

**Site code<sup>1</sup>**    **OTR489**



Red limestone rise west of Torquay

**Location**    Torquay (Torquay football ground)

**Landform**    Rolling rises/low hills

**Geology**    Palaeogene Jan Juc  
Formation/Quaternary  
alluvium

**Element**    Hillslope – upper slope

**Slope**        -

**Aspect**      South-westerly

Ceteric, Pedal, Calcic Calcarosol

Horizon	Depth (cm)	Description
A1	0–10	Reddish brown (5YR4/4); sandy clay loam; weak crumb structure; clear boundary to:
B21	10–30	Yellowish red (5YR4/6); medium clay; strong medium (10 mm) subangular blocky structure; diffuse boundary to:
B22	30–70	Yellowish red (5YR4/6); medium clay; strong medium (10 mm) subangular blocky structure; soft accumulations of calcium carbonate; abrupt boundary to:
C	70+	Weathering limestone and marl.

<sup>1</sup> Source: Pitt AJ (1981) A study of the land in the catchments of the Otway Range and adjacent plains. TC-14. Soil Conservation Authority. Kew, Victoria

## Analytical data<sup>2</sup>

Site OTR489 Horizon	Sample depth cm	pH		EC	NaCl	Ex Ca	Ex Mg	Ex K	Ex Na	Ex Al	Ex Acidity	FC -10kPa	PWP -1500kPa	KS	FS	Z	C	
		H <sub>2</sub> O	CaCl <sub>2</sub>	dS/m	%	cmol <sub>c</sub> /kg	cmol <sub>c</sub> /kg	cmol <sub>c</sub> /kg	cmol <sub>c</sub> /kg	cmol <sub>c</sub> /kg	mg/kg	cmol <sub>c</sub> /kg	%	%	%	%	%	%
A1	0-10	6.5	N/R	0.099	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R
B21	10-20	6.1	N/R	0.064	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R
B22	30-50	6.7	N/R	0.113	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R

## Management considerations

Limestone can provide the calcium so often lacking in Victorian soils but may occur in high concentrations that prove too alkaline for some plants (affecting soil nutrient availability and be restrictive to root movement where close to the surface). The shallow sandy topsoil (generally 10cm or less) has a reduced water holding capacity limiting root growth and high susceptibility to wind erosion. Calcium carbonate nodules (segregations, soft and hard) are derived from the source parent material (limestone).

<sup>2</sup> Source: Government of Victoria State Chemistry Laboratory.