

Project Name: Regional
Project Code: REG **Site ID:** T395 **Observation ID:** 1
Agency Name: CSIRO Division of Soils (QLD)

Site Information

Desc. By:	M.D. Laffan	Locality:	
Date Desc.:	31/08/84	Elevation:	600 metres
Map Ref.:	Sheet No. : 8062 1:100000	Rainfall:	3000
Northing/Long.:	145.6875	Runoff:	No Data
Easting/Lat.:	-17.5583333333333	Drainage:	Well drained

Geology

ExposureType:	Soil pit	Conf. Sub. is Parent. Mat.:	No Data
Geol. Ref.:	CZA	Substrate Material:	Basalt

Land Form

Rel/Slope Class:	Rolling low hills 30-90m 10-	Pattern Type:	No Data
Morph. Type:	Upper-slope	Relief:	No Data
Elem. Type:	Hillslope	Slope Category:	No Data
Slope:	30 %	Aspect:	180 degrees

Surface Soil Condition (dry):

Erosion:

Soil Classification

Australian Soil Classification:		Mapping Unit:	N/A
Acidic Dystrophic Red Ferrosol		Principal Profile Form:	Gn3.11
ASC Confidence:		Great Soil Group:	Krasnozern

Analytical data are incomplete but reasonable confidence.

Site Disturbance: Limited clearing, for example selective logging

Vegetation: Low Strata - Fern, 0.51-1m, Sparse. *Species includes - None recorded
Tall Strata - Tree, 6.01-12m, Mid-dense. *Species includes - None Recorded

Surface Coarse Fragments:

Profile Morphology

A1	0 - 0.04 m	Dark reddish brown (5YR3/2-Moist); ; Light clay; Strong grade of structure, 2-5 mm, Polyhedral; Smooth-ped fabric; Moderately moist; Weak consistence; Field pH 6 (pH meter); Many, fine (1-2mm) roots; Clear, Wavy change to -
AB	0.04 - 0.1 m	Dark reddish brown (5YR3/2-Moist); ; Light clay; Strong grade of structure, 2-5 mm, Polyhedral; Smooth-ped fabric; Moderately moist; Weak consistence; Field pH 5.6 (pH meter); Many, fine (1-2mm) roots; Clear, Wavy change to -
B21	0.1 - 0.2 m	Dark reddish brown (5YR3/3-Moist); ; Light medium clay; Moderate grade of structure, 5-10 mm, Subangular blocky; Strong grade of structure, 2-5 mm, Polyhedral; Smooth-ped fabric; Moderately moist; Firm consistence; Field pH 5.5 (pH meter); Common, fine (1-2mm) roots;
B21	0.2 - 0.3 m	Dark reddish brown (5YR3/3-Moist); ; Light medium clay; Moderate grade of structure, 5-10 mm, Subangular blocky; Strong grade of structure, 2-5 mm, Polyhedral; Smooth-ped fabric; Moderately moist; Firm consistence; Field pH 5.5 (pH meter); Common, fine (1-2mm) roots;
B21	0.3 - 0.4 m	Dark reddish brown (5YR3/3-Moist); ; Light medium clay; Moderate grade of structure, 5-10 mm, Subangular blocky; Strong grade of structure, 2-5 mm, Polyhedral; Smooth-ped fabric; Moderately moist; Firm consistence; Field pH 5.5 (pH meter); Common, fine (1-2mm) roots; Clear, Wavy change to -
B22	0.4 - 0.6 m	Dark reddish brown (5YR3/2-Moist); ; Medium heavy clay; Moderate grade of structure, 5-10 mm, Subangular blocky; Strong grade of structure, 2-5 mm, Polyhedral; Smooth-ped fabric; Moderately moist; Very firm consistence; Field pH 5.5 (pH meter); Few, fine (1-2mm) roots;
B22	0.6 - 0.9 m	Dark reddish brown (5YR3/2-Moist); ; Medium heavy clay; Moderate grade of structure, 5-10 mm, Subangular blocky; Strong grade of structure, 2-5 mm, Polyhedral; Smooth-ped fabric; Moderately moist; Very firm consistence; Field pH 5.5 (pH meter); Few, fine (1-2mm) roots; Diffuse change to -
B23	0.9 - 1.2 m	Dark reddish brown (5YR2/2-Moist); ; Medium heavy clay; Moderate grade of structure, 5-10 mm, Subangular blocky; Smooth-ped fabric; Moderately moist; Very firm consistence; 0-2%, fine gravelly, 2-6mm, subangular, undisturbed, Sand, coarse fragments; Few, fine (1-2mm) roots;

