**Project Name:** Regional

**Project Code:** T433 Observation ID: 1 REG Site ID:

**CSIRO Division of Soils (QLD) Agency Name:** 

**Site Information** 

Locality: M.G. Cannon 1KM to west of Bruce Highway 2KM south of Euramo:

Desc. By: Date Desc.: 23/09/85 Elevation: No Data Map Ref.: Sheet No.: 8061 1:100000 Rainfall: 3800 Northing/Long.: 145.923611111111 Runoff: Very slow

Very poorly drained Easting/Lat.: -18.0166666666667 Drainage:

Geology

ExposureType: Conf. Sub. is Parent. Mat.: Undisturbed soil core No Data

**Substrate Material:** Geol. Ref.: Unconsolidated material (unidentified) Qa

**Land Form** 

Rel/Slope Class: Level plain <9m <1% Pattern Type: Alluvial plain Morph. Type: Closed Depression Relief: No Data Elem. Type: Swamp **Slope Category:** Level Aspect: No Data Slope: <1 %

Surface Soil Condition (dry): Other, Soft

**Erosion:** 

**Soil Classification** 

**Australian Soil Classification: Mapping Unit:** N/A Humose Dermosolic Redoxic Hydrosol **Principal Profile Form:** Dy5.11 **ASC Confidence: Great Soil Group:** Humic gley

All necessary analytical data are available.

Site Disturbance: No effective disturbance. Natural

**Vegetation:** 

Tall Strata - Tree, 6.01-12m, Mid-dense. \*Species includes - Melaleuca species, Trigonella suavissima, Nauclea

## **Surface Coarse Fragments:**

Profile Morpholog	αv
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Pro	offie Morphology	
A1I	h 0 - 0.1 m	Black (10YR2/1-Moist); Black (10YR2/1-Dry); ; Loam (Sapric); Moderate grade of structure, 5-10 mm, Cast; Weak grade of structure, 2-5 mm, Granular; Earthy fabric; Few (<1 per 100mm2) Very fine (0.075-1mm) macropores, Moist; Very weak consistence; Common, fine (1-2mm) roots;
	0.1 - 0.2 m	Black (10YR2/1-Moist); Black (10YR2/1-Dry); ; Loam (Sapric); Weak grade of structure, 5-10 mm, Cast; Weak grade of structure, 2-5 mm, Granular; Earthy fabric; Few (<1 per 100mm2) Very fine (0.075-1mm) macropores, Very weak consistence; Common, fine (1-2mm) roots;
	0.2 - 0.3 m	Black (10YR2/1-Moist); Black (10YR2/1-Dry); ; Loam (Sapric); Weak grade of structure, 5-10 mm, Cast; Weak grade of structure, 2-5 mm, Granular; Earthy fabric; Few (<1 per 100mm2) Very fine (0.075-1mm) macropores, Very weak consistence; Common, fine (1-2mm) roots;
A2I	h 0.3 - 0.4 m	Black (10YR2/1-Moist); Black (10YR2/1-Dry); ; Silty loam (Sapric); Weak grade of structure, 5-10 mm, Cast; Weak grade of structure, 2-5 mm, Granular; Earthy fabric; Few (<1 per 100mm2) Very fine (0.075-1mm) macropores, Moist; Very weak consistence; Common, fine (1-2mm) roots; Diffuse, Irregular change to -
А3	0.4 - 0.66 m	Very dark grey (10YR3/1-Moist); Dark grey (10YR4/1-Dry); ; Silty loam (Sapric); Moderate grade of structure, 10-20 mm, Prismatic; Moderate grade of structure, 5-10 mm, Subangular blocky; Smooth-ped fabric; Few (<1 per 100mm2) Very fine (0.075-1mm) macropores, Moist; Weak consistence; Common, fine (1-2mm) roots; Diffuse, Irregular change to -
B1	0.66 - 0.96 m	Dark greyish brown (10YR4/2-Moist); , 10YR62, 0-2% , 5-15mm, Distinct; , 0-2% , 5-15mm, Distinct; Silty clay loam; Moderate grade of structure, 10-20 mm, Prismatic; Moderate grade of structure, 5-10 mm, Angular blocky; Smooth-ped fabric; Few (<1 per 100mm2) Very fine (0.075-1mm) macropores, Moist; Firm consistence; Few, fine (1-2mm) roots;
	0.96 - 1.26 m	Very dark greyish brown (10YR3/2-Moist); , 10YR62, 2-10% , 5-15mm, Distinct; , 2-10% , 5-15mm, Distinct; Silty clay loam; Moderate grade of structure, 10-20 mm, Prismatic; Moderate grade of structure, 5-10 mm, Angular blocky; Smooth ped fabric; Fayy (-1 per 100mm2) Very fine

