

Project Name: Soils of the Lower Macquarie Valley, New South Wales
Project Code: Macquarie **Site ID:** 530 **Observation ID:** 1
Agency Name: CSIRO Division of Soils (ACT)

Site Information

Desc. By:	N.J. McKenzie	Locality:	
Date Desc.:	07/12/85	Elevation:	No Data
Map Ref.:	Sheet No. : 8434 1:10000	Rainfall:	No Data
Northing/Long.:	6479711 AMG zone: 55	Runoff:	Slow
Easting/Lat.:	580000 Datum: AGD66	Drainage:	Moderately well drained

Geology

ExposureType:	Soil pit	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:	Flat	Relief:	No Data
Elem. Type:	No Data	Slope Category:	No Data
Slope:	%	Aspect:	No Data

Surface Soil Condition (dry): Hardsetting, Surface crust

Erosion:

Soil Classification

Australian Soil Classification:		Mapping Unit:	TRANGIE COWAL ALLUVIUM
N/A			

ASC Confidence:

Confidence level not specified

Principal Profile Form: Dy3.12

Great Soil Group: N/A

Site Disturbance: Extensive clearing, for example poisoning, ringbarking

Vegetation:

Tall Strata - Tree, 12.01-20m, Sparse. *Species includes - None Recorded

Surface Coarse Fragments:

Profile Morphology

A1	0 - 0.2 m	Dark brown (7.5YR3/4-Moist); ; Light clay; Weak grade of structure, 20-50 mm, Platy; Earthy fabric; Many (>5 per 100mm ²) Very fine (0.075-1mm) macropores, Many (>5 per 100mm ²) Fine (1-2mm) macropores, Common (1-5 per 0.01m ²) Medium (2-5mm) macropores, Moist; Weak consistence; Common (10 - 20 %), Ferruginous, Coarse (6 - 20 mm), Nodules; Field pH 6.5 (Raupach); Common, very fine (0-1mm) roots; Common, fine (1-2mm) roots; Common, medium (2-5mm) roots; Many, coarse (>5mm) roots; Gradual, Smooth change to -
B2	0.2 - 0.69 m	Yellowish brown (10YR5/4-Moist); , 10YR66, 20-50% , 15-30mm, Faint; Medium clay; Moderate grade of structure, 20-50 mm, Angular blocky; Smooth-ped fabric; Common (1-5 per 100mm ²) Very fine (0.075-1mm) macropores, Common (1-5 per 100mm ²) Fine (1-2mm) macropores, Common (1-5 per 0.01m ²) Medium (2-5mm) macropores, Moderately moist; Firm consistence; Many cutans, >50% of ped faces or walls coated; Many cutans, >50% of ped faces or walls coated; Many cutans, >50% of ped faces or walls coated; Few (2 - 10 %), Ferruginous, Coarse (6 - 20 mm), Nodules; Field pH 8 (Raupach); Common, very fine (0-1mm) roots; Common, fine (1-2mm) roots; Gradual, Smooth change to -
2B	0.69 - 1.35 m	Yellowish red (5YR3/6-Moist); , 7.5YR66, 20-50% , 15-30mm, Faint; Medium clay; Strong grade of structure, 10-20 mm, Polyhedral; Smooth-ped fabric; Common (1-5 per 100mm ²) Very fine (0.075-1mm) macropores, Common (1-5 per 100mm ²) Fine (1-2mm) macropores, Few (<1 per 0.01m ²) Medium (2-5mm) macropores, Moderately moist; Firm consistence; Many cutans, >50% of ped faces or walls coated; Many cutans, >50% of ped faces or walls coated; Many cutans, >50% of ped faces or walls coated; Field pH 8 (Raupach); Few, very fine (0-1mm) roots; Common, very fine (0-1mm) roots;

Morphological Notes

A1 A more uniform version of 529 without A2cb. An IIA from 70-90 could be pulled out with an A1 crust to 5cm (without concs). A1/B2 feel a bit silty

Observation Notes

Buckshot Soil Profile Class

Site Notes

Project Name: Soils of the Lower Macquarie Valley, New South Wales
Project Code: Macquarie **Site ID:** 530 **Observation ID:** 1
Agency Name: CSIRO Division of Soils (ACT)

Laboratory Test Results:

Depth	pH	1:5 EC	Ca	Exchangeable Mg	Cations K	Na	Exchangeable Acidity	CEC	ECEC	ESP
m		dS/m				Cmol (+)/kg				%
0.1 - 0.15	7.1A	0.056A	8.2E	1.7	2	0			11.9D	
0.3 - 0.35	8.2A	0.128A								
0.7 - 0.75	8.4A	0.114A	12E	3.4	1.5	0.1			17D	
1.3 - 1.35	8.4A	0.087A								

Depth	CaCO3	Organic C	Avail. P	Total P	Total N	Total K	Bulk Density	Particle GV	Size CS	Analysis FS	Silt	Clay
m	%	%	mg/kg	%	%	%	Mg/m3			%		
0.1 - 0.15							1.45		20.6A	29.1	13.6	36.7
0.3 - 0.35							1.39					
0.7 - 0.75							1.49		13.2A	17.8	9.2	59.8
1.3 - 1.35							1.56					

Depth	COLE	Gravimetric/Volumetric Water Contents						K sat	K unsat
m		Sat.	0.05 Bar	0.1 Bar	0.5 Bar	1 Bar	5 Bar	15 Bar	
				g/g	m3/m3				mm/h
0.1 - 0.15	0.027A			0.19G				0.13D	
0.3 - 0.35	0.048A			0.26G				0.19D	
0.7 - 0.75	0.057A			0.22G				0.18D	
1.3 - 1.35	0.042A			0.23G				0.18D	

Project Name: Soils of the Lower Macquarie Valley, New South Wales
Project Code: Macquarie **Site ID:** 530 **Observation ID:** 1
Agency Name: CSIRO Division of Soils (ACT)

Laboratory Analyses Completed for this profile

15C1_CA	Exchangeable bases (Ca ²⁺ ,Mg ²⁺ ,Na ⁺ ,K ⁺) - alcoholic 1M ammonium chloride at pH 8.5, pretreatment for soluble salts
15C1_K	Exchangeable bases and CEC - alcoholic 1M ammonium chloride at pH 8.5, pretreatment for soluble salts
15C1_MG	Exchangeable bases and CEC - alcoholic 1M ammonium chloride at pH 8.5, pretreatment for soluble salts
15C1_NA	Exchangeable bases and CEC - alcoholic 1M ammonium chloride at pH 8.5, pretreatment for soluble salts
15J_BASES	Sum of Bases
3A1	EC of 1:5 soil/water extract
4A1	pH of 1:5 soil/water suspension
P10_CF_C	Clay (%) - Coventry and Fett pipette method
P10_CF_CS	Coarse sand (%) - Coventry and Fett pipette method
P10_CF_FS	Fine sand (%) - Coventry and Fett pipette method
P10_CF_Z	Silt (%) - Coventry and Fett pipette method
P3A1	Bulk density - g/cm ³
P3B1GV_15	15 BAR Moisture g/g - Gravimetric of ground sample (<2mm) using pressure plate
P3B4GV_01	0.1 BAR Moisture g/g - Gravimetric of soil clods (Soil Survey Staff,1967)
P5_COLE	Coefficient of Linear Extensibility (Grossman et al. 1968)