Site code¹ MM5155

Location Steiglitz (Butchers Road), Anakie district, south-west Victoria

Landform Undulating rises

Geology Neogene Werribee Formation: fluvial sand, sandy and silty clay, carbonaceous,

pyritic in part

Element Mid slope

Profile morphology

Horizon	Depth (cm)	Description					
A1	0–15	Very dark grey (10YR3/1); loamy sand; clear boundary to:					
A2	15–50	Pale brown (10YR6/3), sporadically bleached, very pale brown (10YR7/3 dry); sand; sharp boundary to:					
A3	50-70	Brownish yellow (10YR6/6); sandy loam; many fine segregations; boundary to:					
B2	70+	Yellowish brown (10YR5/8) with red (2.5YR4/6) mottles; medium clayey sand; strong platy structure; firm consistence (moderately moist).					

ASC: Ferric, Mottled-Subnatric, Brown Sodosol (deep sandy topsoil)

Analytical data²

Site MM5155	Sample depth	рН		EC	NaCl	Ex Ca	Ex Mg	Ex K	Ex Na	Ex Al	Ex acidity
Horizon	cm	H ₂ O	CaCl ₂	dS/m	%	cmolc/kg	cmolc/kg	cmolc/kg	cmolc/kg	mg/kg	cmol _c /kg
A1	0–15	5.6	N/R	0.02	N/R	0.9	0.9	0.1	0.1	N/R	7.3
A2	15–50	5.6	N/R	N/R	N/R	0.1	0.1	0	0.1	N/R	2.7
A3	50-70	6.2	N/R	N/R	N/R	0	0	0	0.3	N/R	4.2
B2	70+	6	N/R	0.05	N/R	0.1	0.1	0.1	0.6	N/R	8.6

Site	Sample	FC	PWP	KS	FS	Z	С	Org C	Bulk
MM5155	depth	(-10kPa)	(-1500kPa)						density
Horizon	cm	%	%	%	%	%	%	%	t m-3
A1	0–15	9.7	5.3	46	42	6	2	2.2	1.23
A2	15-50	N/R	N/R	44	43	9	3	0.5	N/R
A3	50-70	27.8	19.8	35	38	12	14	N/R	N/R
B2	70+	N/R	N/R	25	24	14	39	N/R	1.44

Management considerations

Deep sandy topsoil overlies a strong texture contrast between the surface soil and the subsoil. The A horizon exhibits a sporadically bleached soil leading to many fine segregations which are key features of this profile. The subsoil has prominent mottling which is another prominent feature of this soil type.

Increasing organic matter and maintaining vegetative cover is important to help stabilise the sandy topsoil and improve the soil structure. Penetration by deep-rooted crops is also a recommended management practice.

 $^{^1}$ 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.