

Site code¹	MM331
Location	Elingamite (Scotts Creek Road), Cobden district, south-west Victoria
Landform	Gently undulating plain
Geology	Neogene Port Campbell Limestone: <i>marine calcarenite, minor calcilutite</i>
Element	Ridge crest

Profile morphology

Horizon	Depth (cm)	Description
A1	80–20	Very dark grey (10YR3/1); fine sandy clay loam; apedal massive structure; weak consistence (moderately moist); sharp boundary to:
A2G	20–50	Sporadically bleached, very pale brown (10YR7/3 dry); fine sandy clay loam; sharp boundary to:
B21	50–70	Dark yellowish brown (10YR4/4) with red (2.5YR4/6) mottles; medium clay; moderate fine blocky structure; gradual boundary to:
B22	70+	Yellowish brown (10YR5/6) with red (2.5YR4/6) mottles; medium clay; moderate fine blocky structure.

ASC: Mottled, Eutrophic, Brown Chromosol

Analytical data²

Site MM331	Sample depth	pH		EC	NaCl	Ex Ca	Ex Mg	Ex K	Ex Na	Ex Al	Ex acidity
		H ₂ O	CaCl ₂	dS/m	%	cmol _c /kg	cmol _c /kg	cmol _c /kg	cmol _c /kg	mg/kg	cmol _c /kg
Horizon	cm										
A1	80–20	5.1	N/R	0.2	0.02	N/R	N/R	N/R	N/R	N/R	N/R
A2G	20–50	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R
B21	50–70	5.8	N/R	0.04	N/R	4.9	6.5	0.24	0.48	N/R	9.2
B22	70+	5.9	N/R	0.05	N/R	N/R	N/R	N/R	N/R	N/R	N/R

Site MM331	Sample depth	FC	PWP	KS	FS	Z	C	Org C	Bulk density
Horizon	cm	(-10kPa) %	(-1500kPa) %	%	%	%	%	%	t m ⁻³
A1	80–20	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R
A2G	20–50	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R
B21	50–70	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R
B22	70+	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R

Management considerations

This soil site exhibits a strong texture contrast between the surface soil and the subsoil. Hardsetting surface and subsurface soils (A1 and A2) and acidic subsoils with medium to heavy textures that may be sodic are other key features of this soil type. Improvement of soil structure through increased organic matter would be useful, and addition of gypsum where sodic would be beneficial. Where the acidity is deep, acid tolerant plants are a practical option, while the application of lime will increase the pH.

¹ Source: Maher JM, Martin JJ (1987) Soils and landforms of south-western Victoria. Department of Agriculture and Rural Affairs. Research Report No. 40.

² Source: Government of Victoria, State Chemistry Laboratory.