

Site code¹	MM229
Location	Lake Colongulac (Chocolyn Maloneys Road), Camperdown district, south-west Victoria
Landform	Lunette
Geology	Quaternary aeolian lunette deposits: <i>sand, silt, clay</i>
Element	Crest

Profile morphology

Horizon	Depth (cm)	Description
A1	0–50	Black (10YR2/1); clay loam; strong very fine blocky structure; firm consistence (dry); clear boundary to:
B21	50–70	Black (10YR2/1); medium clay; strong fine blocky structure; weak consistence (moderately moist); clear boundary to:
B22	70–110	Very dark greyish brown (10YR3/2); medium clay; strong fine blocky structure; weak consistence (moderately moist); gradual boundary to:
B23	110+	Light yellowish brown (2.5Y6/4); medium clay; very firm consistence (moderately moist); common calcareous soft segregations.

ASC: Haplic, Calcic, Black Chromosol

Analytical data²

Site MM229 Horizon	Sample depth cm	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
A1	0–50	6.3	N/R	0.06	N/R	12.4	12.4	0.6	0.5	N/R	16
B21	50–70	6.8	N/R	0.07	N/R	12.6	12.6	1.2	1.1	N/R	11.8
B22	70–110	7.7	N/R	0.07	N/R	N/R	N/R	N/R	N/R	N/R	7.8
B23	110+	8.7	N/R	0.2	0.02	12.2	12.2	1.6	1.6	N/R	N/R

Site MM229 Horizon	Sample depth cm	FC (-10kPa) %	PWP (-1500kPa) %	KS %	FS %	Z %	C %	Org C %	Bulk density t m ⁻³
A1	0–50	34.1	26.6	0	46	11	35	5.2	1.01
B21	50–70	46.9	36.1	0	29	7	61	N/R	1.09
B22	70–110	52.6	38.7	0	27	4	67	N/R	N/R
B23	110+	N/R	N/R	0	22	4	49	N/R	N/R

Management considerations

Strong texture contrast between the surface soil and the subsoil is a very important soil feature and can have a major effect on the soil profile permeability. Significant organic matter and fine cracking soils in the topsoil lead to friable surface soils (and subsoils). Alkaline subsoils are associated with a high nutrient capacity but may result in an imbalance in nutrient availability. Calcium carbonate nodules (segregations, soft and hard) are associated with alkaline soils.

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.