

SANDY LOAM OVER RED SODIC CLAY

(Cleve / Deakin soil)

General Description: *Hard sandy loam over a coarsely structured and usually dispersive red clay*

Landform: Undulating low hills.

Substrate: Clayey outwash sediments.

Vegetation:

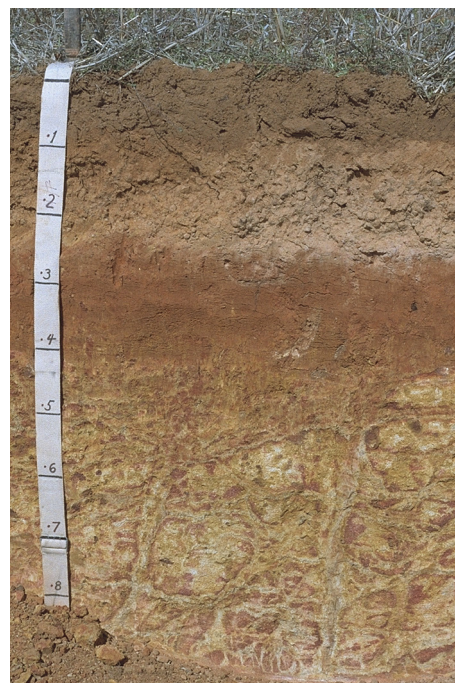


Type Site:	Site No.:	EE045	1:50,000 mapsheet:	6131-2 (Carappee)
	Hundred:	Campoona	Easting:	631660
	Section:	24	Northing:	6293300
	Sampling date:	14/4/1989	Annual rainfall:	410 mm average

Slope of low hill. Firm surface with no stones.

Soil Description:

<i>Depth (cm)</i>	<i>Description</i>
0-10	Dark yellowish brown weakly structured sandy loam. Clear to:
10-20	Yellowish brown massive sandy loam. Abrupt to:
20-40	Yellowish red light medium clay with moderate medium subangular blocky structure. Clear to
40-55	Orange medium clay with strong medium lenticular structure. Gradual to:
55-100	Dark red sandy clay with strong medium lenticular structure.



Classification: Eutrophic, Subnatric, Red Sodosol; medium, non-gravelly, loamy / clayey, moderate



Summary of Properties

- Drainage:** Well drained. Water perches on top of the clayey subsoil for up to a week at a time following heavy or prolonged rainfall.
- Fertility:** Inherent fertility is moderate, as indicated by the exchangeable cation data. Regular phosphorus applications are needed and nitrogen status depends on cropping history and legume content of pastures. Zinc and sulphur deficiencies are likely from time to time.
- pH:** Acidic at the surface, slightly acidic with depth.
- Rooting depth:** Not recorded. Estimate 55 cm in pit.
- Barriers to root growth:**
- Physical:** Dense subsoil clay affects root growth from 40 cm.
 - Chemical:** There are no chemical barriers.
- Waterholding capacity:** Approximately 65 mm in the rootzone.
- Seedling emergence:** Fair to satisfactory, depending on compactness of surface.
- Workability:** Fair to good, depending on condition of surface.
- Erosion Potential:**
- Water:** Moderate.
 - Wind:** Moderately low.

Laboratory Data

Depth cm	pH H ₂ O	pH CaCl ₂	CO ₃ %	EC1:5 dS/m	ECe dS/m	Org.C %	Avail. P mg/kg	Avail. K mg/kg	SO ₄ mg/kg	Boron mg/kg	Trace Elements mg/kg (DTPA)				CEC cmol (+)/kg	Exchangeable Cations cmol(+)/kg				ESP
											Cu	Fe	Mn	Zn		Ca	Mg	Na	K	
0-10	5.7	4.9	0	0.09	0.97	-	-	-	-	1.3	0.28	18	4.58	0.24	6.90	2.80	1.00	0.12	0.29	1.7
10-20	5.7	4.9	0	0.08	0.74	-	-	-	-	1.3	0.25	18	0.42	0.09	5.40	2.40	0.95	0.18	0.20	3.3
20-40	6.1	5.1	0	0.10	0.66	-	-	-	-	4.0	0.16	11	0.12	0.06	14.00	3.50	4.10	0.88	0.59	6.3
40-55	6.2	5.1	0	0.11	0.47	-	-	-	-	5.9	0.12	7.8	0.07	0.04	24.00	4.20	7.30	1.60	0.91	6.7
55-100	6.7	5.5	0	0.09	0.50	-	-	-	-	7.0	0.22	8.3	0.06	0.09	15.00	2.50	4.90	1.40	0.57	9.3

Note: CEC (cation exchange capacity) is a measure of the soil's capacity to store and release major nutrient elements. ESP (exchangeable sodium percentage) is derived by dividing the exchangeable sodium value by the CEC.

Further information: [DEWNR Soil and Land Program](#)

