Project Name: Soil Studies in the Lower Namoi Valley

Project Code: EDGEROI Site ID: ed161 Observation ID: 1

Agency Name: CSIRO Division of Soils (QLD)

Site Information

Desc. By: E. Veldhuis Locality: Peter Leitch, Myall Vale

Date Desc.: Elevation: 29/03/85 199 metres Map Ref.: Sheet No.: 8837 N 1:50000 Rainfall: No Data Northing/Long.: 6656400 AMG zone: 55 Runoff: No Data 748300 Datum: AGD66 Easting/Lat.: Drainage: No Data

Geology

ExposureType: Undisturbed soil core Conf. Sub. is Parent. Mat.: No Data Geol. Ref.: No Data Substrate Material: No Data

Land Form

 Rel/Slope Class:
 No Data
 Pattern Type:
 No Data

 Morph. Type:
 No Data
 Relief:
 No Data

 Elem. Type:
 Terrace flat
 Slope Category:
 Level

 Slope:
 0 %
 Aspect:
 No Data

Surface Soil Condition (dry): Surface crust, Recently cultivated

Erosion:

Soil Classification

 Australian Soil Classification:
 Mapping Unit:
 N/A

 N/A
 Principal Profile Form:
 Ug5.15

 ASC Confidence:
 Great Soil Group:
 Brown clay

Confidence level not specified

Site Disturbance: Cultivation. Rainfed

Vegetation:

Surface Coarse Fragments:

Profile Morphology

A11p 0 - 0.07 m Very dark greyish brown (10YR3/2-Moist); Greyish brown (10YR5/2-Dry); ; Medium clay; Weak grade of structure, <2 mm, Granular; Rough-ped fabric; Moderately moist; Very weak consistence; Field pH 7 (pH meter); Few, very fine (0-1mm) roots; Abrupt, Smooth change to -

A12 0.07 - 0.25 m Very dark greyish brown (10YR3/2-Moist); , 10YR73, 0-2% , 0-5mm, Distinct; Medium heavy

clay; Moderate grade of structure, 20-50 mm, Subangular blocky; Smooth-ped fabric; Fine, (0 - 5) mm crack; Common (1-5 per 100mm2) Very fine (0.075-1mm) macropores, Moderately moist; Firm consistence; Very few (0 - 2 %), Calcareous, Medium (2 -6 mm), Nodules; Field pH 8.5 (pH

meter); Few, very fine (0-1mm) roots;

A13 0.25 - 0.55 m Dark brown (7.5YR3/2-Moist); , 10YR73, 0-2% , 0-5mm, Distinct; Medium clay; Moderate grade

of structure, 10-20 mm, Subangular blocky; Smooth-ped fabric; Fine, (0 - 5) mm crack; Common (1-5 per 100mm2) Very fine (0.075-1mm) macropores, Moderately moist; Weak consistence; Very few (0 - 2 %), Calcareous, Medium (2 -6 mm), Nodules; Field pH 8.3 (pH meter);

A14 0.55 - 0.82 m Very dark greyish brown (10YR3/2-Moist); , 10YR73, 2-10% , 0-5mm, Faint; Medium clay; Weak

grade of structure, 20-50 mm, Subangular blocky; Smooth-ped fabric; Fine, (0 - 5) mm crack; Few (<1 per 100mm2) Very fine (0.075-1mm) macropores, Moderately moist; Firm consistence; Few (2 - 10 %), Calcareous, Medium (2 -6 mm), Nodules; Field pH 8.2 (pH meter); Diffuse,

Smooth change to -

B21 0.82 - 1.7 m Dark brown (7.5YR3/2-Moist); , N30, 2-10% , 5-15mm, Faint; , 10YR74, 0-2% , 0-5mm, Distinct; Light medium clay; Weak grade of structure, 50-100 mm, Subangular blocky; Smooth-ped fabric;

Light medium clay; Weak grade of structure, 50-100 mm, Subangular blocky; Smooth-ped fabric Fine, (0 - 5) mm crack; Few (<1 per 100mm2) Very fine (0.075-1mm) macropores, Moderately moist; Firm consistence; Very few (0 - 2 %), Calcareous, Fine (0 - 2 mm), Nodules; Field pH 8.7

(pH meter); Diffuse, Smooth change to -

B22 1.7 - 3 m Brown (7.5YR4/4-Moist); , 10YR43, 10-20% , 5-15mm, Faint; , 7.5YR68, 2-10% , 0-5mm,

Prominent; Light medium clay; Weak grade of structure, 20-50 mm, Subangular blocky; Moderate grade of structure, 5-10 mm, Lenticular; Smooth-ped fabric; Fine, (0 - 5) mm crack; Few (<1 per 100mm2) Very fine (0.075-1mm) macropores, Moderately moist; Weak consistence; Few (2 - 10 %), Calcareous, Extremely coarse (> 60 mm), Veins; Very few (0 - 2 %), Manganiferous, Fine (0 - 2 mm), Nodules; Very few (0 - 2 %), Ferruginous, Medium (2 -6 mm), Veins; Field pH

8.3 (pH meter);

Morphological Notes

A11p At 250-260cm, CaCO3 veins occupy old slickensides. Weak surface crust of 2cm from

recent rainfall.

