

Site code¹	MM5012
Location	Teesdale (Stephens Road), Bannockburn district, south-west Victoria
Landform	Gently undulating plains
Geology	Neogene Hanson Plain Sand: <i>fluvial gravel, sand, silt</i>
Element	Mid slope

Profile morphology

Horizon	Depth (cm)	Description
A1	0–15	Very dark greyish brown (10YR3/2); fine sandy loam; apedal massive structure; very weak consistence (dry); clear boundary to:
A2	15–45	Light yellowish brown (10YR6/4), conspicuously bleached, light grey (10YR7/2 dry); sandy loam; weak consistence (moderately moist); very many coarse segregations; boundary to:
B21	45+	Yellowish brown (10YR5/6) with red (2.5YR4/6) mottles medium clay; strong fine blocky structure; firm consistence (moderately moist).

ASC: Ferric, Mottled-Mesonatric, Brown Sodosol

Analytical data²

Site MM5012 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	0–15	5.9	N/R	0.09	N/R	2.1	2.1	0.4	0.2	N/R	8
A2	15–45	6.2	N/R	0.02	N/R	1.1	1.1	0.1	0.1	N/R	2.3
B21	45+	7.1	N/R	0.22	0.03	1.6	1.6	0.6	4.5	N/R	8.2

Site MM5012 Horizon	Sample depth cm	FC (-10kPa) %	PWP (-1500kPa) %	KS %	FS %	Z %	C %	Org C %	Bulk density t m ⁻³
A1	0–15	11.7	7.1	37	46	7	6	2.8	1.25
A2	15–45	N/R	N/R	35	51	8	4	0.8	N/R
B21	45+	42.4	31	7	12	1	80	N/R	1.14

Management considerations

Strong texture contrast between the surface soil and the subsoil is a very important soil feature and can impact upon the permeability aspects of the profile. A conspicuously bleached A2 indicates restricted drainage, poor soil structure (often massive), low organic matter and low nutrient status. The surface soil is sandy and hardsetting, while the subsoil is sodic medium clay with mottles. Increasing the organic matter of the soil will help to reduce the hardsetting nature, while the application of gypsum should improve soil structure and drainage.

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.