

Site code<sup>1</sup>    OTR499



Remnant vegetation north-east of Anglesea

**Location**    Anglesea  
**Landform**    Hills  
**Geology**    Palaeogene Demons Bluff  
                  Formation  
**Element**    Hillslope - mid slope  
**Slope**        0%  
**Aspect**      -

Bleached-Sodic, Eutrophic, Black Kurosol

Horizon	Depth (cm)	Description
A1	0–10	Black (10YR2/1); loamy fine sand; apedal single grain structure; gradual boundary to:
A2	10–30	Grey (10YR5/1); loamy fine sand; apedal single grain structure; clear wavy boundary to:
B21	30–50	Very dark greyish brown (10YR3/2); sandy clay loam; weak coarse (40 mm) subangular blocky structure; organic stains on ped faces; diffuse boundary to:
B22	50–120	Dark yellowish brown (10YR4/4); sandy clay loam; coarse (40 mm) subangular blocky structure; clay skin cutans; diffuse boundary to:
C	120+	Yellowish brown (10YR5/6); sandy clay; apedal massive structure.

<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 OTR499 Horizon	Sample depth cm	pH		EC dS/m	NaCl %	Ex Ca cmol <sub>c</sub> /kg	Ex Mg cmol <sub>c</sub> /kg	Ex K cmol <sub>c</sub> /kg	Ex Na cmol <sub>c</sub> /kg	Ex Al mg/kg	Ex Acidity cmol <sub>c</sub> /kg	FC -10kPa %	PWP -1500kPa %	KS %	FS %	Z %	C %
		H <sub>2</sub> O	CaCl <sub>2</sub>														
A1	0-10	4.7	N/R	0.052	N/R	2.5	0.9	0.1	0.04	N/R	N/R	N/R	N/R	1	83	6	7
A2	10-20	4.6	N/R	0.037	N/R	0.9	0.2	0.07	0.01	N/R	N/R	N/R	N/R	1	84	10	6
A2	20-30	4.9	N/R	0.021	N/R	0.5	0.3	0.03	0.01	N/R	N/R	N/R	N/R	<1	90	3	7
B21	40-50	5.3	N/R	0.060	N/R	1.2	2.5	0.2	0.2	N/R	N/R	N/R	N/R	1	69	5	22
B22	110-120	5.2	N/R	0.258	N/R	0.9	3.3	0.1	0.8	N/R	N/R	N/R	N/R	<1	65	4	29

## Management considerations

The sandy topsoil generally has poor plant water and nutrient holding capacities and due to the low level of bonding between soil particles are particularly prone to wind erosion where land is cleared. Sheet and rill erosion (depending on organic matter content and vegetative cover) may also be an issue. The soils are possibly hydrophobic (in conjunction with organic coatings) when dry, taking time to reabsorb moisture. Sandy topsoils do however drain rapidly and maintenance of a vegetative cover is important. The acidic soils restrict the uptake of certain nutrients as well as intolerance for some plant species (due in part to the increasing mobilisation of aluminium and manganese). Sodic subsoils usually have poor structure (generally as coarse domed columns). The poor structure results in dispersion (and subsequent clogging of pores), restricting water and gas movement through the subsoil. These soils are hardsetting and have limited opportunity for cultivation without further damage to soil structure. Deficiencies of calcium, potassium and molybdenum are likely.

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