

Project Name: Soil Studies in the Lower Namoi Valley
Project Code: EDGEROI **Site ID:** ed095 **Observation ID:** 1
Agency Name: CSIRO Division of Soils (QLD)

Site Information

Desc. By:	G.M. Roberts	Locality:	stock route, near Brynmair
Date Desc.:	10/03/85	Elevation:	210 metres
Map Ref.:	Sheet No. : 8837_N 1:50000	Rainfall:	No Data
Northing/Long.:	6665600 AMG zone: 55	Runoff:	No Data
Easting/Lat.:	759500 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:	Terrace plain	Slope Category:	Level
Slope:	1 %	Aspect:	180 degrees

Surface Soil Condition (dry): Surface crust

Erosion:

Soil Classification

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

Site Disturbance:

Vegetation:

Surface Coarse Fragments:

Profile Morphology

A11	0 - 0.08 m	Very dark grey (10YR3/1-Moist); Dark grey (10YR4/1-Dry); ; Medium heavy clay; Strong grade of structure, 10-20 mm, Subangular blocky; Rough-ped fabric; Fine, (0 - 5) mm crack; Few (<1 per 100mm2) Very fine (0.075-1mm) macropores, Moderately moist; Very firm consistence; 0-2%, fine gravelly, 2-6mm, subrounded, Quartz, coarse fragments; Field pH 6.3 (pH meter); Common, very fine (0-1mm) roots; Abrupt, Wavy change to -
A12	0.08 - 0.25 m	Very dark grey (10YR3/1-Moist); Very dark grey (10YR3/1-Dry); ; Medium heavy clay; Weak grade of structure, 20-50 mm, Subangular blocky; Rough-ped fabric; Fine, (0 - 5) mm crack; Few (<1 per 100mm2) Fine (1-2mm) macropores, Moderately moist; Strong consistence; 0-2%, fine gravelly, 2-6mm, angular, Quartz, coarse fragments; Field pH 7 (pH meter); Common, very fine (0-1mm) roots;
A13	0.25 - 0.55 m	Very dark grey (10YR3/1-Moist); Very dark grey (10YR3/1-Dry); , 10YR82, 0-2% , 0-5mm, Distinct; Medium heavy clay; Weak grade of structure, 20-50 mm, Angular blocky; Rough-ped fabric; Fine, (0 - 5) mm crack; Few (<1 per 100mm2) Fine (1-2mm) macropores, Moderately moist; Strong consistence; 0-2%, fine gravelly, 2-6mm, subrounded, Quartz, coarse fragments; Very few (0 - 2 %), Calcareous, Fine (0 - 2 mm), Nodules; Field pH 8.5 (pH meter); Common, very fine (0-1mm) roots;
A14	0.55 - 0.82 m	Dark brown (7.5YR3/2-Moist); , 10YR83, 0-2% , 5-15mm, Distinct; Medium heavy clay; Weak grade of structure, 10-20 mm, Subangular blocky; Rough-ped fabric; Smooth-ped fabric; Fine, (0 - 5) mm crack; Few (<1 per 100mm2) Very fine (0.075-1mm) macropores, Moderately moist; Strong consistence; 0-2%, fine gravelly, 2-6mm, subangular, Quartz, coarse fragments; Very few (0 - 2 %), Calcareous, Fine (0 - 2 mm), Nodules; Field pH 8 (pH meter); Few, very fine (0-1mm) roots; Clear, Smooth change to -
B21	0.82 - 1.9 m	Dark brown (7.5YR3/4-Moist); , 10YR21, 10-20% , 15-30mm, Distinct; , 10YR81, 0-2% , 5-15mm, Prominent; Medium clay; Moderate grade of structure, 20-50 mm, Angular blocky; Smooth-ped fabric; Rough-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, Medium (2 -6 mm), Nodules; Field pH 8 (pH meter);
B22	1.9 - 2.8 m	Brown (10YR4/3-Moist); , 7.5YR32, 2-10% , 5-15mm, Distinct; , 10YR62, 2-10% , 5-15mm, Prominent; Medium clay; Strong grade of structure, 10-20 mm, Angular blocky; Smooth-ped fabric; Medium, (5 - 10) mm crack; Few (<1 per 100mm2) Very fine (0.075-1mm) macropores, Moderately moist; Very firm consistence; Few (2 - 10 %), Calcareous, Medium (2 -6 mm), Nodules; Field pH 8.5 (pH meter); Diffuse, Smooth change to -

Morphological Notes

Project Name: Soil Studies in the Lower Namoi Valley
Project Code: EDGEROI **Site ID:** ed095 **Observation ID:** 1
Agency Name: CSIRO Division of Soils (QLD)

A11 Sample .06 colour between 5YR4/2 and 10YR4/3. C bedding at 280cm. Earthy fabric makes poor match with Ug5.15. Cast granules at 250cm+.

Observation Notes

Parent Rock: alluvial sediment, mixed texture, with lime, parna on fourth fan

Site Notes

Observation ID: 1

Agency Name: CSIRO Division of Soils (QLD)

Laboratory Test Results:

Depth	pH	1:5 EC	Exchangeable Cations			Exchangeable	CEC	ECEC	ESP
m		dS/m	Ca	Mg	K	Na	Acidity		%
						Cmol (+)/kg			
0 - 0.02	6.67A	0.142A	18.12B	6.7	1.87	0.26			
0 - 0.08	6.34A	0.171A	16.68B	6.39	1.44	0.87			
0.1 - 0.2	7.94A	0.087A	24.07B	7.89	0.54	2.61			
0.3 - 0.4	9.05A	0.259A	26.23B	8.030001	0.44	5.23			
0.7 - 0.8	8.8A	0.625A	25.07B	9.79	0.8	7.05			
1.2 - 1.3	8.81A	0.712A	26.27B	9.84	1.04	7.79			
2.5 - 2.6	8.92A	0.697A	23.2B	8.7	0.69	8.65			

[illegible][illegible]

Project Name: Soil Studies in the Lower Namoi Valley
Project Code: EDGEROI **Site ID:** ed095 **Observation ID:** 1
Agency Name: CSIRO Division of Soils (QLD)

Laboratory Analyses Completed for this profile

15A2_CA	Exchangeable bases (Ca ²⁺ ,Mg ²⁺ ,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