Project Name: Soil Studies in the Lower Namoi Valley

Project Code: EDGEROI Site ID: ed401 Observation ID: 1

Agency Name: CSIRO Division of Soils (QLD)

Site Information

Desc. By: W.T. Ward Locality: Twynam Pastoral Co., Boolcarrol

Date Desc.: Elevation: 05/12/85 188 metres Map Ref.: Sheet No.: 8837 N 1:50000 Rainfall: No Data Northing/Long.: 6674810 AMG zone: 55 Runoff: No Data 742360 Datum: AGD66 No Data Easting/Lat.: Drainage:

**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 DataPattern Type:No DataMorph. Type:No DataRelief:No DataElem. Type:Terrace plainSlope Category:Gently inclinedSlope:0 %Aspect:No Data

Surface Soil Condition (dry): Self-mulching

**Erosion:** 

Soil Classification

Australian Soil Classification:Mapping Unit:N/AN/APrincipal Profile Form:N/AASC Confidence:Great Soil Group:N/A

Confidence level not specified

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

Vegetation:

## **Surface Coarse Fragments:**

Profile Morphology	l
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A11g 0 - 0.03 m Very dark greyish brown (10YR3/2-Moist); Very dark greyish brown (10YR3/2-Dry); ; Medium clay; Strong grade of structure, 2-5 mm, Subangular blocky; Earthy fabric; Moderately moist; Firm consistence; 0-2%, fine gravelly, 2-6mm, subangular, Quartz, coarse fragments; Clear,

Wavy change to -

A12g 0.03 - 0.32 m Very dark greyish brown (10YR3/2-Moist); Very dark greyish brown (10YR3/2-Dry); ; Medium

clay; Strong grade of structure, 20-50 mm, Subangular blocky; Earthy fabric; Moderately moist; Very firm consistence; 0-2%, fine gravelly, 2-6mm, subangular, Quartz, coarse fragments;

Few, very fine (0-1mm) roots; Gradual, Smooth change to -

A13g 0.32 - 1.05 m Very dark greyish brown (10YR3/2-Moist); , 10YR73, 0-2% , 0-5mm, Distinct; , 10YR42, 0-2% ,

0-5mm, Distinct; Medium clay; Moderate grade of structure, 50-100 mm, Prismatic; Weak grade

of structure, 10-20 mm, Angular blocky; Earthy fabric; Moderately moist; Very strong

consistence; 0-2%, fine gravelly, 2-6mm, subangular, Quartz, coarse fragments; Very few (0 - 2%), Calcareous, Medium (2 -6 mm), Soft segregations; Few, very fine (0-1mm) roots; Diffuse,

B21 1.05 - 1.9 m Brown (7.5YR4/4-Moist); , 10YR32, 10-20% , 15-30mm, Prominent; , 10YR74, 0-2% , 0-5mm,

Distinct; Medium clay; Moderate grade of structure, 50-100 mm, Angular blocky; Earthy fabric; Moderately moist; Very firm consistence; 0-2%, fine gravelly, 2-6mm, subangular, Quartz, coarse fragments; Very few (0 - 2 %), Calcareous, Fine (0 - 2 mm), Soft segregations; Very

few (0 - 2 %), Gypseous, Fine (0 - 2 mm), Crystals; Diffuse, Smooth change to -

B22 1.9 - 2.6 m Brown (7.5YR4/4-Moist); , 10YR32, 2-10% , 15-30mm, Distinct; , 10YR74, 0-2% , 0-5mm,

Distinct; Silty clay; Moderate grade of structure, 100-200 mm, Lenticular; Moderate grade of structure, 20-50 mm, Subangular blocky; Smooth-ped fabric; Earthy fabric; Moderately moist; Very firm consistence; Very few (0 - 2 %), Calcareous, Fine (0 - 2 mm), Nodules; Diffuse,

Smooth change to -

C 2.6 - 3.37 m Strong brown (7.5YR5/6-Moist); , N20, 2-10% , 0-5mm, Distinct; , 7.5YR32, 10-20% , 5-15mm,

Distinct; Silty clay; Massive grade of structure; Moderate grade of structure, 2-5 mm, Cast;

Smooth-ped fabric; Earthy fabric; Moderately moist; Firm consistence;

## **Morphological Notes**

A11g Soil faunal (?ant) seed store at 58 cm. There are extremely few coarse fragments in

401.04. Few very small soft lime segregations in 401.06. Compared with R1, R10 has

slightly paler or yellower colours (?hydromorphic effect), but chips quot

A12g ed do not show the difference; new determinations give 7.5YR5/4-6 for R10.

## **Observation Notes**

Soil Studies in the Lower Namoi Valley

Project Name: Project Code: Agency Name: EDGEROI Site ID: ed4
CSIRO Division of Soils (QLD) Observation ID: 1 ed401

Parent Rock: alluvial sediment, mixed texture, with lime, clay parna on fourth fan, Namoi Site Notes

Profile R10. Full easting, northing, elevation: 42362.74812.188.04m.

Project Name: Project Code: Agency Name:

Soil Studies in the Lower Namoi Valley EDGEROI Site ID: ed401 CSIRO Division of Soils (QLD) Observation ID: 1

## **Laboratory Test Results:**

Depth	рН	1:5 EC		nangeable ⁄lg	Cations K	E: Na	changeable Acidity	CEC	ECEC	ESP
m		dS/m	Ca ii	ng	K	Cmol (+)/				%
0 - 0.03 0.03 - 0.32 0.32 - 1.05 1.05 - 1.9 1.9 - 2.6 2.6 - 3.37										
Depth	CaCO3	Organic C	Avail. P	Total P	Total N	Total K	Bulk Density		cle Size	Analysis Silt Clay
m	%	%	mg/kg	%	%	%	Mg/m3	GV C	% %	Sill Clay
0 - 0.03 0.03 - 0.32 0.32 - 1.05 1.05 - 1.9 1.9 - 2.6 2.6 - 3.37										
Depth	COLE				lumetric W				K sat	K unsat
m		Sat.	0.05 Bar	0.1 Bar g/g	0.5 Bar g - m3/m3	1 Bar	5 Bar 15	Bar	mm/h	mm/h
0 - 0.03 0.03 - 0.32 0.32 - 1.05 1.05 - 1.9 1.9 - 2.6 2.6 - 3.37										

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**Laboratory Analyses Completed for this profile**