

Project Name: Bradshaw
Project Code: BRD **Site ID:** 308 **Observation ID:** 1
Agency Name: CSIRO Division of Soils (SA)

Site Information

Desc. By:	I. Hollingsworth	Locality:	
Date Desc.:	17/10/96	Elevation:	No Data
Map Ref.:	Sheet No. : 5067-3 1:50000	Rainfall:	No Data
Northing/Long.:	8310285 AMG zone: 52	Runoff:	No runoff
Easting/Lat.:	671863 Datum: AGD66	Drainage:	Poorly drained

Geology

ExposureType:	Auger boring	Conf. Sub. is Parent. Mat.:	No Data
Geol. Ref.:	Qa	Substrate Material:	Slightly porous, Alluvium

Land Form

Rel/Slope Class:	Level plain <9m <1%	Pattern Type:	Anastomatic plain
Morph. Type:	Flat	Relief:	0 metres
Elem. Type:	Plain	Slope Category:	Level
Slope:	0 %	Aspect:	No Data

Surface Soil Condition (dry): Cracking, Cryptogam surface

Erosion:

Soil Classification

Australian Soil Classification:	Mapping Unit:	13
Endocalcareous Crusty Grey Vertosol Non-gravelly Medium fine Medium fine Very deep	Principal Profile Form:	N/A
ASC Confidence:	Great Soil Group:	N/A

All necessary analytical data are available.

Site Disturbance:

Vegetation:

Tall Strata - Tussock grass, 0.51-1m, Closed or dense. *Species includes - Sorghum timorense

Surface Coarse Fragments: No surface coarse fragments

Profile Morphology

A1	0 - 0.03 m	Dark greyish brown (2.5Y4/2-Moist); , 0-0% ; Light clay; Massive grade of structure, 5-10 mm, Platy; Earthy fabric; Medium, (5 - 10) mm crack; Common (1-5 per 100mm2) Medium (2-5mm) macropores, Dry; Very plastic; Moderately sticky; Field pH 6.5 (Raupach); Few, very fine (0-1mm) roots;
B21	0.03 - 0.1 m	Very dark greyish brown (2.5Y3/2-Moist); , 10YR44, 10-20% , 5-15mm, Faint; Light medium clay; Strong grade of structure, 20-50 mm, Subangular blocky; Moderate grade of structure, 50-100 mm, Subangular blocky; Smooth-ped fabric; Medium, (5 - 10) mm crack; Common (1-5 per 100mm2) Medium (2-5mm) macropores, Dry; Very plastic; Normal plasticity; Very sticky; Field pH 6.5 (Raupach); Few, very fine (0-1mm) roots;
B22	0.1 - 0.3 m	Dark greyish brown (2.5Y4/2-Moist); , 0-0% ; Medium clay; Strong grade of structure, 2-5 mm, Angular blocky; Smooth-ped fabric; Medium, (5 - 10) mm crack; Common (1-5 per 100mm2) Medium (2-5mm) macropores, Dry; Very plastic; Normal plasticity; Very sticky; Field pH 6.5 (Raupach);
B23	0.3 - 0.5 m	Light olive brown (2.5Y5/4-Moist); , 0-0% ; Medium clay; Strong grade of structure, 2-5 mm, Angular blocky; Smooth-ped fabric; Fine (1-2mm) macropores, Dry; Very plastic; Normal plasticity; Very sticky; Field pH 7 (Raupach);
B24	0.5 - 0.75 m	Dark greyish brown (2.5Y4/2-Moist); , 0-0% ; Medium clay; Strong grade of structure, 2-5 mm, Angular blocky; Smooth-ped fabric; Fine (1-2mm) macropores, Moderately moist; Very plastic; Normal plasticity; Moderately sticky; Very few (0 - 2 %), Ferromanganiferous, Fine (0 - 2 mm), Nodules; Field pH 8.5 (Raupach);
B24	0.75 - 1.2 m	Olive brown (2.5Y4/4-Moist); , 0-0% ; Medium clay; Strong grade of structure, 2-5 mm, Angular blocky; Smooth-ped fabric; Very fine (0.075-1mm) macropores, Moderately moist; Very plastic; Normal plasticity; Slightly sticky; Field pH 9 (Raupach);

Morphological Notes

Observation Notes

Site Notes

VERTOSOL, GREY,.....,V.GRAVELLY,.....V.DEEP

Observation ID: 1

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 - 0.03	5C 5.9A	0.04A	2.41C	5.18	0.69	0.17		12.9K	8.4D	1.32
0.03 - 0.1	4.9C 6.1A	0.03A	2.77C	7.47	0.56	0.24		14.6K	11D	1.64

Depth	CaCO3	Organic	Avail.	Total	Total	Total	Bulk	Particle	Size	Analysis	
m	%	C	P	P	N	K	Density	GV	CS	FS	Silt Clay
		%	mg/kg	%	%	%	Mg/m3			%	
0 - 0.03		1.13C	<2E						4.1A	24.3	32.5 35.8
0.03 - 0.1		0.95C	<2E						2.5A	16.6	32.3 46.6

[illegible]

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Laboratory Analyses Completed for this profile

15B1_CA	Exchangeable bases (Ca ²⁺ ,Mg ²⁺ ,Na ⁺ ,K ⁺) - 1M ammonium chloride at pH 7.0, no pretreatment for soluble salts
15B1_K	Exchangeable bases and CEC - 1M ammonium chloride at pH 7.0, no pretreatment for soluble salts
15B1_MG	Exchangeable bases and CEC - 1M ammonium chloride at pH 7.0, no pretreatment for soluble salts
15B1_NA	Exchangeable bases and CEC - 1M ammonium chloride at pH 7.0, no pretreatment for soluble salts
15I3	CEC measurement - automated determination of ammonium and chloride ions
15J_BASES	Sum of Bases
2A1	Air-dry moisture content
3A1	EC of 1:5 soil/water extract
4A1	pH of 1:5 soil/water suspension
4B2	pH of 1:5 soil/0.01M calcium chloride extract - following Method 4A1
6B3	Total organic carbon - high frequency induction furnace, infrared
9B2	Bicarbonate-extractable phosphorus - automated colour
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