

SANDY LOAM OVER RED SANDY CLAY

General Description: *Sandy loam over a coarsely structured red sandy clay, calcareous with depth*

Landform: Flats on gently undulating plains or dunefields

Substrate: Tertiary sands.

Vegetation: Mallee

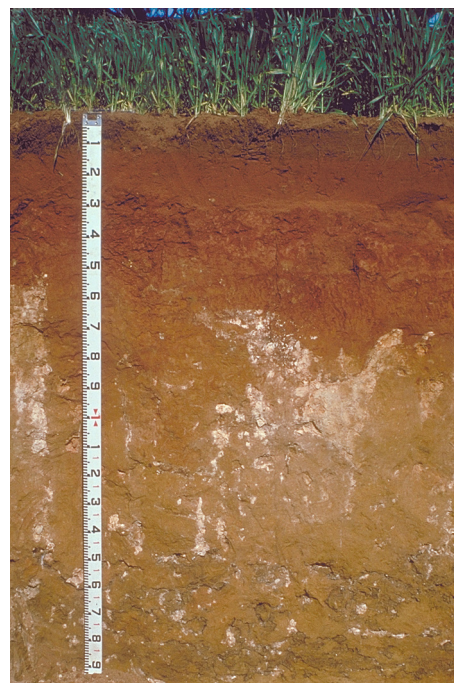


Type Site:	Site No.:	MM006	1:50,000 mapsheet:	6928-3 (Halidon)
	Hundred:	Wilson	Easting:	413200
	Section:	60	Northing:	6131800
	Sampling date:	05/09/1991	Annual rainfall:	315 mm average

Flat on very gently undulating plain. Firm surface, no stone.

Soil Description:

<i>Depth (cm)</i>	<i>Description</i>
0-12	Dark reddish brown soft sandy loam. Abrupt to:
12-27	Red soft sandy loam. Sharp to:
27-36	Red sandy clay with coarse columnar structure and sandy loam between columns. Clear to:
36-62	As above, without the sandy loam. Clear to:
62-88	Yellowish red calcareous sandy loam. Gradual to:
88-115	Orange very highly calcareous loamy sand. Diffuse to:
115-150	Orange moderately calcareous loamy sand. Diffuse to:
150-195	Orange loamy sand with 20-50% ironstone. Diffuse to:
195-	Yellowish brown sandy loam.



Classification: Sodic, Calcic, Red Chromosol; medium, non-gravelly, loamy / clayey, deep



Summary of Properties

- Drainage:** Well drained. Soil rarely remains saturated for more than a few days.
- Fertility:** Inherent fertility is moderate, as indicated by the exchangeable cation data. Improved organic matter status will augment nutrient retention capacity. Phosphorus, copper and zinc are deficient at the sampling site.
- pH:** Slightly acidic at the surface, alkaline with depth.
- Rooting depth:** 50 cm in pit.
- Barriers to root growth:**
- Physical:** Hard sandy substrate material from 60 cm limits root growth.
 - Chemical:** No apparent chemical barriers, other than low nutrient status.
- Waterholding capacity:** Approximately 65 mm.
- Seedling emergence:** Satisfactory.
- Workability:** Firm surface is easily worked.
- Erosion Potential:**
- Water:** Low.
 - Wind:** Low to 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	Boron mg/kg	Trace Elements mg/kg (DTPA)				CEC cmol (+)/kg	Exchangeable Cations cmol(+)/kg				ESP
										Cu	Fe	Mn	Zn		Ca	Mg	Na	K	
Paddock	6.3	6.2	<0.1	0.08	0.50	0.46	11	120	0.38	0.14	8.1	3.2	0.29	3.6	2.40	0.61	0.06	0.19	1.7
0-12	6.4	6.1	<0.1	0.06	0.25	0.70	14	130	0.41	0.15	16	7.1	0.94	4.6	4.26	0.74	0.06	0.20	1.3
12-27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27-36	7.1	6.5	<0.1	0.06	0.31	0.19	2.4	110	0.76	0.11	6.9	0.58	0.30	6.2	7.20	2.20	0.30	0.22	4.8
36-50	6.8	6.8	<0.1	0.06	0.31	0.16	1.6	86	1.3	0.08	13	0.54	0.36	15.9	10.65	3.67	0.34	0.26	2.1
50-62	6.9	6.9	<0.1	0.06	0.32	0.13	1.4	55	1.0	0.08	3.5	0.48	0.14	15.1	10.01	3.91	0.38	0.23	2.5
62-88	8.8	7.3	0.9	0.14	0.46	0.07	1.6	63	0.62	0.10	3.3	0.22	0.37	4.2	6.46	2.66	0.33	0.15	7.9
88-115	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
115-150	9.2	7.6	1.5	0.23	0.73	0.07	1.5	63	0.94	0.11	2.5	0.09	0.29	6.3	4.06	2.29	0.88	0.12	14.0
150-195	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
195+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

- Note:** Paddock sample bulked from cores (0-10 cm) taken around the pit.
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](#)

