

Project Name: Bencubbin land resources survey (Merredin North)
Project Code: MDN **Site ID:** 0331 **Observation ID:** 1
Agency Name: Agriculture Western Australia

Site Information

Desc. By: Gerard Grealish
Date Desc.: 09/08/91
Map Ref.:
Northing/Long.: 6565621 AMG zone: 50
Easting/Lat.: 561391 Datum: AGD84
Locality:
Elevation: No Data
Rainfall: No Data
Runoff: No Data
Drainage: No Data

Geology

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

Landform

Rel/Slope Class: No Data
Morph. Type: No Data
Elem. Type: Hillcrest
Slope: %
Pattern Type: Peneplain
Relief: No Data
Slope Category: No Data
Aspect: No Data

Surface Soil Condition Hardsetting

Erosion

Soil Classification

Australian Soil Classification:
 Calcic Subnatric Red Sodosol
ASC Confidence:
 Analytical data are incomplete but reasonable confidence.
Mapping Unit: N/A
Principal Profile Form: Dy2.53
Great Soil Group: N/A

Site Disturbance

Vegetation

Surface Coarse Fragments

Profile Morphology

A1 0 - 0.1 m Very dark greyish brown (10YR3/2-Moist); ; Sandy loam; Weak grade of structure, 200-500 mm, Angular blocky; Rough-ped fabric; Moderately moist; Very firm consistence; Field pH 7 (pH meter); Many, very fine (0-1mm) roots; Sharp, Smooth change to -
 B21 0.1 - 0.35 m Yellowish red (5YR4/6-Moist); ; Light medium clay; Massive grade of structure; Earthy fabric; Moderately moist; Strong consistence; Field pH 9 (pH meter); Many, very fine (0-1mm) roots; Gradual, Irregular change to -
 B22 0.35 - 0.85 m Yellowish red (5YR5/6-Moist); ; Light medium clay; Massive grade of structure; Earthy fabric; Moderately moist; Strong consistence; 20-50%, coarse fragments; Many (20 - 50 %), Unidentified, Very coarse (20 - 60 mm), Nodules; Field pH 9.5 (pH meter); Few, very fine (0-1mm) roots;
 0.85 - m ;

Morphological Notes

A1 10% CLAY
 B21 45% CLAY
 B22 45% CLAY

Observation Notes

Site Notes

Rob McAndrew-paddock 8

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Laboratory Test Results:

Depth	pH	1:5 EC	Ca	Exchangeable Mg	Cations K	Na	Exchangeable Acidity	CEC	ECEC	ESP
m		dS/m				Cmol (+)/kg				%

0.01 - 0.05	6B 6.6H	7B	6.76H	0.57	0.57	0.21	0.02J	8.11D	
0.2 - 0.25	7.5B 8.3H	17B	6.56E	3.72	0.48	0.85		16B	11.61D 5.31
0.7 - 0.75	8.4B 9.3H	85B	2.73E	5.99	1.1	6.42		16B	16.24D 40.13

Depth	CaCO ₃	Organic C Clay	Avail. P	Total P	Total N	Total K	Bulk Density	Particle Size Analysis
m	%	%	mg/kg	%	%	%	Mg/m ³	GV CS FS Silt
0.01 - 0.05 12.2		0.81D		180B				8.1
0.2 - 0.25 36.6	<2C	0.31D		60B				9.4
0.7 - 0.75 39.6	10C	0.17D		53B				11.2

Laboratory Analyses Completed for this profile

15_NR_BSa	Exchangeable bases (Ca++) - meq per 100g of soil - Auto calculated from available
15_NR_CMR	Exchangeable bases (Ca/Mg ratio) - Not recorded
15C1_CA	Exchangeable bases (Ca ²⁺ ,Mg ²⁺ ,Na ⁺ ,K ⁺) - alcoholic 1M ammonium chloride at pH 8.5,
pretreatment for	soluble salts
15C1_CEC	CEC - alcoholic 1M ammonium chloride at pH 8.5, pretreatment for soluble salts
15C1_K	Exchangeable bases and CEC - alcoholic 1M ammonium chloride at pH 8.5, pretreatment for
soluble salts	
15C1_MG	Exchangeable bases and CEC - alcoholic 1M ammonium chloride at pH 8.5, pretreatment for
soluble salts	
15C1_NA	Exchangeable bases and CEC - alcoholic 1M ammonium chloride at pH 8.5, pretreatment for
soluble salts	
15E1_AL	Exchangeable Al - by compulsive exchange, no pretreatment for soluble salts
15E1_CA	Exchangeable bases (Ca ²⁺ ,Mg ²⁺ ,Na ⁺ ,K ⁺) by compulsive exchange, no pretreatment for soluble
salts	
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_MN	Exchangeable bases (Mn ²⁺) by compulsive exchange, no pretreatment for soluble salts
15E1_NA	Exchangeable bases, CEC and AEC by compulsive exchange, no pretreatment for soluble salts
15J_BASES	Sum of Bases
15L1_a	Exchangeable bases Base saturation percentage (BSP) - Auto calculated from available using
Sum of Cations	and measured clay
15N1_a	Exchangeable sodium percentage (ESP) - Auto calculated from available using CEC
15N1_b	Exchangeable sodium percentage (ESP) - Auto calculated from available using Sum of Cations
18A1_NR	Bicarbonate-extractable potassium (not recorded)
19B_NR	Calcium Carbonate (CaCO ₃) - Not recorded
3_NR	Electrical conductivity or soluble salts - Not recorded
4_NR	pH of soil - Not recorded
4B1	pH of 1:5 soil/0.01M calcium chloride extract - direct
6A1_UC	Organic carbon (%) - Uncorrected Walkley and Black method
9A3	Total Phosphorus (ppm) - semimicro kjeldahl, automated colour
9B_NR	Bicarbonate-extractable phosphorus (not recorded)
9H1	Anion storage capacity
P10_1m2m	1000 to 2000u particle size analysis, (method not recorded)
P10_20_75	20 to 75u particle size analysis, (method not recorded)
P10_75_106	75 to 106u particle size analysis, (method not recorded)
P10_NR_C	Clay (%) - Not recorded
P10_NR_Saa	Sand (%) - Not recorded arithmetic difference, auto generated

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P10_NR_Z	Silt (%) - Not recorded
P10106_150	106 to 150u particle size analysis, (method not recorded)
P10150_180	150 to 180u particle size analysis, (method not recorded)
P10180_300	180 to 300u particle size analysis, (method not recorded)
P10300_600	300 to 600u particle size analysis, (method not recorded)
P106001000	600 to 1000u particle size analysis, (method not recorded)