RUBBLY CALCAREOUS SANDY LOAM

General Description: *Calcareous sandy loam grading to a very highly calcareous and rubbly clay loam*

Landform: Gently undulating rises.

Substrate: Very highly calcareous medium grained sediments of the Woorinen Formation.

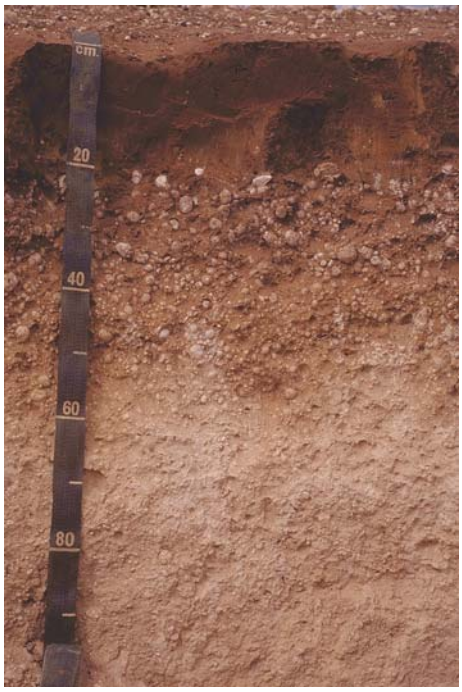
Vegetation: Mallee.

Type Site: Site No.: CL912

1:50,000 sheet:	6629-3 (Hamley Bridge)	Hundred:	Grace
Annual rainfall:	375 mm	Sampling date:	08/03/91
Landform:	Low rise on gently undulating plain, 2% slope		
Surface:	Soft with 2-10% calcrete gravel and stones		

Soil Description:

Depth (cm)	*Description*
0-5	Reddish brown soft massive moderately calcareous loamy sand. Clear to:
5-23	Reddish brown soft massive moderately calcareous sandy loam. Clear to:
23-55	Yellowish red firm massive very highly calcareous loam with 20-50% carbonate nodules (2-20 mm). Gradual to:
55-123	Reddish yellow firm massive very highly calcareous loam with 10-20% carbonate nodules and more than 50% fine carbonate segregations.
123-	Reddish yellow massive firm very highly calcareous clay loam.



Classification: Endohypersodic, Regolithic, Supracalcic Calcarosol; medium, slightly gravelly, sandy / clay loamy, deep

Summary of Properties

Drainage: Rapidly drained. The soil rarely remains wet for more than a few hours at a time.

Fertility: Inherent fertility is moderately low. Low surface clay content restricts nutrient retention capacity, and high carbonate content affects availability of phosphorus, copper, zinc, manganese and iron. Zinc and manganese availability is poor below surface soil.

pH: Slightly alkaline at the surface, strongly alkaline with depth.

Rooting depth: 84 cm in pit.

Barriers to root growth:

Physical: There are no physical barriers.

Chemical: High pH and probably high sodicity limit deep root growth.

Water holding capacity: Approximately 80 mm in the root zone.

Seedling emergence: Satisfactory.

Workability: Medium to coarse textured calcareous soils are easily worked.

Erosion Potential

Water: Low.

Wind: Moderately low.

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	
0-5	7.5	6.8	1	0.18	-	1.21	32	580	-	-	0.5	8.9	19.1	0.5	-	-	-	-	-	-
5-23	8.2	7.4	3	0.14	-	0.55	3	200	-	-	0.7	3.8	2.9	0.0	-	-	-	-	-	-
23-55	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
55-123	9.3	8.3	56	0.25	-	0.22	2	170	-	13	1.1	3.0	0.6	0.1	-	-	-	-	-	-
123-	9.7	8.3	33	0.85	-	0.11	1	420	-	-	0.3	2.3	1.0	0.1	-	-	-	-	-	-