Project Name: LBV
Project Code: LBV **Site ID:** B48 **Observation ID:** 1
Agency Name: CSIRO Division of Soils (QLD)

Site Information

Desc. By: C.H. Thompson
Date Desc.: 07/09/50
Map Ref.: Sheet No. : 8357 1:100000
Northing/Long.: 147.333333333333
Easting/Lat.: -20.0166666666667
Locality:
Elevation: 41 metres
Rainfall: 750
Runoff: Very slow
Drainage: Imperfectly drained

Geology

ExposureType: Soil pit
Geol. Ref.: CZA
Conf. Sub. is Parent. Mat.: No Data
Substrate Material: Auger boring, 3 m deep,Porous, Unconsolidated material (unidentified)

Land Form

Rel/Slope Class: Gently undulating plains <9m 1-3%
Morph. Type: No Data
Elem. Type: Plain
Slope: 0 %
Pattern Type: Alluvial plain
Relief: No Data
Slope Category: No Data
Aspect: No Data

Surface Soil Condition (dry): Self-mulching

Erosion:

Soil Classification

Australian Soil Classification:
Epicalcareous Self-Mulching Black Vertosol
ASC Confidence:
All necessary analytical data are available.
Mapping Unit: N/A
Principal Profile Form: Ug5.16
Great Soil Group: Black earth

Site Disturbance: No effective disturbance other than grazing by hoofed animals

Vegetation: Low Strata - Tussock grass, 1.01-3m, Closed or dense. *Species includes - Ophiurous exaltatus

Surface Coarse Fragments: No surface coarse fragments

Profile Morphology

AB	0 - 0.1 m	Very dark grey (10YR3/1-Moist); ; Heavy clay; Strong grade of structure, 10-20 mm, Granular; Strong grade of structure, 5-10 mm, Granular; Dry; Firm consistence; Field pH 7.2 (pH meter); Gradual change to -
B2	0.1 - 0.48 m	Very dark grey (10YR3/1-Moist); ; Heavy clay; Strong grade of structure, 50-100 mm, Angular blocky; Strong grade of structure, 5-10 mm, Angular blocky; Wet; Moderately plastic; Very few (0 - 2 %), Calcareous, Medium (2 -6 mm), Nodules; Field pH 8.2 (pH meter); Gradual change to -
B2	0.48 - 0.91 m	Very dark greyish brown (10YR3/2-Moist); ; Heavy clay; Moderate grade of structure, 100-200 mm, Lenticular; Moderate grade of structure, 10-20 mm, Angular blocky; Wet; Moderately plastic; Very few (0 - 2 %), Calcareous, Medium (2 -6 mm), Nodules; Field pH 8.8 (pH meter); Gradual change to -
B2	0.91 - 1.02 m	Dark greyish brown (10YR4/2-Moist); ; Heavy clay; Moderate grade of structure, Angular blocky; Wet; Moderately plastic; Very few (0 - 2 %), Calcareous, Medium (2 -6 mm), Nodules; Very few (0 - 2 %), Gypseous, , Crystals; Field pH 8.1 (pH meter); Gradual change to -
B3	1.02 - 1.27 m	Brown (10YR5/3-Moist); ; Medium heavy clay; Moderate grade of structure, Angular blocky; Moist; Weak consistence; Very few (0 - 2 %), Calcareous, Medium (2 -6 mm), Nodules; Field pH 7.9 (pH meter);

Morphological Notes

Observation Notes

Site Notes

BURDEKIN VALLE

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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 - 0.1	7.2H	0.02B	26.8K	23.5	0.79	1.8	5.6D		58.5E	
0.1 - 0.48	8.2H	0.03B								
0.48 - 0.91	8.8H	0.16B	24.5K	17.7	0.43	5.7			48.3E	
0.91 - 1.02	8.1H	0.84B	26.5K	16.3	0.44	4.5	0.31D		48E	
1.02 - 1.27	7.9H	0.48B								

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 - 0.1		1.3E	14C	0.02F	0.08B				1C	12	23	62
0.1 - 0.48												
0.48 - 0.91	0.53C								1C	15	21	60
0.91 - 1.02	0.65C								1C	8	30	58
1.02 - 1.27	0.05C								2C	7	32	56

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 - 0.1										
0.1 - 0.48										
0.48 - 0.91										
0.91 - 1.02										
1.02 - 1.27										

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Laboratory Analyses Completed for this profile

15_NR	Sum of Ex. cations + Ex. acidity - Not recorded
15_NR_CA	Exch. basic cations (Ca++) - meq per 100g of soil - Not recorded
15_NR_H	Hydrogen Cation - meq per 100g of soil - Not recorded
15_NR_K	Exch. basic cations (K++) - meq per 100g of soil - Not recorded
15_NR_MG	Exch. basic cations (Mg++) - meq per 100g of soil - Not recorded
15_NR_NA	Exch. basic cations (Na++) - meq per 100g of soil - Not recorded
19B_NR	Calcium Carbonate (CaCO3) - Not recorded
2_LOI	Loss on Ignition (%)
2A1	Air-dry moisture content
3_NR	Electrical conductivity or soluble salts - Not recorded
4_NR	pH of soil - Not recorded
5_NR	Water soluble Chloride - Cl(%) - Not recordede
6Z	Organic carbon (%) - Not recorded
7_NR	Total nitrogen (%) - Not recorded
9_NR	Available P (mg/kg) - Not recorded
9A_NR	Total element - P(%) - Not recorded
P10_NR_C	Clay (%) - Not recorded
P10_NR_CS	Coarse sand (%) - Not recorded
P10_NR_FS	Fine sand (%) - Not recorded
P10_NR_Z	Silt (%) - Not recorded