

Soil map of Sauternes

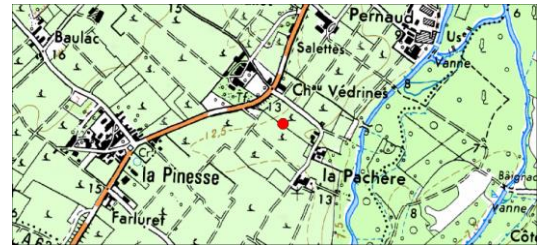
Barsac - Bommès - Fargues - Preignac - Sauternes

Q.Vauthier - JP.Party - N.Muller - 14/11/2012

PROFILE 8

BARSAC ; Location name: "Villefranche"
X : L93 : 436 382 m – Y : L93 : 6392 810 m

CALCISOL
sand on *Astéries* limestone



© SCAN25-IGN-2012

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
A	0 - 15	62	37	22	105	775	39	14.4	0.66	12.7
S	15 - 80	81	28	30	111	750	-	2.9	0.33	5.1
SCci	80 - 120	332	27	23	108	510	-	6.2	0.82	4.4
Cca	120 - 180	147	187	64	171	430	-	1.9	0.41	2.7

Depth (cm)	Soil water pH	pH KCl	Limestone total (‰)	P ₂ O ₅ (‰)	Exchangeable cations (Cmol/kg)					CEC sat. (%)
					Ca	Mg	K	Na	CEC	
0 - 15	6.8	6.2	0	0.165	3.86	0.39	0.39	0.04	3.5	100
15 - 80	7.0	6.1	0	0.161	1.89	0.18	0.23	0.05	1.9	100
80 - 120	7.1	5.3	0	0.025	13.71	0.62	0.44	0.06	11.4	100
120 - 180	9.1	8.5	750	0.068	37.84	0.37	0.15	0.05	3.4	100

Vines

Sandy soil, not sensitive to compaction,

Correct calcium status (pH around 7.0),

P₂O₅ and K₂O contents quite high at the surface, and down to 80-100 cm depth,

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

Correct organic matter content, to be maintained.

MORPHOLOGIC DESCRIPTION



0 - 15 cm : A. Sand, brownish beige (10YR43); very clear particle structure; loose, very friable, porous, fresh; few roots, vertical; a few quartz pebbles (2%); regular transition (3 cm).

15 - 80 cm : S. Sand, orange-beige (10YR46); very clear particle structure; loose, very friable, porous, fresh; few roots, vertical; some quartz pebbles (2%); smooth transition (5 cm).

80 - 120 cm : SCci. Clayey to sandy clay, orange-beige (10YR46); continuous structure; not very compact, not very friable, moderately porous, fresh; very few roots, vertical; many limestones (30%); wavy transition (4 cm).

120 - 180 cm : Cca. Silty clay sand, yellowish white (10YR82); strongly calcareous; continuous structure; compact, brittle and hard, moderately porous, dry; no roots; few calcareous pebbles (20%).

AGRONOMIC COMMENTS

Light soil, fairly deep, with sandy clay and calcareous stones at 80-100 cm depth, not sensitive to compaction, resting at depth (around 120-140 cm) on more or less altered asteriated limestone.

The porosity remains significant even at depth; the whole soil presents a structure favorable to root exploration.

Soil with a favorable viticultural potential (soil water holding capacity close to 100-120 mm) typical of the Barsac appellation, *a priori* without risk of chlorosis (CPI < 5 beyond 120 cm), except very locally; organic matter rate to be maintained.

