge of the tartar when racking and thus reducing the amount of water used for washing the tanks.
- Finally every production department is equipped with a meter in order to monitor the water consumption and to check the efficiency of the measures adopted.









In this way between 2006 and 2008, 800 m3 of water were saved during production, equivalent to 8% savings.

2) Effluents:

Water consumption control also requires effluents control.

During the wine making period, Duval-Leroy chooses to spread these onto the soil because they contribute a worthwhile mix of nourishing elements. Outside of the wine making period, the effluents, after an oxygenation pre-treatment, rejoin the communal system to be treated in the local purification centre.



For the past 10 years, Duval-Leroy has controlled all the waste products from the production processes, ranging from the by-products of the wine making process to packaging waste.

Thus, all waste is collected and separated in specific containers throughout the different departments. The waste disposal system is regularly reviewed in order to be optimized. Recycling is favoured for glass and cardboard. A recycling facility and a deposit have been set up for the plastic pallets and for the metal cap boxes. All plastic is separated by type for the relevant recycling.

By-products of wine making are sent to the distillery according to regulations and all tartar or filtration material containing tartar is recuperated for the extraction of the natural tartaric acid.

4) Energy:

Several changes were adopted in order to limit the energy consumptions connected to the thermal regulation of wine making and of the ageing process.

The malolactic fermentation, systematically made at Duval-Leroy, is activated immediately after the alcoholic fermentation in order to take advantage of its residual heat, which is favourable to the bacterial development, thus avoiding the use of exogenous calories.













A choice of responsible suppliers

Champagne Duval-Leroy's commitment to sustainable development extends to the choice of its partners.

Bottles:

The glass bottles used by Duval-Leroy are made of approximately 70 % of recycled glass and come from factories near Vertus: therefore less energy is consumed. In addition, Duval-Leroy will use lighter glass bottles in the next bottling process in order to diminish its Carbon Footprint.

Our cork suppliers such as Amorim, a leader in this sector, are gradually setting up a responsible management system of forests including FSC certification.

Labelling:

The labels of the Duval-Leroy range are printed by our historic partner, the printing company Billet. This printing company was one of the first in Champagne to obtain the label IMPRIM'VERT. The purpose of this label is to emphasize their willingness to reduce the environmental impact connected to the printing activities.

The main requirements of the IMPRIM'VERT specifications are:

- To dispose of all polluting residues at least once a year, according to the standard regulation
- To make secure the storage of new and dangerous liquids in order to avoid any risk of accident for the workers and any risk of accidental pollution
 - To avoid the use of any products labelled as "toxic"



The label IMPRIM'VERT is renewable every year and at the end of the third year, the renewal requires a validation by the granting committee following an inspection.

Mailing and commercial document:

Duval-Leroy tries to reduce its paper consumption.

All commercial documents are available in paper format (using a printer labelled IMPRIM'VERT), but they are also available online on the Duval-Leroy intranet website. Ecologically speaking, this allows a considerable reduction in paper consumption. Admittedly, it is not possible yet to go totally paperless, as some documents still need to be printed and the attachments to emails are still too often printed by users. Nevertheless, the online version is proving to be an essential step on the sustainable development path for any responsible company.

Cases, gift boxes and cardboard packaging:

These products are made up largely of corrugated cardboard. As an auxiliary of the product which it protects, corrugated cardboard packaging, due to its renewable natural origin and its recyclable nature, goes together with the dynamics of sustainable development.

Our main supplier for gift boxes is the ETUI COGNAC company part of the group Otor, one of Europe's leaders. Otor paper industries utilize recycled paper as raw material, also contributing to the environment's protection by recycling thousands of tons of papers and used cardboard.

Duval-Leroy Champagnes from organically grown grapes

Duval-Leroy encourages organic viticulture and for this reason decided to rely on the know-how and resolution of a few certified organic growers, by buying their organically grown grapes.

This noble material is vinified by Duval-Leroy respecting natural methods, with a homoeopathic use of sulphites.

Our Champagne House assures an optimal traceability, regularly controlled and certified by Ecocert with the label AB on these specific cuvees.

Development, improvement and the protection of nature are part of the ethics of Duval-Leroy.





Our Cuvee Authentis, an expression of the "terroir" of Cumières, is elaborated with organic pinot noir grapes and vinified in oak barrels; it shows purity and concentration.

Champagne Duval-Leroy Brut AB combines organically grown grapes from different terroirs in Champagne: Barséquanais, Montagne de Reims. This champagne is different because it is a blend of wines made from organically grown grapes, as opposed to the mono-cru and mono-grape concept and this method lends to this champagne its dense and true expression.

