

Project Name: Soil Studies in the Lower Namoi Valley
Project Code: EDGEROI **Site ID:** ed412 **Observation ID:** 1
Agency Name: CSIRO Division of Soils (QLD)

Site Information

Desc. By:	M.E. Heape	Locality:	stock route, at Oakvale
Date Desc.:	07/05/86	Elevation:	278 metres
Map Ref.:	Sheet No. : 8837_N 1:50000	Rainfall:	No Data
Northing/Long.:	6667500 AMG zone: 55	Runoff:	No Data
Easting/Lat.:	775600 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:	Very gently sloped
Slope:	1 %	Aspect:	240 degrees

Surface Soil Condition (dry): Self-mulching

Erosion:

Soil Classification

Australian Soil Classification:	N/A	Mapping Unit:	N/A
ASC Confidence:	Confidence level not specified	Principal Profile Form:	Ug5.16
		Great Soil Group:	Grey clay

Site Disturbance: Complete clearing. Pasture, native or improved, cultivated at some stage

Vegetation:

Surface Coarse Fragments:

Profile Morphology

A11	0 - 0.1 m	Very dark brown (10YR2/2-Moist); Very dark grey (10YR3/1-Dry); ; Loam; 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; Firm consistence; Field pH 7.5 (pH meter); Common, fine (1-2mm) roots;
A12	0.1 - 0.25 m	Very dark brown (10YR2/2-Moist); ; Light clay; Moderate grade of structure, 20-50 mm, Angular blocky; Rough-ped fabric; Fine, (0 - 5) mm crack; Few (<1 per 100mm2) Very fine (0.075-1mm) macropores, Moderately moist; Firm consistence; Field pH 8 (pH meter); Few, very fine (0-1mm) roots;
A13	0.25 - 0.55 m	Very dark brown (10YR2/2-Moist); , 10YR62, 0-2% , 0-5mm, Distinct; Light clay; Moderate grade of structure, 20-50 mm, Angular blocky; Smooth-ped fabric; Fine, (0 - 5) mm crack; Few (<1 per 100mm2) Very fine (0.075-1mm) macropores, Moderately moist; Very firm consistence; Very few (0 - 2 %), Calcareous, Fine (0 - 2 mm), Soft segregations; Field pH 8 (pH meter); Common, very fine (0-1mm) roots;
A14	0.55 - 0.88 m	Very dark grey (10YR3/1-Moist); , 10YR62, 0-2% , 0-5mm, Distinct; Light medium clay; Moderate 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; Very firm consistence; Very few (0 - 2 %), Calcareous, Medium (2 -6 mm), Soft segregations; Field pH 8 (pH meter); Few, very fine (0-1mm) roots; Gradual, Smooth change to -
B21k	0.88 - 1.7 m	Dark reddish grey (5YR4/2-Moist); , 10YR21, 2-10% , 5-15mm, Distinct; Light medium clay; Moderate grade of structure, 20-50 mm, Angular blocky; Smooth-ped fabric; Fine, (0 - 5) mm crack; Few (<1 per 100mm2) Very fine (0.075-1mm) macropores, Moderately moist; Strong consistence; 2-10%, cobbly, 60-200mm, subangular, Basalt, coarse fragments; Common (10 - 20 %), Calcareous, Medium (2 -6 mm), Nodules; Field pH 8.5 (pH meter); Few, very fine (0-1mm) roots; Gradual, Smooth change to -
B22	1.7 - 2.8 m	Reddish brown (5YR4/4-Moist); ; Loam; Weak grade of structure, 20-50 mm, Prismatic; 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; Strong consistence; Very few (0 - 2 %), Calcareous, Medium (2 -6 mm), Nodules; Field pH 8 (pH meter); Diffuse, Smooth change to -

Project Name: Soil Studies in the Lower Namoi Valley
Project Code: EDGEROI **Site ID:** ed412 **Observation ID:** 1
Agency Name: CSIRO Division of Soils (QLD)

C 2.8 - 4.48 m Reddish brown (5YR4/4-Moist); ; Light clay; Massive grade of structure; Sandy (grains prominent) fabric; Fine, (0 - 5) mm crack; Few (<1 per 100mm²) Fine (1-2mm) macropores, Moderately moist; Strong consistence; 20-50%, coarse gravelly, 20-60mm, subrounded, Consolidated rock (unidentified), coarse fragments; Field pH 8 (pH meter);

Morphological Notes

A11 Second colour 5 is faunal mix, as well as crack infill. From 160-185 there are abundant large (3-6cm), subrounded tabular, basalt gravels. Manganese stain starts at 170cm. The matrix changes gradually (over 40cm) from 160-200cm from clay to
A12 sand. The sand continues to increase through to 280cm where C material (principally sandy) is encountered. From 320-340cm there are 2 distinct sand and fine gravel beds. Other gravel bands at 406-416, and 436-446. The surface 10-15cm is br
A13 owner than soil beneath, suggesting ? a surface wash.

Observation Notes

Parent Rock: alluvial sediment, mixed texture, with lime, fifth (eroded) fan

Site Notes

Slightly dissected old terrace. Alluvium (not pedis sediment). Erosional relief on prior alluvium.

Observation ID: 1

Depth	pH	1:5 EC	Exchangeable Cations			Exchangeable	CEC	ECEC	ESP
m		dS/m	Ca	Mg	K	Na Cmol (+)/kg	Acidity		%
0 - 0.1	6.89A	0.101A	14.71B	3.42	0.66	0.22			
0.1 - 0.2	8.02A	0.08A	23.29B	7.56	0.43	1.9			
0.3 - 0.4	8.93A	0.28A	26.55B	7.38	0.41	5.51			
0.7 - 0.8	8.67A	1.03A	26.05B	17.63	0.38	10.33			
1.2 - 1.3	8.68A	0.99A	20.49B	16.05	0.39	6.75			
2.5 - 2.6	8.32A	0.565A	13.34B	13.38	0.31	5.7			
3.5 - 3.6	7.43A	0.353A	6.5B	8.23	0.24	3.67			

[illegible]

Project Name: Soil Studies in the Lower Namoi Valley
Project Code: EDGEROI **Site ID:** ed412 **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