

Site code¹	MM5143
Location	Springbank (Ormond Road), Gordon district, central Victorian Highlands
Landform	Gently undulating basalt rises
Geology	Quaternary Newer Volcanics: <i>extrusive tholeiitic to alkaline basalts, minor scoria and ash</i>
Element	Mid slope

Profile morphology

Horizon	Depth (cm)	Description
A1	0–30	Dark reddish brown (5YR3/2); clay loam; moderate coarse granular structure; firm consistence (dry); common fine segregations; boundary to:
B21	30+	Dark red (2.5YR3/6); medium clay; moderate fine blocky structure; smooth ped fabric; weak consistence (moderately moist); many fine segregations.

ASC: Melacic, Mesotrophic, Red Chromosol

Analytical data²

Site	Sample	pH		EC	NaCl	Ex Ca	Ex Mg	Ex K	Ex Na	Ex Al	Ex
MM5143	depth	H ₂ O	CaCl ₂	dS/m	%	cmol _c /kg	cmol _c /kg	cmol _c /kg	cmol _c /kg	mg/kg	acidity
Horizon	cm										cmol _c /kg
A1	0–30	5.4	N/R	0.04	N/R	0.6	0.6	0.2	0.1	N/R	23
B21	30+	5.9	N/R	0.05	N/R	2.1	2.1	0.1	0.1	N/R	12.6

Site	Sample	FC	PWP	KS	FS	Z	C	Org C	Bulk
MM5143	Depth	(-10kPa)	(-1500kPa)						density
Horizon	Cm	%	%	%	%	%	%	%	t m ⁻³
A1	0–30	28.7	19.4	29	21	19	27	3.5	1.3
B21	30+	25.5	18.7	40	13	14	32	N/R	1.44

Management considerations

Acidic surface soils (topsoil) are often associated with sandy surfaces due to the lack of base minerals and may or may not have organic matter (humose or peaty surfaces). Their acidic nature restricts the uptake of certain nutrients as well as intolerance for some plant species (due in part to the increasing mobilisation of aluminium and manganese). The application of lime is the main method of increasing the pH, reducing toxic levels of nutrients to plants while increasing the availability of nutrients such as calcium, potassium and molybdenum.

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.