

Site code¹	MM236
Location	Mannibadar (Lismore Pittong Road), Linton district, south-west Victoria
Landform	Undulating low hills
Geology	Devonian Tiac Granodiorite: <i>intrusive biotite granodiorite, coarse grained</i>
Element	Upper slope

Profile morphology

Horizon	Depth (cm)	Description
A11	20–25	Very dark greyish brown (10YR3/2); loamy sand; very weak consistence (dry); clear boundary to:
A12	25–65	Brown (7.5YR4/4), light brown (7.5YR6/4 dry); loamy sand; clear boundary to:
A13	65–115	Brown (10YR4/3); loamy sand; clear boundary to:
B21	115–135	Dark greyish brown (10YR4/2) with red (5YR4/6) mottles; light sandy clay loam; apedal massive structure; clear boundary to:
B22	135+	Olive brown (2.5Y4/4); light sandy clay loam.

ASC: Melanic, Mottled-subnatric, Grey Sodosol (deep surface, subsurface soil)

Analytical data²

Site MM236 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
A11	20–25	5.5	N/R	0.13	N/R	2.2	2.2	0.9	0.4	N/R	7.6
A12	25–65	6.3	N/R	0.03	N/R	1.6	1.6	0.3	0.3	N/R	2.3
A13	65–115	6.3	N/R	0.08	N/R	2.2	2.2	0.3	0.4	N/R	2.6
B21	115–135	6.5	N/R	0.1	N/R	2.8	2.8	0.3	0.8	N/R	3.9
B22	135+	6.1	N/R	0.08	N/R	3.2	3.2	0.3	1.3	N/R	4

Site MM236 Horizon	Sample depth cm	FC (-10kPa) %	PWP (-1500kPa) %	KS %	FS %	Z %	C %	Org C %	Bulk density t m ⁻³
A11	20–25	15.6	7.8	47	27	11	10	2.8	1.28
A12	25–65	11	3.5	52	30	12	6	N/R	N/R
A13	65–115	10.7	4.4	57	27	9	8	N/R	N/R
B21	115–135	N/R	N/R	59	16	8	16	N/R	N/R
B22	135+	N/R	N/R	53	22	8	18	N/R	N/R

Management considerations

Deep sandy soils generally have poor plant water holding capacity and poor nutrient holding capacity. The low level of bonding between soil particles makes this soil prone to wind, sheet and rill erosion. Mottled subsoils are common and are an indication of periodic waterlogging. Improved drainage is required to reduce waterlogging while erosion of the topsoil may be modified by the amount of organic matter in the profile as increased organic matter bonds soil particles together.

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.