Site Code 1 SFS21



Location East of Lake Weering (Barpinba-Poorneet Road)

Landform Lunette

Geology Quaternary aeolian deposits:

sand, clay, calcareous sand

Element Crest

Slope 3%

Aspect West

View north west across paleo swamp (source material for lunette)

Horizon	Depth (cm)	Description
A11	0–10	Black (10YR2/1); heavy clay loam to light clay; fine crumb structure (self-mulching); clear boundary to:
A12	10-30	Black (10YR2/1); light clay; rough peds, fine to medium 5-20 mm polyhedral structure, strong consistence; clear boundary to:
B21	30-60	Very dark grey (7.5YR3/1 moist) to dark brown (10YR3/3 dry); light medium clay; moderate coarse polyhedral to strong fine polyhedral peds; clear boundary to:
B22k	60-130+	Light brownish grey (2.5Y6/2); light medium clay; apedal but very common fine pores and some larger root channels infilled with A and B horizon material; very calcareous.

Management considerations:

The lunette soils in the Victorian Volcanic Plain may have sandy or clay profiles, with clay profiles, as in this case (SFS21), being generally more common. Occurrence is very localised and of limited spatial extent. The soils are well structured and have high fertility. Site drainage is usually good but because the clay content is high and the clays swell, internal drainage is often poor and the soil surface becomes sticky and difficult to manage when wet.



Melanic, Calcic, Black VERTOSOL (or DERMOSOL)

¹ Source: MacEwan R, Imhof M (in press) Soils at Raised Bed Cropping Sites in South West Victoria. DPI

Analytical data²

Site SFS21	Sample depth	pН		EC	NaCl	Ех Са	Ex Mg	Ex K	Ex Na	Ex Al	Ex Acidity	FC -10kPa	PWP -1500kPa	KS	FS	Z	С
Horizon	cm	H ₂ O	CaCl ₂	dS/m	%	cmolc/kg	cmolc/kg	cmolc/kg	cmolc/kg	mg/kg	cmol _c /kg	%	%	%	%	%	%
A11	0-10	6.3	5.9	0.30	0.04	11.0	5.5	2.3	0.3	N/R	N/R	36.3	20.9	12.3	18.5	15.5	45.0
A12	15-25	6.3	5.7	0.09	N/R	12.0	8.0	2.6	0.27	<10	8.7	33.2	20.6	15.8	17.1	12.5	47.5
B21	40-50	7.3	6.8	0.19	N/R	18.0	16.0	2.6	0.41	N/R	N/R	48.6	31.4	5.2	7.7	7.0	72.0
B22k	75-85	8.5	8.0	0.26	N/R	59.0	37.0	4.0	2.0	N/R	N/R	25.2	14.0	3.2	6.5	9.0	42.5

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 $^{^{2}}$ Source: Government of Victoria State Chemistry Laboratory.