

Soils and climate of the satellite appellations of Saint-Emilion Château La Couronne – Montagne Saint-Emilion

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The appellations Saint-Emilion and Saint-Emilion Grand Cru (5450 ha) are surrounded by four satellite appellations: Montagne Saint-Emilion (1450 ha), Lussac Saint-Emilion (1450 ha), Puisseguin Saint-Emilion (730 ha) and Saint-Georges Saint-Emilion (200 ha). The geology of the satellite appellation is composed of Tertiary sediments, including soft limestone located on the slopes, called "molasses du Fronsadais" (Oligocene), hard limestone located on the plateaus, called "calcaire à Astéries" (Oligocene) and non-calcareous river sediments in the northern part of the area, called (sables du Périgord, Eocene). The topography is gently sloping and extends between 30 m above sea level (m.a.s.l.) and 106 m.a.s.l. Soils are calcareous on 34 % of the area and vary from shallow on the "calcaire à Astéries" to medium depth on the "molasses du Fronsadais". The texture of the calcareous soils is silty clay. On 66 % of the area soils are non-calcareous and vary in texture from sandy silt to silty clay. The non-calcareous soils are deeper and have generally a greater water holding capacity.

The climate is, on average, cooler in the satellite appellation compared to Saint-Emilion, but temperatures do vary locally. The highest average temperatures are recorded on the limestone plateaus, while temperatures are lower in the northeastern part of the area.

The wines from the satellite appellations used to be not as famous as the wines from Saint-Emilion. Because of the cooler climatic conditions, maturity was more difficult to achieve. With climate change, this handicap is progressively turning into an advantage and wine quality is steadily increasing in this area.

One of the soil types of château La Couronne (Montagne Saint-Emilion) is a weakly leached silty-clay soil on "molasses de l'Agenais" substrate. Traditionally Merlot was the major variety on this soil type, but with climate change Cabernet franc becomes an alternative option. Wines are powerful and conserve good freshness, despite moderately high alcohol levels. They blend well with wines produced on calcareous soils located on the "calcaire à Astéries" substrate, which adds complexity.

Keywords : Soil, Climate, Saint-Emilion, satellite appellation, château La Couronne, Montagne Saint-Emilion

Château La Rose Perrière

Château Tour Bayard îlot 1

Château Tour Bayard îlot 2

Château Vieux Bonneau

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Château Corbir

Château Rigaud

Château De La Grenière

Château Guibot La Fourvieille







The Saint'Elites

Clos Albertus

Château La Couronne



Soil map of Saint-Emilion, Pomerol and their Satellite appellations

Geology, topographie and soils have a high degree of similarity between Saint-Emilion and its satellite appellations

> Château La Couronne PDO Montagne Saint-Emilion

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of the Saint-Elites association

on on the t Saint-Emilion with multiple interactive maps (Adviclim project)

Canopy Winkler index map (average 2012-18) of Saint-Emilion, Pomerol and their Satellite appellations



The climate is cooler in the satellite appellations compared to Saint-Emilion and Pomerol

Parcels of château La Couronne



Soil pit parcel informations:

> Plant material: Merlot/161-49C

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Planting year: around 1970



Topography:



Geology:

Molasses de l'Agenais (Oligocene) on top of calcaire à Astéries (Oligocene)

Soil description:

- Deep soil, parent rock not visible in the soil pit
- Silty clay top soil (approx. 30% clay)
- Clay-silt sub soil (approx. 40% clay below 60 cm depth)
- Moderately high soil water holding capacity
- Slight water deficit possible due to high clay content in sub-soil
- Moderately high OM content, non limiting N conditions

Recommended plant material:

- No active lime, wide variety of rootstocks possible 101-14MGt recommended to limit vigor and
- productivity of the vines
- Merlot preferred, Cabernet franc is an option in a contexte of climate change

Wine style:

- Powerful wines
- Wines preserve freshness despite high alcohol content
- Blending with wine produced on calcaire à Astéries increases finesse and complexity



Soil type (Fr): NEOLUVISOL faiblement redoxique sur molasses de l'Agenais

Soil type (En):

Weakly leached silty clay soil on molasses de l'Agenais

Plateau, 75 m.a.s.l.