

MAINTAINING AND DEVELOPING THE VITICULTURE AND OENOLOGICAL HERITAGE OF THE MOMBARONE TERRACES

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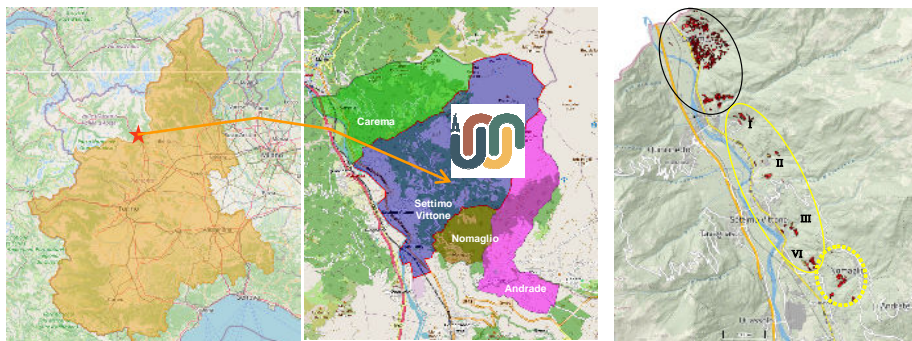
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The study has been supported by **UNIONE MONTANA MOMBARONE** and aimed to describe and highlight the importance of the viticulture and oenological potential of the territory of Carema, Nomaglio and Settimo Vittone, which are located on the western slopes of **Mombarone** (2371 m above sea level) (North-West Italy).

This wine-growing area is extremely small (43 ha) and marginal, with only a few productive realities

However, the area has a **HIGH LANDSCAPE** and **HISTORICAL VALUE** due to its **typical and recognizable structural elements** which deserve to be preserved and protected (figure 1).



In red, from North-West to South-East, the vineyards of Carema (black line), Settimo Vittone (yellow continuous line), Nomaglio (double yellow dotted lines)

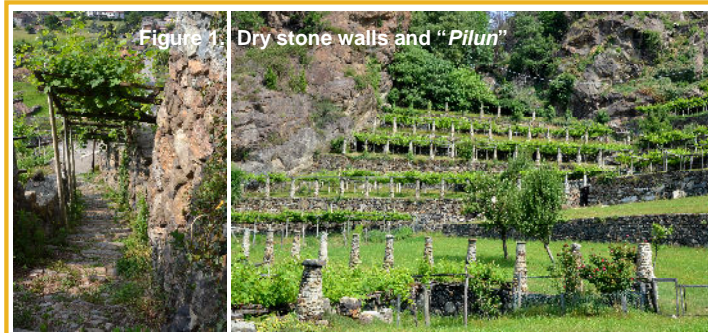
The **soils** are generally classified as **Mountain Inceptisols** or **Entisols**; they have significant limitations to cultivation due to their poor evolution, richness in skeleton, and vulnerability to erosion and landslides (http://www.sistemapiemonte.it/agricoltura/suoli_1_250/).

The **topography** is heterogeneous (table 1) and the steep slopes make **traditional terraces** indispensable (figure 1, 2)

Table 1. Ranges of altitude, slope gradient, aspect of the terraced vineyard in Mombarone

Topographic features	Carema	Settimo Vittone	Nomaglio
Elevation (m above sea level)	200 - 600	300 - 470	420 - 520
Slope gradient (°) ¹	from 5 to 30	from 15 - 20 to 30 - 40	20 - 40
Aspect (°) ¹	from South to South-West	South, West, North-West	South, West

¹The slope gradient and aspect depend on the location of the vineyards



Higher-altitude plots with huge slopes are difficult to access and mechanize and are at serious risk of **abandonment**, or **have already been abandoned**. Due to the difficulty of the vineyard management, **only 40 ha remain today** of the 140 ha registered in the 1950s.

However, since it plays a role in protecting **AGAINST HYDROGEOLOGICAL INSTABILITY** of the slopes, **viticulture deserves to be protected, safeguarded, and enhanced, even with public supports**.

Despite **OBJECTIVE FRAGILITY**, this *terroir* has good production potential and 5 to 7 ha could be recovered for cultivation, helping to improve the economic value of the area.

In addition to the **Nebbiolo** cultivar, there are many **NATIVE VARIETIES** that have always been grown here, and this can add further value to the wine production in this area.



Figure 2. new "heroic" vineyards planted in 2020 with the traditional PERGOLA

"**Carema**" denomination of **WINE origin** prevails, but it is also possible using the "**Canavese Nebbiolo**" denomination. However, the wines produced in the area are similar (Figure 3), and any differences are due to winery objectives and market strategies. Some wineries do not claim the denomination and orient their products towards the customer's target. The identity of this area's wines is still worthy of consideration.

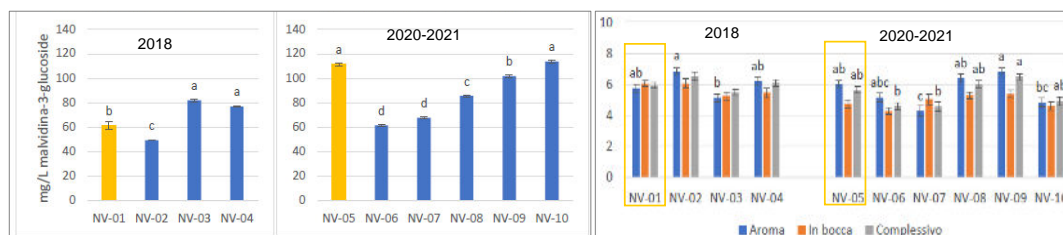


Figure 3. Anthocyanin concentration in wines produced in the Mombarone area (on the left) and appreciation for the wine's organoleptic characteristics (on the right).

NV-01 and NV-05 are Carema DOC wines used as a reference; the other numbers refer to wines without denomination of origin.

2018, 2020 and 2021 vintages have been considered.

The terraced vineyard landscape of Mombarone represents an example of mountain agriculture with a high identity value, in which viticulture plays a productive role, but also contributes significantly to the preservation of the historic landscape and local rural memory.