grade of structure, 5-10 mm, Angular blocky; Smooth-ped fabric; Few (<1 per 100mm2) Very fine (0.075-1mm) macropores, Firm consistence; Few, fine (1-2mm) roots; Abrupt, Irregular change

to -

**Project Name:** Regional

**Project Code:** REG Site ID: T433 Observation ID: 1

**CSIRO** Division of Soils (QLD) **Agency Name:** 

Light brownish grey (2.5Y6/2-Moist); , 7.5YR68, 2-10% , 5-15mm, Distinct; , 10YR68, 2-10% , 5-B21g 1.26 - 1.46 m

15mm, Distinct; Silty medium clay; Moderate grade of structure, 10-20 mm, Prismatic; Moderate grade of structure, 5-10 mm, Angular blocky; Smooth-ped fabric; Few (<1 per 100mm2) Very fine (0.075-1mm) macropores, Moist; Firm consistence; Common (10 - 20 %), Organic (humified),

Coarse (6 - 20 mm), Soft segregations; Few, very fine (0-1mm) roots;

Light brownish grey (2.5Y6/2-Moist); , 7.5YR68, 2-10% , 5-15mm, Distinct; , 10YR68, 2-10% , 5-B22 1.46 - 1.76 m

15mm, Distinct; Silty medium clay; Moderate grade of structure, 10-20 mm, Prismatic; Moderate grade of structure, 5-10 mm, Angular blocky; Smooth-ped fabric; Few (<1 per 100mm2) Very fine

(0.075-1mm) macropores, Moist; Firm consistence; Few, very fine (0-1mm) roots;

B23 1.76 - 1.97 m

Greyish brown (2.5Y5/2-Moist); , 7.5YR68, 2-10% , 5-15mm, Distinct; , 10YR68, 2-10% , 5-15mm, Distinct; Silty medium clay; Moderate grade of structure, 10-20 mm, Prismatic; Moderate grade of structure, 5-10 mm, Angular blocky; Smooth-ped fabric; Few (<1 per 100mm2) Very fine (0.075-1mm) macropores, Moist; Firm consistence; Common (10 - 20 %), Organic (humified),

Coarse (6 - 20 mm), Soft segregations; Few, very fine (0-1mm) roots;

**Morphological Notes Observation Notes** 

**Site Notes** 

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Observation ID: 1

Project Name: Project Code: Agency Name: Regional REG Site ID: T433 CSIRO Division of Soils (QLD)

