

Site code¹ CLRA8



Soil pit atop dissected plateau in the Heytesbury district

Location Timboon (Timboon Curdie Vale Road), Heytesbury district, south-west Victoria

Landform Dissected plateaux

Geology Neogene Port Campbell
Limestone: *marine calcarenite, marl*

Element Mid slope

Slope 3%

Aspect North-west



Haplic, Eutrophic, Brown Kurosol

Horizon	Depth (cm)	Description
A11	0–10	Very dark greyish brown (10YR3/2); very fine sandy clay loam; apedal single grain structure; rough ped fabric; firm consistence (moderately moist); non-calcareous, pH 8; gradual smooth boundary to:
A12	10–17	Dark greyish brown (10YR4/2) with brownish yellow (10YR6/6) mottles due to bioturbation; light medium clay; strong very fine subangular blocky structure; rough ped fabric; weak consistence (moist) and very firm consistence (dry); clear smooth boundary to:
B21	17–55	Yellowish brown (10YR5/4); medium clay; strong very fine polyhedral structure; rough and smooth ped fabric; weak consistence (moderately moist) and strong consistence (dry); non-calcareous, pH 7; clear smooth boundary to:
B22	55–80	Light olive brown (2.5Y5/4) with few brownish yellow (10YR6/6) mottles; medium heavy clay; strong fine and medium lenticular structure; smooth ped fabric; slickenside cutans; weak consistence (moist) and strong consistence (dry); non-calcareous, pH 5.5; clear smooth boundary to:
B23	80–100	Olive brown (2.5Y4/4) with many olive yellow (2.5Y6/6) mottles; medium clay; strong fine and medium lenticular structure; smooth ped fabric; mangans and slickenside cutans; weak consistence (moist) and strong consistence (dry); non-calcareous, pH 6; abrupt smooth boundary to:
C	100+	Very highly calcareous, pH 8.5.

¹ Source: Robinson et al (2003) A land resource assessment of the Corangamite region. Department of Primary Industries, Centre for Land Protection Research Report No. 19

Analytical data²

Site CLRA8 Horizon	Sample depth cm	pH		EC dS/m	NaCl %	Ex Ca cmolc/kg	Ex Mg cmolc/kg	Ex K cmolc/kg	Ex Na cmolc/kg	Ex Al mg/kg	Ex Acidity cmolc/kg	FC -10kPa %	PWP -1500kPa %	KS %	FS %	Z %	C %
		H ₂ O	CaCl ₂														
A11	0–10	6.8	6.3	0.26	N/R	17	4.5	2.6	0.76	N/R	N/R	50.5	26.3	5.9	33.9	25.5	22
B21	25–45	5.1	4.4	0.19	N/R	13	5.7	1.6	0.94	N/R	N/R	49.8	29.8	2.4	18.7	13	62
B22	60–75	5	4.5	0.36	N/R	21	7.6	1.1	1.6	N/R	N/R	58.9	37.1	2.6	13.5	12.5	66.5
B23	85–100	6.4	5.9	0.42	N/R	36	7.1	1.1	2	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R
C	100+	8.3	7.8	0.37	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R

Management considerations

This soil is strongly texture contrast with a shallow surface soil. This is an acidic profile overlying calcareous parent material due mainly to the relatively high rainfall of the area. The subsoil has restricted drainage (colour, mottling) due to the high clay content of the subsoil and despite the limestone below. Nutrient levels are high particularly in the lower subsoil and the surface nutrient status has been altered by management to improve nutrient availability by increasing the pH. The shallow surface soil has limited depth for root penetration but high organic matter (10% OM) without which it would set hard (poor structure). The soils is quite stable, slightly less in the surface [Emerson 3(1)] compared with the subsoil[Emerson 5].

² Source: Government of Victoria State Chemistry Laboratory.