Project Name: LBV
Project Code: LBV **Site ID:** B12 **Observation ID:** 1
Agency Name: CSIRO Division of Soils (QLD)

Site Information

Desc. By: G.D. Hubble
Date Desc.: 12/10/48
Map Ref.: Sheet No. : 8358 1:100000
Northing/Long.: 147.209444444445
Easting/Lat.: -19.82
Locality:
Elevation: 21 metres
Rainfall: 800
Runoff: Slow
Drainage: Imperfectly drained

Geology

ExposureType: Soil pit
Geol. Ref.: Cza
Conf. Sub. is Parent. Mat.: No Data
Substrate Material: Auger boring, 2 m deep,Slightly porous, Clay

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: 3 metres
Slope Category: No Data
Aspect: No Data

Surface Soil Condition (dry): Cracking, Hardsetting

Erosion:

Soil Classification

Australian Soil Classification:
Calcic Mottled-Mesonatric Yellow Sodosol
ASC Confidence:
All necessary analytical data are available.
Mapping Unit: N/A
Principal Profile Form: Dy3.43
Great Soil Group: Solodic soil

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

Vegetation: Low Strata - Tussock grass, , . *Species includes - None recorded

Tall Strata - Tree, 6.01-12m, Very sparse. *Species includes - Eucalyptus papuana, Grevillea striata

Surface Coarse Fragments: No surface coarse fragments

Profile Morphology

A1	0 - 0.18 m	Light grey (10YR7/1-Moist); ; Silty loam; Weak grade of structure, 10-20 mm, Angular blocky; Dry; Very weak consistence; Very few (0 - 2 %), Manganiferous, Medium (2 -6 mm), Nodules; Field pH 6 (pH meter); Sharp, Smooth change to -
B21	0.18 - 0.3 m	Light yellowish brown (10YR6/4-Moist); , 10YR52; Medium clay; Moderate grade of structure, 20-50 mm, Angular blocky; Dry; Strong consistence; Very few (0 - 2 %), Manganiferous, Fine (0 - 2 mm), Nodules; Field pH 6.7 (pH meter); Many, very fine (0-1mm) roots; Diffuse change to -
B22	0.3 - 0.53 m	Brown (10YR5/3-Moist); ; Heavy clay; Moderate grade of structure, 20-50 mm, Angular blocky; Moderately moist; Strong consistence; Few (2 - 10 %), Manganiferous, Medium (2 -6 mm), Nodules; Field pH 7.9 (pH meter); Many, very fine (0-1mm) roots; Diffuse change to -
B23	0.56 - 0.81 m	Brown (10YR5/3-Moist); ; Heavy clay; Moderate grade of structure, 10-20 mm, Angular blocky; Moderately moist; Strong consistence; Very few (0 - 2 %), Manganiferous, , Nodules; Common (10 - 20 %), Calcareous, Coarse (6 - 20 mm), Nodules; Field pH 8.9 (pH meter); Diffuse change to -
BC	0.81 - 0.91 m	Yellowish brown (10YR5/4-Moist); ; Medium clay; Moderate grade of structure, 10-20 mm, Angular blocky; Moist; Firm consistence; Few (2 - 10 %), Calcareous, , Nodules; Field pH 9.1 (pH meter); Diffuse change to -
BC	0.91 - 1.52 m	Greyish brown (2.5Y5/2-Moist); ; Fine sandy medium clay; Weak grade of structure, 20-50 mm, Angular blocky; Moist; Weak consistence; Very few (0 - 2 %), Manganiferous, , Nodules; Few (2 - 10 %), Calcareous, , Nodules; Field pH 8.9 (pH meter); Diffuse change to -
BC	1.52 - 1.98 m	Light brownish grey (2.5Y6/3-Moist); ; Light medium clay; Weak grade of structure, 20-50 mm, Angular blocky; Moist; Firm consistence; Few (2 - 10 %), Calcareous, , Nodules; Field pH 9.2 (pH meter);

Morphological Notes

Observation Notes

12-18CM BLEACHED A2 HORIZON

Site Notes

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BURDEKIN VALLE

Project Name: LBV
Project Code: LBV **Site ID:** B12 **Observation ID:** 1
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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 - 0.18	6H	0.02B	2.9K	2.9	0.34	0.33	12.1D		18.6E	
0.18 - 0.3	6.7H	0.16B	6.1K	9.7	0.2	3.7	3.5D		23.2E	
0.3 - 0.53	7.9H	0.29B	8K	13.1	0.23	8.8	1.5D		31.6E	
0.56 - 0.81	8.9H	0.33B								
0.81 - 0.91	9.1H	0.24B								
0.91 - 1.52	8.9H	0.18B	5.7K	9.4	0.22	7.9			23.2E	
1.52 - 1.98	9.2H	0.22B								

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 - 0.18		0.94E	7C	0.01F	0.06B				1C	50	35	14
0.18 - 0.3									1C	38	28	34
0.3 - 0.53									1C	27	22	49
0.56 - 0.81	0.21C											
0.81 - 0.91	0.25C								1C	45	26	28
0.91 - 1.52	0.02C								1C	47	19	32
1.52 - 1.98	0.3C								1C	38	26	33

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 - 0.18									
0.18 - 0.3									
0.3 - 0.53									
0.56 - 0.81									
0.81 - 0.91									
0.91 - 1.52									
1.52 - 1.98									

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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