



Organic and sustainable commitments

At Domaine Paul Mas, we have understood for a long time the need to integrate environmental sustainability into our agricultural philosophy and practices. Son of a grower, Jean-Claude Mas believes that with a living soil the vine grows better and the wines are better still – for him, organic viticulture is a **key value**, not a selling point.

"We have our own rules when it comes to sustainable winemaking, and we've established several processes and relationships when it comes to working ethically and ecologically. It is a 360° approach" Jean-Claude Mas

Nowadays:

- 23% of our own vineyards are certified **organic**
- 100% of our own vineyards are **Terra Vitis** certified
- 100% of our own vineyards are certified **HVE 3 level 3**

Organic viticulture

At Domaine Paul Mas, 23% of our own vineyards are certified **organic**. Our vines get greater consistency in terms of quality and yield. Grapes are more sapid; the plant finds trace elements that cannot be found in conventional agriculture. Vineyard practices are adapted to each site. Overall practices include:

- Use of light tractors to avoid soil compaction
- Use of essential oils in favor of chemicals
- Deep ploughing to encourage root growth and activities in the soils
- Leaving our soils fallow of 5 to 7 years, planting cereal crops and leguminous plants before replanting vines – this bring organic life to the soils without having to use chemical intervention
- Study of mycorrhizae to counter the various wood diseases





Viticulture by horse

- The main interest of viticulture on horseback lies in the great precision of the work carried out, during each row and each vine stock are treated almost individually. Work with horses in the vines then finds their interest in the sustainability of the soils for the enhancement of the terroirs.
- Horse work also makes it possible to display the phenomena of soil compaction. This technique thus allows a greater activity of the biological, chemical and physical life of the soils. The agronomic potential of the soil is better exploited.
- With an airy structure, the runoff of excess rain is limited. The soil is prepared for better water infiltration, which makes it possible to build up reserves in depth.
- Either way, horse tillage creates a soil structure that is much more suited to the health of the vine, the root system of which penetrates deeply. Its water supply is better. The vine is more vigorous.

Eden, our 7 year-old mare was trained from the start for agricultural work, as she has a calm temperament and walks at a slow pace.

The horse's work is controlled via a dynamometer to check that it is not being worked too hard.

We use Eden to plough our parcels our on small estates such as Clos Astélia.





Terra Vitis

- Terra Vitis was created in 1998 and is the **stamp** of French vine grower and winemakers who respect nature and apply **sustainable agriculture**.

Objectives:

- To respect the environment
- To preserve our terroir
- To safeguard our soils and respect its ecosystem
- To promote biodiversity throughout the vineyard
- To prevent soil compaction and work with the available mineral and organic resources from vineyards
- To reduce the use of chemical in the vineyards (herbicides)





Terra Vitis

Keys practices:

- We inoculate the soils with selected **endomycorrhizal fungi**.
- We **bring biological enrichments** in order to increase the microbial biomass of soils

ie: at our Les Tannes vineyard, we are introducing some selected bacteria which act as biological activators. They allow the mineralization of organic fertilizers and increase the bio-availability of the nutrients which are necessary to the development of plants.

- Practice **deep ploughs** for decompaction of the soils and to encourage root growth, life development and activities in the soil.
- We use **lighter machinery** to avoid excessive compaction of the soils
- We use phytosanitary products which are more respectful of the environment:

ie. Anti mildew: use of horsetail decoction which acts as an elicitor; this is a substance that significantly increases the width of the cell walls which makes it more resistant to plagues

Insecticides: we use decoction of fern which is a good repellent

- We use **existing phytosanitary products and use them in a reasoned way**. The moment of the application and the doses to be used are very important, we can reduce the doses to one third while keeping a total efficiency.





HVE: Haute Valeur Environnementale 3 High Environmental Value 3

For a very long time, we have been involved in agri-environmental approaches such as Terra Vitis.

Whilst they are the recognition of the establishment of a mean to protect the environment, the HVE approach is a further step that **recognizes the results**. Level 3 is the highest level of commitment that can be achieved.

Four required keys :

- **Biodiversity's conservation**

This is our strength at DPM. The very nature of our estates promotes biodiversity with the presence of scrubland, groves of fields, orchards, olive groves, creek slopes. The validation of this criteria is based on the weighing of the surfaces according to their environmental values. The proportion of vines planted on the global surface is accounted via a point system: for 1 ha of planted vines, 1 ha of topographic surface is required, equivalent in biodiversity: streams, scrubland, tree alignment, isolated trees, groves, etc... is valued at double in its actual area. Our 850 ha of vines are planted on sites representing 1250 ha which mix olive groves, orchards, groves, streams, etc... These 400 ha preserved are valued at twice their surface.

- **Phytopsanitary strategy**

Languedoc is one of the French region which uses the least phytosanitary products. Domaines Paul Mas makes the choice of alternative methods such as zero herbicide, zero insecticide, tillage and organic preventive control.

- **Fertilization management**

Domaines Paul Mas uses organic fertilizers in all areas. Before fertilization, we analyze the soils. After fertilization, we analyze our shoots, and our limbo over 3 years to check the effect of fertilizers on each plot.

- **Irrigation management**

Water, even in small quantities, is essential to the well being of the vines. We have put in place a rigorous management of our resources from the cellar to the vine.





On-going Environmental and Biodiversity projects

- **Project "Birth of a vine"**

Before planting a plot, we systematically sow sunflowers, forages or wheat (without any use of irrigation) over 5 years, in order to rest and reinvigorate our soils. The harvest of these seedlings is collected by local farmers or used for our horses.

- **Project « Bee Friendly »**

We welcome beekeepers on the Lauriga, Les Tannes, Astelia and Martinolles estates, so that the bees benefit from the privileged frame of our preserved sites. We help pollinate and adjust our treatments to protect them. *Bee Friendly certification in progress.*

- **Grass cover**

In order to stimulate biodiversity in the soil, in our vineyards and our woods, we proceed to calculated sowing according to each type of soil.

- **Production Transition**

87% of production-related waste (plastics, cardboard, glass, label glassine, wood substrates) are recycled (190 tonnes / year)

Our water and electricity consumption are monitored on all our sites and we use green guaranteed electricity

All our constructions favor the noble and traditional materials which assure optimal isolations and a better comfort of work.