Project Name: PAT
Project Code: PAT **Site ID:** H248 **Observation ID:** 1
Agency Name: CSIRO Division of Soils (TAS)

Site Information

Desc. By: G.M. Dimmock
Date Desc.: 23/04/63
Map Ref.:
Northing/Long.: 147.381944444444
Easting/Lat.: -41.3638888888889
Locality: .8KM NNE of Legana:
Elevation: 38 metres
Rainfall: 780
Runoff: Moderately rapid
Drainage: Poorly drained

Geology

ExposureType: Soil pit
Geol. Ref.: No Data
Conf. Sub. is Parent. Mat.: No Data
Substrate Material: Auger boring, 2.3 m deep,Unconsolidated material (unidentified)

Land Form

Rel/Slope Class: No Data
Morph. Type: Flat
Elem. Type: No Data
Slope: 3.5 %
Pattern Type: Terrace (alluvial)
Relief: No Data
Slope Category: Gently inclined
Aspect: 45 degrees

Surface Soil Condition (dry):

Erosion:

Soil Classification

Australian Soil Classification:
Ferric Mesotrophic Brown Chromosol
ASC Confidence:
All necessary analytical data are available.
Mapping Unit: N/A
Principal Profile Form: Dy5.61
Great Soil Group: Lateritic podzolic soil

Site Disturbance: Limited clearing, for example selective logging

Vegetation: Low Strata - Fern, , . *Species includes - None recorded
Tall Strata - Tree, , . *Species includes - None Recorded

Surface Coarse Fragments:

Profile Morphology

A	0 - 0.025 m	Very dark grey (10YR3/1-Moist); ; Loamy sand; Massive grade of structure; Dry; Very weak consistence; 0-2%, fine gravelly, 2-6mm, subangular, Quartz, coarse fragments; Common (10 - 20 %), Ferruginous, Coarse (6 - 20 mm), Nodules; Many, coarse (>5mm) roots; Clear, Irregular change to -
A1A2	0.025 - 0.09 m	Very dark grey (10YR3/1-Moist); ; Loamy sand; Massive grade of structure; Dry; Very weak consistence; 2-10%, medium gravelly, 6-20mm, rounded, Quartz, coarse fragments; Common (10 - 20 %), Ferruginous, Very coarse (20 - 60 mm), Nodules; Many, coarse (>5mm) roots; Diffuse change to -
A21	0.09 - 0.18 m	Brown (10YR5/3-Moist); ; Loamy sand; Massive grade of structure; Dry; Loose consistence; 2-10%, medium gravelly, 6-20mm, rounded, Quartz, coarse fragments; Very many (50 - 100 %), Ferruginous, Very coarse (20 - 60 mm), Nodules; Many, coarse (>5mm) roots; Diffuse change to -
A22	0.23 - 0.36 m	Brown (10YR5/3-Moist); ; Loamy sand (Heavy); Massive grade of structure; Moderately moist; Weak consistence; 2-10%, medium gravelly, 6-20mm, rounded, Quartz, coarse fragments; Very many (50 - 100 %), Ferruginous, Very coarse (20 - 60 mm), Nodules; Abundant, coarse (>5mm) roots; Abrupt, Wavy change to -
B21	0.42 - 0.56 m	Yellowish brown (10YR5/6-Moist); , 2.5YR48; Heavy clay; Weak grade of structure, 20-50 mm, Angular blocky; Moderately moist; Strong consistence; Very few (0 - 2 %), Ferruginous, Extremely coarse (> 60 mm), Nodules;
B22	0.56 - 0.71 m	Yellowish brown (10YR5/4-Moist); , 2.5YR48; , 2.5Y71; Heavy clay; Massive grade of structure; Moderately moist; Weak consistence; Very few (0 - 2 %), Ferruginous, Very coarse (20 - 60 mm), Nodules;
B2	0.71 - 0.86 m	Yellowish brown (10YR5/4-Moist); , 2.5Y54; , 7.5YR56; Heavy clay; Massive grade of structure; Moderately moist; Weak consistence; Very few (0 - 2 %), Ferruginous, Very coarse (20 - 60 mm), Nodules;
B24	0.86 - 1.07 m	Yellowish brown (10YR5/4-Moist); , 2.5Y62; , 2.5YR48; Heavy clay; Massive grade of structure; Moderately moist; Weak consistence; Very few (0 - 2 %), Ferruginous, Very coarse (20 - 60 mm), Nodules; Few

Project Name: **PAT**
Project Code: **PAT** **Site ID:** **H248** **Observation ID:** **1**
Agency Name: **CSIRO Division of Soils (TAS)**

C	1.52 - 1.68 m	Light grey (2.5Y7/1-Moist); , 10YR54; , 2.5YR36; Heavy clay; Moderately moist; Weak consistence; Very few (0 - 2 %), Ferruginous, , Nodules; Few
	2.13 - 2.26 m	Light grey (2.5Y7/1-Moist); , 2.5YR36; , 10YR54; Heavy clay; Weak consistence;

