

# Soil map of Sauternes

Barsac - Bommes - Fargues - Preignac - Sauternes

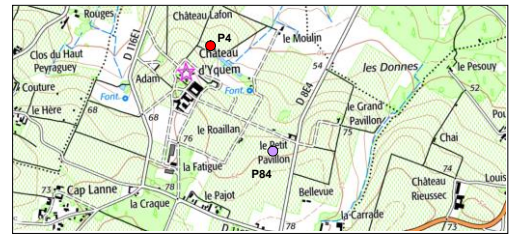
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## Profile 84

SAUTERNES ; site name: "Petit Pavillon"  
X : L93 : 436 063 m – Y : L93 : 6388 016 m

## PEYROSOL

Sandy-clay to sandy-clay on high terraces



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## Analytical results

Horizon	Depth (cm)	Particle size (‰)					Course elements (%)	Organic matter (OM)		
		Clay	Fine silt	Course silt	Fine sand	Course sand		OM (‰)	N (‰)	C/N
ACa	0 - 40	91	65	75	98	648	65	22.2	1.06	12.2
SCa	40 - 190	219	63	64	252	400	80	-	-	-
								-	-	-

Depth (cm)	pH soil water	P <sub>2</sub> O <sub>5</sub> g/kg	Limestone total (‰)	CPI*	Exchangeable cations (Cmol/kg)					CEC sat. (%)
					Ca	Mg	K	Na	CEC	
0 - 40	5.5	0.20	-	-	1.93	0.23	0.18	-	4.8	49%
40 - 190	4.6	0.02	-	-	1.18	0.20	0.10	-	4.5	33%

\* CPI = Chlorosis Power Index

Vines about 20 years old.

Very gravelly soil with sandy matrix, from high sandy-clay terraces, not sensitive to settling,

Acidic soil with low saturation (pH between 5.5 at the surface and 4.5 at depth),

Water reserve is rather limited for such thick but very compact and stony soil at depth,

Organic matter content correct, but should be monitored as mineralization rates can be high in such hot soils.



## MORPHOLOGICAL DESCRIPTION

**0 – 40 cm : AXc.** Clean brown sand (7.5YR4/4); unclear to particulate sub-angular polyhedral structure; cool, porous, and fairly loose, no effervescence; shallow rooting with fine to medium roots of all sizes and orientation; high quartz pebble content (60-70%); transition reworked by tillage.

**40 - 190 cm : Xc.** Light gray to white mottled clayey sand with ochre brown streaks (10YR4/6); massive structure locally concreted; not very porous and compact, fresh; no effervescence; presence of many muscovite-type micas; fairly dense rooting with fine and medium live and necrotic roots mainly horizontal and oblique; very many coarse elements (more than 75% of pebbles) surrounded by clay.

## AGRONOMIC COMMENTS

Deep gravelly soil, with a tendency towards sand on the surface and more clayey at depth, not sensitive to compaction at depth (around 1 m) on very old and very compact alluvium, more or less penetrable by the roots.

The porosity is limited, which means weak root penetration.

Soil with a very favorable viticultural potential for white and red wines (soil water holding capacity close to 120 to 150 mm), but beware of possible strong summer water deficits in the context of climate change, and of rather low mineral contents, which have yet to be monitored.

