

**Project Name:** Soil Studies in the Lower Namoi Valley  
**Project Code:** EDGEROI **Site ID:** ed218 **Observation ID:** 1  
**Agency Name:** CSIRO Division of Soils (QLD)

#### Site Information

<b>Desc. By:</b>	E. Veldhuis	<b>Locality:</b>	Department of Agriculture, Myall Vale Research Station
<b>Date Desc.:</b>	19/03/85	<b>Elevation:</b>	200 metres
<b>Map Ref.:</b>	Sheet No. : 8837_N 1:50000	<b>Rainfall:</b>	No Data
<b>Northing/Long.:</b>	6655130 AMG zone: 55	<b>Runoff:</b>	No Data
<b>Easting/Lat.:</b>	749910 Datum: AGD66	<b>Drainage:</b>	No Data

#### Geology

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

#### Land Form

<b>Rel/Slope Class:</b>	No Data	<b>Pattern Type:</b>	No Data
<b>Morph. Type:</b>	No Data	<b>Relief:</b>	No Data
<b>Elem. Type:</b>	Terrace flat	<b>Slope Category:</b>	Level
<b>Slope:</b>	0 %	<b>Aspect:</b>	No Data

**Surface Soil Condition (dry):** Self-mulching, Recently cultivated

#### Erosion:

#### Soil Classification

<b>Australian Soil Classification:</b>	N/A	<b>Mapping Unit:</b>	N/A
<b>ASC Confidence:</b>	Confidence level not specified	<b>Principal Profile Form:</b>	Ug5.15
		<b>Great Soil Group:</b>	Grey clay

#### Site Disturbance:

#### Vegetation:

#### Surface Coarse Fragments:

#### Profile Morphology

A11p	0 - 0.15 m	Very dark greyish brown (10YR3/2-Moist); Very dark greyish brown (10YR3/2-Dry); , 10YR82, 0-2% , 0-5mm, Faint; Medium heavy clay; Moderate grade of structure, 50-100 mm, Subangular blocky; Earthy fabric; Fine, (0 - 5) mm crack; Few (<1 per 100mm <sup>2</sup> ) Very fine (0.075-1mm) macropores, Moderately moist; Very strong consistence; Very few (0 - 2 %), Calcareous, Fine (0 - 2 mm), Nodules; Field pH 8.5 (pH meter); Clear, Wavy change to -
A12	0.15 - 0.25 m	Very dark greyish brown (10YR3/2-Moist); Very dark greyish brown (10YR3/2-Dry); , 10YR82, 0-2% , 0-5mm, Faint; Medium clay; Weak grade of structure, 5-10 mm, Subangular blocky; Smooth-ped fabric; Fine, (0 - 5) mm crack; Few (<1 per 100mm <sup>2</sup> ) Very fine (0.075-1mm) macropores, Moderately moist; Weak consistence; Very few (0 - 2 %), Calcareous, Fine (0 - 2 mm), Nodules; Field pH 7.8 (pH meter); Few, very fine (0-1mm) roots;
A13	0.25 - 0.7 m	Dark brown (7.5YR3/2-Moist); , 10YR64, 0-2% , 0-5mm, Faint; Medium clay; Strong grade of structure, 10-20 mm, Lenticular; Strong grade of structure, 5-10 mm, Angular blocky; Smooth-ped fabric; Fine, (0 - 5) mm crack; Common (1-5 per 100mm <sup>2</sup> ) Fine (1-2mm) macropores, Moderately moist; Weak consistence; Very few (0 - 2 %), Calcareous, Fine (0 - 2 mm), Nodules; Field pH 8 (pH meter); Few, very fine (0-1mm) roots; Gradual, Smooth change to -
B21	0.7 - 1.06 m	Brown (7.5YR4/4-Moist); , 7.5YR32, 10-20% , 5-15mm, Distinct; , 10YR54, 0-2% , 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 100mm <sup>2</sup> ) Very fine (0.075-1mm) macropores, Moderately moist; Weak consistence; Very few (0 - 2 %), Calcareous, Fine (0 - 2 mm), Nodules; Field pH 8.3 (pH meter); Gradual, Smooth change to -
B22	1.06 - 2.1 m	Brown (7.5YR4/4-Moist); , 7.5YR32, 2-10% , 5-15mm, Distinct; , 7.5YR42, 0-2% , 0-5mm, Faint; Light medium clay; Weak grade of structure, 20-50 mm, Subangular blocky; Earthy fabric; Fine, (0 - 5) mm crack; Few (<1 per 100mm <sup>2</sup> ) Very fine (0.075-1mm) macropores, Moderately moist; Weak consistence; Very few (0 - 2 %), Calcareous, Fine (0 - 2 mm), Nodules; Field pH 8.3 (pH meter); Gradual, Smooth change to -
B23	2.1 - 3.2 m	Brown (7.5YR4/4-Moist); , 7.5YR32, 10-20% , 15-30mm, Distinct; , 10YR53, 0-2% , 0-5mm, Faint; Light medium clay; Strong grade of structure, 10-20 mm, Subangular blocky; Smooth-ped fabric; Fine, (0 - 5) mm crack; Few (<1 per 100mm <sup>2</sup> ) Very fine (0.075-1mm) macropores, Moderately moist; Weak consistence; Very few (0 - 2 %), Calcareous, Fine (0 - 2 mm), Nodules; Field pH 7.8 (pH meter);

#### Morphological Notes

**Project Name:** Soil Studies in the Lower Namoi Valley  
**Project Code:** EDGEROI      **Site ID:** ed218      **Observation ID:** 1  
**Agency Name:** CSIRO Division of Soils (QLD)

Parent Rock: alluvial sediment, clay, second terraced fan, Namoi

**Site Notes**

Surface structure dominated by extremely coarse machine produced clods.

**Observation Notes**

**Observation ID: 1**

Depth	pH	1:5 EC	Exchangeable Cations			Exchangeable	CEC	ECEC	ESP
m		dS/m	Ca	Mg	K	Na	Acidity		
						Cmol (+)/kg			%
0 - 0.02	8.34A	0.138A	25.36B	10.26	1.5	0.67			
0 - 0.1	8.46A	0.136A	24.48B	15.94	1.09	0.95			
0.15 - 0.2	8.49A	0.101A	23.66B	9.68	1.31	0.81000			
						01			
0.3 - 0.4	8.78A	0.14A	21.69B	14.69	0.55	1.5			
0.7 - 0.8	9.06A	0.187A	17.74B	16.39	0.68	3.08			
1.2 - 1.3	9.2A	0.208A	16.23B	15.86	0.66	4.76			
2.5 - 2.6	9.16A	0.297A	16.63B	15.55	0.56	5.39			

[illegible]

**Project Name:** Soil Studies in the Lower Namoi Valley  
**Project Code:** EDGEROI      **Site ID:** ed218      **Observation ID:** 1  
**Agency Name:** CSIRO Division of Soils (QLD)

**Laboratory Analyses Completed for this profile**

15A2_CA	Exchangeable bases (Ca <sup>2+</sup> ,Mg <sup>2+</sup> ,Na <sup>+</sup> ,K <sup>+</sup> ) - 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