HIGHLY CALCAREOUS SANDY LOAM
(Sandy Wookata soil)

General Description: *Very highly calcareous sandy loam over very highly calcareous coarse grained Woorinen Formation deposits*

Landform: Undulating rises.

Substrate: Calcreted calcarenite (Bridgewater Formation).

Vegetation:

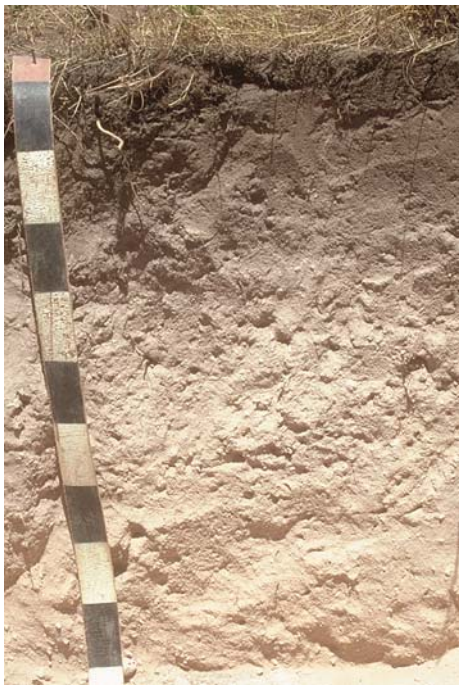
No landscape image available

Type Site: Site No.: EC097

1:50,000 sheet:	5830-1 (Elliston)	Hundred:	Ward
Annual rainfall:	425 mm	Sampling date:	23/11/93
Landform:	Gentle slope of 2%		
Surface:	Soft with minor calcrete stone		

Soil Description:

Depth (cm)	*Description*
0-15	Very dark greyish brown soft very highly calcareous sandy loam with weak fine subangular blocky structure. Diffuse to:
15-30	Brown soft very highly calcareous loamy sand. Diffuse to:
30-90	Light brown soft very highly calcareous loamy sand with 2-10% carbonate concretions. Sharp to:
90-	Calcrete.



Classification: Supravescent, Petrocalcic, Hypercalcic Calcarosol; medium, non-gravelly, loamy / sandy, moderate

Summary of Properties

Drainage Rapidly drained. The soil is never wet for more than a few hours.

Fertility Inherent fertility is low, although high surface organic carbon boosts nutrient retention capacity. Regular phosphorus applications are needed - concentrations at sampling site are adequate. Nitrogen levels depend on legume status of pastures and cropping history. Copper and zinc deficiencies are likely - zinc is marginally deficient.

pH Alkaline throughout.

Rooting depth 90 cm in pit.

Barriers to root growth

Physical: There are no physical barriers until the calcrete - depth to calcrete is critical in determining root zone depth.

Chemical: There are no chemical barriers.

Water holding capacity Approximately 100 mm in root zone.

Seedling emergence: Satisfactory.

Workability: Soft surface is easily worked.

Erosion Potential

Water: Low.

Wind: Moderate.

Laboratory Data

Depth cm	pH H_2O	pH $CaC1_2$	CO_3 %	EC1:5 dS/m	ECe dS/m	Org.C %	Avail. P mg/kg	Avail. K mg/kg	SO_4-S 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	
0-15	8.3	7.6	62	0.18	0.61	2.0	26	650	-	2.7	0.30	4.2	4.9	0.39	15.4	14.72	2.00	0.32	1.50	2.1
15-30	8.4	7.6	73	0.19	0.72	1.0	4.4	290	-	1.7	0.15	3.6	1.3	0.15	9.6	10.07	1.71	0.32	0.71	3.3
30-90	8.9	7.6	78	0.31	2.50	0.46	4.4	150	-	2.2	0.13	2.3	0.53	0.10	5.0	4.23	2.09	0.86	0.44	17.2

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.