

LOAM OVER CALCAREOUS ROCK

General Description: *Reddish brown loam grading to red clay loam or calcareous clay loam merging with weathering fine grained basement rock within 100 cm*

Landform: Slopes of undulating to rolling rises and low hills.

Substrate: Fine grained basement rock (usually siltstone). Mintaro Shale Formation at this site.

Vegetation:



Type Site: Site No.: CM906

1:50,000 sheet:	6630-3 (Clare)	Hundred:	Upper Wakefield
Annual rainfall:	625 mm	Sampling date:	March 1990
Landform:	Upper slope of undulating rise, 7% slope		
Surface:	Firm with less than 2% calcrete and siltstone fragments		

Soil Description:

Depth (cm)	Description
0-15	Dark reddish brown firm loam with moderate granular structure. Clear to:
15-35	Dark reddish brown firm moderately calcareous loam with weak medium polyhedral structure. Abrupt to:
35-100	Weathering siltstone with 20-50% fine carbonate segregations.



Classification: Epibasic, Paralithic, Hypercalcic Calcarosol; thick, non-gravelly, loamy / loamy, moderate

Summary of Properties

Drainage: Rapidly drained. Soil rarely remains wet for more than a couple of hours following heavy or prolonged rainfall.

Fertility: Inherent fertility is moderately high, due to moderate clay content, high calcium saturation and high organic carbon levels.

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

Rooting depth: 35 cm in pit.

Barriers to root growth:

Physical: Underlying basement rock provides the only physical barrier, although it is usually soft and fractured in upper 50 cm or so, allowing root growth.

Chemical: There are no apparent chemical barriers, other than low nutrient availability in highly calcareous lower layers.

Water holding capacity: Approximately 60 mm in the root zone.

Seedling emergence: Satisfactory.

Workability: Firm loamy surface is easily worked.

Erosion Potential

Water: Moderately low.

Wind: Low.

Laboratory Data

Depth cm	pH H ₂ O	pH CaCl ₂	CO ₃ %	EC 1:5 dS/m	ECe dS/m	Org.C %	Avail. P mg/kg	Boron mg/kg
0-15	7.9	7.2	0	0.15	-	1.91	40	1.4
15-35	8.2	7.5	6	0.13	-	0.98	4	1.0
35-100	8.7	8.0	23	0.17	-	0.40	6	0.5