

Site code¹	MM411
Location	Mannibadar (Lismore Pittong Road), Linton district, south-west Victoria
Landform	Alluvial fan
Geology	Devonian Tiac Granodiorite: <i>intrusive biotite granodiorite, coarse grained</i>
Element	Lower slope

Profile morphology

Horizon	Depth (cm)	Description
A1	0–10	Brown (10YR4/3); fine sandy loam; clear boundary to:
A2	10–50	Pale brown (10YR6/3), conspicuously bleached, very pale brown (10YR7/3 dry); fine sandy clay loam; very many fine segregations; sharp boundary to:
B21	50–65	Yellowish brown (10YR5/6) with red (2.5YR4/6) mottles; medium heavy clay; strong medium blocky structure; boundary to:
B22	65+	Yellowish brown (10YR5/6) with red (2.5YR4/6) mottles; medium heavy clay; strong medium blocky structure.

ASC: Ferric, Mottled-subnatric, Brown Sodosol

Analytical data²

Site MM411		pH		EC	NaCl	Ex Ca	Ex Mg	Ex K	Ex Na	Ex Al	Ex acidity
Horizon	Sample depth cm	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	0–10	4.6	N/R	0.08	N/R	N/R	N/R	N/R	N/R	N/R	N/R
A2	10–50	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R
B21	50–65	6.5	N/R	0.07	N/R	2.6	7.3	0.19	1.6	N/R	8.7
B22	65+	6.9	N/R	0.08	N/R	N/R	N/R	N/R	N/R	N/R	N/R

Site MM411	Sample depth cm	FC (-10kPa)	PWP (-1500kPa)	KS	FS	Zi	C	Org C	Bulk density t m ⁻³
Horizon	cm	%	%	%	%	%	%	%	
A1	0–10	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R
A2	10–50	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R
B21	50–65	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R
B22	65+	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R

Management considerations

Strong texture contrast between the surface soil and the subsoil is a very important soil feature and may have an impact upon the permeability. Acidic surface soils and conspicuously bleached A2 horizons are other key topsoil features. Mottled subsoils are common and are an indication of periodic waterlogging. Improved drainage and the application of gypsum to improve structure and permeability may reduce the incidence of waterlogging while increasing organic matter and maintaining vegetative cover is also important.

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.