SANDY LOAM OVER RED CLAY ON ROCK

General Description: Sandy loam to sandy clay loam over a well structured red clay

forming in weathering schistose basement rock within a metre

Landform: Undulating rises.

Substrate: Schists of the Mangalo /

Cooke Gap Formations.

Vegetation:



Type Site: Site No.: EE201

1:50,000 sheet: 6130-1 (Rudall) Hundred: Yadnarie Annual rainfall: 410 mm Sampling date: 17/09/01

Landform: Upper slope of undulating rise, 4% slope

Surface: Soft with no stones

Soil Description:

Depth (cm) Description

0-10 Dark reddish brown massive firm sandy loam.

Clear to:

10-25 Red massive firm light sandy clay loam. Abrupt

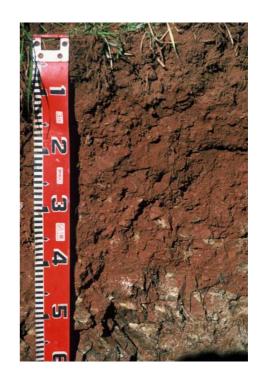
to:

25-50 Red firm medium clay with moderate medium

subangular blocky structure and 10-20% schist

fragments to 20 mm. Gradual to:

50-80 Weathering schist.



Classification: Haplic, Eutrophic, Red Chromosol; medium, non-gravelly, loamy / clayey, moderate

Summary of Properties

Drainage: Well drained. The soil is unlikely to remain wet for more than a day or so following

heavy or prolonged rainfall.

Fertility: Inherent fertility is moderately high, as indicated by the exchangeable cation data.

Phosphorus and potassium levels are high, soil measured trace elements are adequate.

Organic carbon / nitrogen reserves are satisfactory, although not high.

pH: Slightly acidic at the surface, neutral with depth

Rooting depth: 70 cm in pit.

Barriers to root growth:

Physical: The only barrier to root growth is the underlying basement rock. Hardness varies

substantially over short distances.

Chemical: There are no apparent chemical barriers.

Water holding capacity: Approximately 75 mm in the root zone.

Seedling emergence: Satisfactory, except where surface seals.

Workability: Satisfactory provided that surface condition is maintained.

Erosion Potential

Water: Moderate due to the slope and high erodibility of the surface soil.

Wind: Low.

Laboratory Data

Depth cm	pH H ₂ 0	pH CaC1 ₂	CO ₃	EC 1:5 dS/m	• • •	NO ₃ mg/kg		Avail. K		Boron mg/kg				Sum of cations				ESP		
							mg/kg	mg/kg			Cu	Fe	Zn	Mn	cmol (+)/kg	Ca	Mg	Na	K	
0-10	6.3	5.7		0.05	1.13	8	64	331	2.7	0.7	0.91	19.4	7.46	31.5	6.1	4.08	1.11	0.11	0.80	1.8
10-25	6.7	6.2		0.03	0.41	2	27	176	2.9	0.9	0.56	8.7	0.50	20.0	7.8	5.10	2.05	0.19	0.44	2.4
25-50	7.0	6.3		0.06	0.54	2	7	93	9.7	1.7	0.68	4.7	0.41	9.76	18.8	8.38	9.51	0.67	0.27	3.6
50-80	7.4	6.7		0.10	0.28	2	3	149	14.6	1.2	0.30	5.1	0.26	6.25	22.6	8.53	12.4	1.27	0.37	5.6

Note: Sum of cations in neutral to alkaline soils is an approximation of cation exchange capacity (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 sum of cations.