Project Name: Regional
Project Code: REG **Site ID:** T395 **Observation ID:** 1
Agency Name: CSIRO Division of Soils (QLD)

B23	1.2 - 1.5 m	Dark reddish brown (5YR2/2-Moist); ; Medium heavy clay; Moderate grade of structure, 5-10 mm, Subangular blocky; Smooth-ped fabric; Moderately moist; Very firm consistence; 0-2%, fine gravelly, 2-6mm, subangular, undisturbed, Sand, coarse fragments; Few, fine (1-2mm) roots;
B23	1.5 - 1.8 m	Dark reddish brown (5YR2/2-Moist); ; Medium heavy clay; Moderate grade of structure, 5-10 mm, Subangular blocky; Smooth-ped fabric; Moderately moist; Very firm consistence; 0-2%, fine gravelly, 2-6mm, subangular, undisturbed, Sand, coarse fragments; Few, fine (1-2mm) roots;
B23	1.8 - 2.1 m	Dark reddish brown (5YR2/2-Moist); ; Medium heavy clay; Moderate grade of structure, 5-10 mm, Subangular blocky; Smooth-ped fabric; Moderately moist; Very firm consistence; 0-2%, fine gravelly, 2-6mm, subangular, undisturbed, Sand, coarse fragments; Few, fine (1-2mm) roots;

Morphological Notes

Observation Notes

RAINFOREST REMNANT 1A:PARENT MATERIAL STRONGLY W'D BROWN BASALT:

Site Notes

Project Name: Regional
Project Code: REG Site ID: T395 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 - 0.04	4.5D	0.085A	4H	2.3	0.41	0.07	0.64F	5.9A	7.4F	1.19
	5.6A							25C		0.28
0.04 - 0.1	5.4A	0.06A								
0.1 - 0.2	5.2A	0.04A								
0.2 - 0.3	4.3D	0.023A	0.18H	0.32	0.09	0.16	1.5F	2.3A	2.3F	6.96
	5.1A							13C		1.23
0.3 - 0.4	5.1A	0.02A								
0.4 - 0.6	4.1D	0.019A	0.03H	0.19	0.05	0.22	2.19F	2.1A	2.7F	10.48
	5A							9C		2.44
0.6 - 0.9	4.9A	0.018A								
0.9 - 1.2	3.9D	0.018A	0.07H	0.13	0.06	0.31	2.81F	1.7A	3.4F	18.24
	5A							9C		3.44
1.2 - 1.5	5A	0.021A								
1.5 - 1.8	3.9D	0.02A	0.03H	0.12	0.04	0.32	2.53F	1.4A	3F	22.86
	4.9A							9C		3.56
1.8 - 2.1	4.9A	0.017A								

[illegible][illegible]

Project Name: Regional
Project Code: REG **Site ID:** T395 **Observation ID:** 1
Agency Name: CSIRO Division of Soils (QLD)

Laboratory Analyses Completed for this profile

10A1	Total sulfur - X-ray fluorescence
12_HF_CU	Total element - Cu(mg/kg) - HF/HClO ₄ Digest
12_HF_FE	Total element - Fe(%) - HF/HClO ₄ Digest
12_HF_MN	Total element - Mn(mg/kg) - HF/HClO ₄ Digest
12_HF_ZN	Total element - Zn(mg/kg) - HF/HClO ₄ Digest
13C1_FE	Citrate/dithionite-extractable iron, aluminium, Manganese and Silicon
15A2_CEC	Exchangeable bases- 1M ammonium chloride at pH 7.0, pretreatment for soluble salts
15D1_CEC	CEC - 1M ammonium acetate at pH 7.0, pretreatment for soluble salts; manual leach
15E1_CA	Exchangeable bases (Ca ²⁺ ,Mg ²⁺ ,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
15G_C	Exchange acidity (hydrogen and aluminium) - meq per 100g of soil - By 1M KCl exch. acidity by titration to pH 8.4
15J1	Effective CEC
17A1	Total potassium - X-ray fluorescence
2A1	Air-dry moisture content
3A1	EC of 1:5 soil/water extract
4A1	pH of 1:5 soil/water suspension
4C1	pH of 1:5 soil/1M potassium chloride extract - direct
5A2	Chloride - 1:5 soil/water extract, automated colour
6B3	Total organic carbon - high frequency induction furnace, infrared
7A2	Total nitrogen - semimicro Kjeldahl , automated colour
9A1	Total phosphorus - X-ray fluorescence
9G_BSES	Available P (mg/kg) - Acid P - 0.005M H ₂ SO ₄ (BSES)
9H1	Phosphate retention
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
P10_GRAV	Gravel (%)