## **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:

**Type Site:** Site No.: EC097 1:50,000 mapsheet: 5830-1 (Elliston)

Hundred:WardEasting:487690Section:123Northing:6282420

Sampling date: 23/11/1993 Annual rainfall: 410 mm average

Gentle slope of 2%. Soft surface 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:

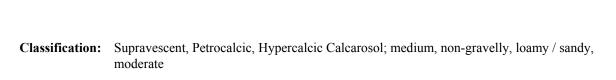
15-30 Brown soft very highly calcareous loamy sand.

Diffuse to:

30-90 Light brown soft very highly calcareous loamy

sand with 2-10% carbonate concretions. Sharp to:

90- Calcrete.







## 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 rootzone depth.

**Chemical:** There are no chemical barriers.

Waterholding capacity: Approximately 100 mm in rootzone.

**Seedling emergence:** Satisfactory.

**Workability:** Soft surface is easily worked.

**Erosion Potential:** 

Water: Low.

Wind: Moderate.

## Laboratory Data

Depth cm	pH H <sub>2</sub> O	pH CaC1 <sub>2</sub>	_	EC1:5 dS/m	ECe dS/m	%	P	P K mg/kg mg/kg (DTPA) ci		0 0				cmol	Excl	ESP				
							mg/kg	mg/kg			Cu	Fe	Mn	Zn	(+)/kg	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.

Further information: DEWNR Soil and Land Program