Project Name: Project Code: Agency Name:

Soil Studies in the Lower Namoi Valley EDGEROI Site ID: ed161 CSIRO Division of Soils (QLD) Observation ID: 1

Observation Notes

Parent Rock: , , second terraced fan, Namoi

Site Notes

Soil Studies in the Lower Namoi Valley EDGEROI Site ID: ed161 CSIRO Division of Soils (QLD) Observation ID: 1

Project Name: Project Code: Agency Name:

Laboratory Test Results:

Donth	!!		F	l l. l .	0-4:		F			F0F0		-00
Depth	рН	1:5 EC		hangeable Mg	K	Na	Exchangeable Acidity	e CEC	•	ECEC		ESP
m		dS/m	Oa .	wg	IX.	Cmol (%
						,	, -					
0 - 0.02	7.75A	0.112A	21.83B	8.98	2.59	0.01						
0 - 0.07	7.56A	0.175A	22.44B	8.39	2.29	0.23						
0.1 - 0.2	8.26A	0.16A	25.05B	8.07	1.23	0.3						
0.3 - 0.4	8.46A	0.156A	22.52B	10.13	0.62	0.6						
0.7 - 0.8	8.67A	0.197A	17.52B	13.91	0.7	1.73						
1.2 - 1.3	8.76A	0.246A	15.53B	14.3	0.85	2.69						
2.5 - 2.6	8.77A	0.231A	14.86B	11.17	0.64	2.06						
5	0.000			T	T .4.1					0:		
Depth	CaCO3	Organic C	Avail. P	Total P	Total N	Tota K			cS	FS	Analysis	
m	%	%	mg/kg	Р %	N %	%		G۷	CS	гэ %	Silt	Clay
•••	70	70	mg/kg	70	70	/0	Wig/III3			70		
0 - 0.02	0.1B	1.6C									22.3	54.5
0 - 0.07	0.1B	1.68C	20.9J								20.1	
0.1 - 0.2	1.1B	1.02C	3.3J								-	53.5
0.3 - 0.4	3.6B	0.78C	5.3J									52.5
0.7 - 0.8	2.6B	0.71C	14.1J									52.6
1.2 - 1.3	2.9B	0.47C	14.2J								-	53.4
2.5 - 2.6	0.8B	0.21C	48.9J									45.9
2.0 2.0	0.00	0.210	40.00								10.4	40.0
Depth	COLE	0.4			olumetric Water Contents			45.5	K sat		K unsat	
m		Sat.	0.05 Bar		0.5 Bar /g - m3/m	1 Bar 3	5 Bar	15 Bar	mm	/h	mm/h	

^{0 - 0.02} 0 - 0.07 0.1 - 0.2 0.3 - 0.4 0.7 - 0.8 1.2 - 1.3 2.5 - 2.6

Project Name: Soil Studies in the Lower Namoi Valley

Project Code: EDGEROI Site ID: ed161 Observation ID: 1

Agency Name: CSIRO Division of Soils (QLD)

Laboratory Analyses Completed for this profile

15A2_CA Exchangeable bases (Ca2+,Mg2+,Na+,K+) - 1M ammonium chloride at pH 7.0, pretreatment for

soluble salts

15A2_K Exchangeable bases- 1M ammonium chloride at pH 7.0, pretreatment for soluble salts 15A2_MG Exchangeable bases- 1M ammonium chloride at pH 7.0, pretreatment for soluble salts 15A2_NA Exchangeable bases- 1M ammonium chloride at pH 7.0, pretreatment for soluble salts

19B1 Carbonates - manometric 3A1 EC of 1:5 soil/water extract 4A1 pH of 1:5 soil/water suspension

5A2 Chloride - 1:5 soil/water extract, automated colour

6B3 Total organic carbon - high frequency induction furnace, infrared

7B1 Water soluble nitrate - automated colour

9B1 Bicarbonate-extractable phosphorus - manual colour

P10_CF_C Clay (%) - Coventry and Fett pipette method Silt (%) - Coventry and Fett pipette method