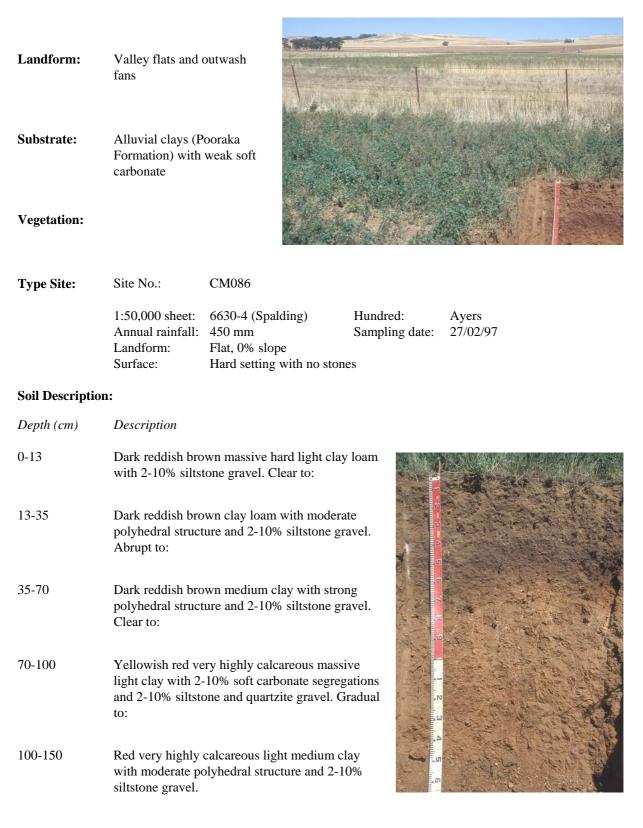
HARD CLAY LOAM OVER SODIC RED CLAY

General Description:

Thick reddish brown massive clay loam overlying a dark reddish brown strongly structured clay, calcareous with depth



Classification: Calcic, Subnatric, Red Sodosol; thick, slightly gravelly, clay loamy / clayey, deep

Summary of Properties

Drainage	Moderately well drained. Water will "perch" on top of the subsoil clay for period a week or so following prolonged rainfall.					
Fertility	Natural fertility is high. Test results indicate no nutrient deficiencies. Organic carbon levels are satisfactory.					
рН	Slightly alkaline at the surface (possibly caused by road dust), alkaline with depth.					
Rooting depth	150 cm in pit.					
Barriers to root growth						
Physical:	None, apart from moderate soil strength.					
Chemical:	None apparent, although manganese may become toxic if soil acidity increases.					
Water holding capacity	More than 150 mm in rootzone.					
Seedling emergence:	Fair, due to hard setting surface. Gypsum response is likely.					
Workability:	Fair. Surface structure is easily destroyed by compaction or working too wet or too dry.					
Erosion Potential						
Water:	Low.					

Wind: Low.

Laboratory Data

Depth cm	pH H2O	pH CaC1 ₂	CO3 %	EC1:5 dS/m	ECe dS/m	%	Avail. P mg/kg	K		Boron mg/kg	Trace Elements mg/kg (EDTA)			CEC cmol (+)/kg	Exc	ESP				
							ing/kg	ing/ Kg			Cu	Fe	Mn	Zn	(1), 16	Ca	Mg	Na	K	
Paddock	7.8	7.0	0	0.20	-	1.9	58	858	13	1.8	3.1	164	301	3.4	16.0	6.8	3.3	0.36	1.82	2.3
0-13	7.3	6.7	0	0.19	-	1.7	35	734	12	1.9	3.3	170	330	2.9	15.0	6.9	3.5	0.38	1.40	2.5
13-35	7.7	6.9	0	0.07	-	0.5	20	448	5.6	1.4	4.7	166	432	1.4	11.8	6.1	2.7	0.75	0.79	6.4
35-70	8.1	7.3	0	0.13	-	0.4	20	514	12	2.9	4.1	112	398	1.9	18.6	6.6	7.7	1.24	1.16	6.7
70-100	8.7	8.2	10.9	0.33	-	0.1	31	464	26	2.6	1.3	5.5	8.8	3.5	12.6	4.6	7.5	0.84	0.94	6.7
100-150	8.7	8.1	3.0	0.48	-	0.1	19	496	39	2.4	1.4	14	34	3.4	12.8	4.3	6.6	1.53	0.96	12.0

Note: Paddock sample bulked from cores (0-10 cm) taken around the pit.

CEC (cation exchange capacity) is a measure of the soil's capacity to store and release major nutrient elements. ESP (exchangeable sodium percentage) is derived by dividing the exchangeable sodium value by the CEC.