Morphological Notes

Observation Notes

ODD LARGE LUMPS OF CONCRETIONARY LATERITE <150MM IN CLAY HORIZON:WORMS ACTIVE:>226CM ON LATERITE BOULDERS:

Site Notes

LAUNCESTON

Project Name: PAT
Project Code: PAT **Site ID:** H248 **Observation ID:** 1
Agency Name: CSIRO Division of Soils (TAS)

Laboratory Test Results:

Depth	pH	1:5 EC	Exchangeable Cations				Exchangeable Acidity	CEC	ECEC	ESP
			Ca	Mg	K	Na				
m		dS/m	Cmol (+)/kg							%
0 - 0.025	6.1A	0.048A	8.1H	2.3	0.28	0.16	12.5E		23.3B	
0.025 - 0.09	5.7A	0.027A	1.9H	0.62	0.1	0.08	7.5E		10.2B	
0.09 - 0.18	5.4A	0.024A	0.29H	0.24	0.06	0.08	6.3E		7B	
0.23 - 0.36	5.8A	0.018A	0.23H	0.29	0.05	0.08	4.8E		5.5B	
0.42 - 0.56	6.1A	0.039A	3.2H	6	0.13	0.77	10.4E		20.5B	
0.56 - 0.71	6.2A	0.039A	3.6H	7.3	0.18	0.4	9.6E		21.4B	
0.71 - 0.86	6.1A	0.045A								
0.86 - 1.07	6A	0.048A								
1.52 - 1.68	5.3A	0.071A								
2.13 - 2.26	4.9A	0.11A	0.48H	3.1	0.08	0.8	15.6E		20.1B	

Depth	CaCO3	Organic C	Avail. P	Total P	Total N	Total K	Bulk Density	Particle Size Analysis				
								GV	CS	FS	Silt	Clay
m	%	%	mg/kg	%	%	%	Mg/m3			%		
0 - 0.025		4.35D		0.008D	0.227A			22	13B	60	15	5
0.025 - 0.09		1.74D		0.003D	0.089A			31	15B	63	15	5
0.09 - 0.18		1.13D			0.049A			42	15B	63	14	5
0.23 - 0.36		0.72D			0.037A			61	19D	59	14	7
0.42 - 0.56		0.8D			0.09A			1	3D	15	7	73
0.56 - 0.71								0	1D	10	5	81
0.71 - 0.86												
0.86 - 1.07												
1.52 - 1.68												
2.13 - 2.26								0	2D	12	10	73

Depth	COLE	Gravimetric/Volumetric Water Contents						K sat	K unsat
		Sat.	0.05 Bar	0.1 Bar	0.5 Bar	1 Bar	5 Bar	15 Bar	
m		g/g - m3/m3						mm/h	mm/h
0 - 0.025									
0.025 - 0.09									
0.09 - 0.18									
0.23 - 0.36									
0.42 - 0.56									
0.56 - 0.71									
0.71 - 0.86									
0.86 - 1.07									
1.52 - 1.68									
2.13 - 2.26									

Project Name: **PAT**
Project Code: **PAT** **Site ID:** **H248** **Observation ID:** **1**
Agency Name: **CSIRO Division of Soils (TAS)**

Laboratory Analyses Completed for this profile

12_HCL_FE	Total element - Fe(%) - Total acid(HCl) extractable Fe
15E1_CA	Exchangeable bases (Ca2+,Mg2+,Na+,K+) by compulsive exchange, no pretreatment for soluble
15E1_K	Exchangeable bases, CEC and AEC by compulsive exchange, no pretreatment for soluble salts
15E1_MG	Exchangeable bases, CEC and AEC by compulsive exchange, no pretreatment for soluble salts
15E1_NA	Exchangeable bases, CEC and AEC by compulsive exchange, no pretreatment for soluble salts
15G1_H	Hydrogen Cation - meq per 100g of soil - 1M KCl Exch. Acidity By titration to pH 8.0
15J_H	Sum of Ex. cations + Ex. acidity - Sum of basic exch. cations and exch. (Hydrogen)
2_LOI	Loss on Ignition (%)
2A1	Air-dry moisture content
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
6A1_UC	Organic carbon (%) - Uncorrected Walkley and Black method
7A2	Total nitrogen - semimicro Kjeldahl , automated colour
9A_HCL	Total element - P(%) - By boiling HCl
P10_GRAV	Gravel (%)
P10_PB_C	Clay (%) - Plummet balance
P10_PB_CS	Coarse sand (%) - Plummet balance
P10_PB_FS	Fine sand (%) - Plummet balance
P10_PB_Z	Silt (%) - Plummet balance
P10A1_C	Clay (%) - Pipette
P10A1_CS	Coarse sand (%) - Pipette
P10A1_FS	Fine sand (%) - Pipette
P10A1_Z	Silt (%) - Pipette