Depth	рН	1:5 EC		nangeable Mg	Cations K	Ex Na	changeable Acidity	CEC	ECE	C E	SP
m		dS/m	Ga i	ng	N.	Cmol (+)/k				%	, 0
0 - 0.1	4.82A	0.093A	0.06H	1.24	0.34	0.05	4.01F	3.2A 33C	5.7		56 15
0.1 - 0.2 0.2 - 0.3	4.78A 4.69A	0.089A 0.102A	0.34H	0.24	0.18	0.13	3.79F	2.8A 30C	4.7		64 43
0.3 - 0.4 0.4 - 0.66	4.77A 5.04A	0.06A 0.425A	0.16H	0.15	0.11	0.21	3.43F	18J 2.9A	4.1	F 7.	24
0.66 - 0.96	5.1A	0.032A	0.03H	2.12	0.58	0.1	3.32F	24C 2.5A 14C	6.2	F 4.	88 00 71
0.96 - 1.26	4.94A	0.035A						4.7A 23C		-	
1.26 - 1.46	5.12A	0.031A	0.49H	1.34	0.07	0.28	5.5F	5.8A 19C			83 47
1.46 - 1.76 1.76 - 1.97	4.92A 4.75A	0.041A 0.062A		2.36	0.21	0.24	3.13F	4.8A 11C	4.7		00 18
Depth	CaCO3	Organic C	Avail. P	Total P	Total N	Total K	Bulk Density	Par GV	CS FS	Analysis Silt C	lay
m	%	%	mg/kg	%	%	%	Mg/m3		%		
0 - 0.1		8.9C	30A 304B	0.164A	0.4	1A 0.86A	<b>A</b>	0	2D (	6 44	48
0.1 - 0.2 0.2 - 0.3		8.3C 7.25C	178B 166B	0.154A	0.3	4A 0.89A	٨	0 0	5D :	6 45 5 44	48 46
0.3 - 0.4 0.4 - 0.66		6.2C 4.76C	25A 203B	0.134A	0.2	6A 0.92A	<b>\</b>	0 0	-	7 39 4 40	45 54
0.66 - 0.96 0.96 - 1.26		3.31C	255B	0.132A	0.1	4A 0.91 <i>A</i>	٨	0 0		5 41 3 37	49 58
1.26 - 1.46		3.15C	12A 56B	0.041A	0.1	2A 0.97A	٨	ő		2 38	59
1.46 - 1.76 1.76 - 1.97		1.22C	17A 20B	0.031A	0.0	5A 1.7A		0		14 49 13 50	36 35
Depth COLE Gravimetric/Volumetric Water Contents K sat K unsat											
	COLE		Grav	imetric/Vol	umetric V	Vater Conte	nts		K sat	K unsat	
m	COLE	Sat.	Gravi 0.05 Bar	0.1 Bar	umetric V 0.5 Bar ı - m3/m3	1 Bar		Bar	K sat mm/h	K unsat mm/h	

<sup>0 - 0.1</sup> 0.1 - 0.2 0.2 - 0.3 0.3 - 0.4 0.4 - 0.66

<sup>0.4 - 0.66</sup> 0.66 - 0.96 0.96 - 1.26 1.26 - 1.46 1.46 - 1.76 1.76 - 1.97

Project Name: Project Code: Agency Name: Regional REG Site ID: T433 CSIRO Division of Soils (QLD) Observation ID: 1

Project Name: Regional

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Agency Name: CSIRO Division of Soils (QLD)

## **Laboratory Analyses Completed for this profile**

10A1 Total sulfur - X-ray fluorescence

12\_HF\_CUTotal element - Cu(mg/kg) - HF/HClO4 Digest12\_HF\_FETotal element - Fe(%) - HF/HClO4 Digest12\_HF\_MNTotal element - Mn(mg/kg) - HF/HClO4 Digest12\_HF\_ZNTotal element - Zn(mg/kg) - HF/HClO4 Digest

13C1\_AL Citrate/dithionite-extractable iron, aluminium, Manganese and Silicon 13C1\_FE Citrate/dithionite-extractable iron, aluminium, Manganese and Silicon

15\_NR\_CEC CEC - meq per 100g of soil - Not recorded

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
15E1\_CA
15E1\_K
15E1\_MG
15E1\_NA
15E1\_NA
15E1\_NA
15E1\_NA
15E1\_NA
15E1\_NA
15E1\_NA
15E1\_CA
Exchangeable bases, CEC and AEC by compulsive exchange, no pretreatment for soluble salts
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Exchangeable bases, CEC and AEC by compulsive exchange, no pretreatment for soluble salts
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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

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

9B\_9C Available P (mg/kg) - Bicarbonate P - 0.5M NaHCO3 extractable

9G\_BSES Available P (mg/kg) - Acid P - 0.005M H2SO4 (BSES)

9H1 Phosphate retention

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