Soil map of Sauternes

Barsac - Bommes - Fargues - Preignac - Sauternes

JP.Party - Q.Vauthier - P.Chéry - 16/11/2012

PROFILE 23

PREIGNAC ; Site name: "Malle"

X L93 : 438 077 m – Y L93 : 6390 678 m

PEYROSOL *dystrique*

sandy gravel from middle terraces

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
LA	0 - 15	54	59	13	151	724	12	11.7	0.64	10.6
S	15 - 30	56	38	50	157	698	-	2.4	0.36	3.9
CD	30 - 150	22	8	1	95	874	-	0.5	0.35	0.8

Depth (cm)	Soil water pH	pH KCl	Limestone total (‰)	P_2O_5 (‰)	Exchangeable cations (Cmol/kg)					CEC sat. (%)
					Ca	Mg	K	Na	CEC	
0 - 15	6.7	6.0	0	0.338	2.50	0.42	0.22	<0.03	4.0	78%
15 - 30	6.7	5.6	0	0.244	0.96	0.26	0.17	<0.03	1.9	73%
30 - 150	6.5	5.5	0	0.410	<0.36	0.13	0.11	<0.03	1.4	17%

Vines: Sémillon / 420 A

Soil very sandy on surface, low in humus, not sensitive to compaction,

Neutral soil (pH 6.5), quasi-saturated at the surface (S/T of 50 to 80%); desaturated at depth,

High P_2O_5 and K_2O levels throughout the soil profile,

MgO content: correct at the surface, a little low at depth,

MORPHOLOGICAL DESCRIPTION

0 - 15 cm : LA. Sand, brown (10YR32); particulate to subangular polyhedral structure (10 mm) very clear; loose, friable, very porous, fresh; numerous roots, vertical and oblique; some quartz pebbles; undulating transition (5 cm).

15 - 30 cm : S. Sand, beige (10YR44); very clear particle structure; loosely compact, friable, very porous, fresh; roots, vertical and oblique, few to many; few quartz pebbles (5-10%); undulating transition (5 cm).

30 - 150 cm : CD. Sand, orange-beige (10YR58); very clear particle structure; compact, friable, very porous, fresh; few roots, vertical and oblique; very many quartz pebbles (60-80%).

AGRONOMIC COMMENTS

Very light, shallow soil, with pebbles (10%), not sensitive to compaction and capping, very filtered, resting from 30 cm on a sandy gravel (60-80% pebbles).

The porosity is high on the whole soil profile; the deep CD horizons do not show any trace of hydromorphy, but are rather unfavorable to root exploration because of the high rate of sand (85 to 95 %)

Soil with a very favorable viticultural potential (soil water holding capacity, however very limiting, around 20-40 mm); beware of maturity blockages in dry summers; organic matter rate to be increased.