Project Name: **Soil Studies in the Lower Namoi Valley**
Project Code: **EDGEROI** **Site ID:** **ed155** **Observation ID:** **1**
Agency Name: **CSIRO Division of Soils (QLD)**

Site Information

Desc. By:	W.T. Ward	**Locality:**	J.Amos/R.Simpson, Woodville
Date Desc.:	28/10/85	**Elevation:**	280 metres
Map Ref.:	Sheet No. : 8837_N 1:50000	**Rainfall:**	No Data
Northing/Long.:	6657900 AMG zone: 55	**Runoff:**	No Data
Easting/Lat.:	779900 Datum: AGD66	**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:	Flood-out	**Slope Category:**	Very gently sloped
Slope:	1 %	**Aspect:**	180 degrees

Surface Soil Condition (dry): Soft

Erosion:

Soil Classification

Australian Soil Classification:
N/A
ASC Confidence:
Confidence level not specified

Mapping Unit: N/A
Principal Profile Form: Db3.13
Great Soil Group: Alluvial soil

Site Disturbance: Cultivation. Rainfed

Vegetation:

Surface Coarse Fragments:

Profile Morphology

A11	0 - 0.07 m	Dark brown (7.5YR3/2-Moist); Very dark greyish brown (10YR3/2-Dry); ; Silty loam; Moderate grade of structure, 2-5 mm, Granular; Earthy fabric; Fine, (0 - 5) mm crack; Few (<1 per 100mm2) Very fine (0.075-1mm) macropores, Moderately moist; Weak consistence; Field pH 8.2 (pH meter); Common, very fine (0-1mm) roots; Abrupt, Wavy change to -
A12	0.07 - 0.27 m	Brown (7.5YR4/4-Moist); , 7.5YR32, 2-10% , 0-5mm, Faint; Loam; Weak grade of structure, 20-50 mm, Subangular blocky; Earthy fabric; Smooth-ped fabric; Fine, (0 - 5) mm crack; Few (<1 per 100mm2) Fine (1-2mm) macropores, Moderately moist; Weak consistence; Field pH 8.5 (pH meter); Common, fine (1-2mm) roots; Abrupt, Smooth change to -
2A1	0.27 - 0.67 m	Dark brown (7.5YR3/2-Moist); , 7.5YR54, 2-10% , 5-15mm, Distinct; Silty clay loam; Moderate grade of structure, 5-10 mm, Subangular blocky; Earthy fabric; Smooth-ped fabric; Fine, (0 - 5) mm crack; Few (<1 per 100mm2) Fine (1-2mm) macropores, Moderately moist; Firm consistence; Field pH 8.5 (pH meter); Common, fine (1-2mm) roots; Clear, Smooth change to -
2B2	0.67 - 1.15 m	Dark brown (10YR3/3-Moist); , 7.5YR54, 10-20% , 5-15mm, Distinct; Light clay; Weak grade of structure, 20-50 mm, Subangular blocky; Moderate grade of structure, 5-10 mm, Cast; Earthy fabric; Fine, (0 - 5) mm crack; Common (1-5 per 100mm2) Fine (1-2mm) macropores, Moderately moist; Weak consistence; Very few (0 - 2 %), Calcareous, Fine (0 - 2 mm), Soft segregations; Field pH 8.8 (pH meter); Common, very fine (0-1mm) roots; Abrupt, Smooth change to -
2C	1.15 - 1.48 m	Dark brown (7.5YR3/2-Moist); , 10YR63, 2-10% , 0-5mm, Prominent; Silty clay loam; Massive grade of structure; Earthy fabric; Fine, (0 - 5) mm crack; Common (1-5 per 0.01m2) Medium (2-5mm) macropores, Moderately moist; Very firm consistence; Field pH 9 (pH meter); Few, very fine (0-1mm) roots; Abrupt, Smooth change to -
3B2	1.48 - 2.65 m	Dark brown (7.5YR3/2-Moist); , 7.5YR44, 2-10% , 0-5mm, Distinct; Silty clay loam; Weak grade of structure, 20-50 mm, Prismatic; Moderate grade of structure, 10-20 mm, Subangular blocky; Earthy fabric; Smooth-ped fabric; Fine, (0 - 5) mm crack; Moderately moist; Strong consistence; Few (2 - 10 %), Calcareous, Coarse (6 - 20 mm), Nodules; Field pH 9 (pH meter);

Morphological Notes

A11 Evident depositional fabric at 25-27cm. The boundary at 27cm is confused by worm mixing. Inwashed sand 75 to 90cm. Pores in 155.05 are worm channels. At 117-122 there is a horizontal band of sand to coarse sand to very fine gravel. Few quar

A12 tz gravels at 165cm and 220-230cm. The buried soils especially no. 3 are well developed and may represent significant depositional events.

Observation Notes

Project Name: **Soil Studies in the Lower Namoi Valley**
Project Code: **EDGEROI** **Site ID:** **ed155** **Observation ID:** **1**
Agency Name: **CSIRO Division of Soils (QLD)**

Parent Rock: alluvial sediment, mixed texture, with lime, floodplain

Site Notes

Rex Simpson, manager. Slope variously S and W. ~40cm layered sand on truncated prior sediment. Flooding stream breaks through to fields. A good re cent alluvial creek section here is badly lit at 3:15pm.

Project Name: Soil Studies in the Lower Namoi Valley
Project Code: EDGEROI **Site ID:** ed155 **Observation ID:** 1
Agency Name: CSIRO Division of Soils (QLD)

Laboratory Test Results:

Depth	pH	1:5 EC	Exchangeable Cations				Exchangeable	CEC	ECEC	ESP
			Ca	Mg	K	Na	Acidity			
m		dS/m	Cmol (+)/kg							%
0 - 0.02	7.23A	0.253A	17.78B	6.21	3.43	0.1				
0 - 0.07	7.87A	0.152A	26.11B	6.35	1.53	0.21				
0.1 - 0.2	7.75A	0.086A	15.98B	4.28	0.32	0.22				
0.3 - 0.4	8.24A	0.119A	20.89B	6.64	0.3	0.14				
0.7 - 0.8	8.34A	0.152A	25.3B	11.25	0.37	0.59				
1.2 - 1.3	8.71A	0.116A	14.75B	7.51	0.36	0.76				
2.5 - 2.6	9.28A	0.293A	10.19B	14.93	0.36	3.15				

Depth	CaCO3	Organic C	Avail. P	Total P	Total N	Total K	Bulk Density	Particle Size Analysis GV	CS	FS	Silt	Clay
m	%	%	mg/kg	%	%	%	Mg/m3			%		
0 - 0.02	<0.1B	4.82C									18	26
0 - 0.07	<0.1B	3.28C	68.1J								18.8	32.5
0.1 - 0.2	<0.1B	1.58C	37.7J								11.2	17.5
0.3 - 0.4	0.2B	1.93C	48.3J								22.4	26.4
0.7 - 0.8	0.5B	2.02C	44.5J								30	32
1.2 - 1.3	1B	0.56C	40.5J								14.6	25.9
2.5 - 2.6	4.5B	0.29C	12.8J								15.2	35.6

Depth	COLE	Gravimetric/Volumetric Water Contents							K sat	K unsat
		Sat.	0.05 Bar	0.1 Bar	0.5 Bar	1 Bar	5 Bar	15 Bar		
m		g/g - m3/m3							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:** **ed155** **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
P10_CF_Z	Silt (%) - Coventry and Fett pipette method