Project Name: **Irrigated Soils of the M.I.A., NSW**
Project Code: **IS** **Site ID:** **C645a** **Observation ID:** **1**
Agency Name: **CSIRO Division of Soils (ACT)**

Site Information

Desc. By: J. Loveday
Locality: Approximatres kilomatres southwest of Griffith. Benerembah, NSW.
Date Desc.: 01/01/66
Elevation: No Data
Map Ref.: 1:100000
Rainfall: No Data
Northing/Long.: 145.86666667
Runoff: No Data
Easting/Lat.: -34.36666667
Drainage: No Data

Geology

ExposureType: Auger boring
Conf. Sub. is Parent. Mat.: No Data
Geol. Ref.: No Data
Substrate Material: No Data

Land Form

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

Surface Soil Condition (dry):

Erosion:

Soil Classification

Australian Soil Classification:
N/A
ASC Confidence:
Confidence level not specified
Mapping Unit: N/A
Principal Profile Form: Dr2.33
Great Soil Group: Red-brown earth

Site Disturbance:
Cultivation. Irrigated, past or present

Vegetation:

Surface Coarse Fragments:

Profile Morphology

0 - 0.1 m	Brown (7.5YR4/4-Moist); Yellowish brown (10YR5/4-Moist); , 10YR54; Light clay; , Angular blocky; Very strong consistence;
0.1 - 0.4 m	Brown (7.5YR4/3-Moist); ; Medium clay; , Angular blocky;
0.4 - 0.7 m	Brown (7.5YR5/4-Moist); ; Medium clay; Smooth-ped fabric; Very few (0 - 2 %), Calcareous, , Concretions;
0.7 - 0.9 m	Light brownish grey (2.5Y6/2-Moist); , 10YR43; Silty clay; Very few (0 - 2 %), Calcareous, , Concretions; Very few (0 - 2 %), Gypseous, , ;

Morphological Notes

Texture LC to CL and weakly mottled.
Shiny surfaces.
Texture is a micaceous silty clay. Occasional pockets of gypsum and carbonate concretions.

Observation Notes

GSG = transitional RBE. PPF = probably Dr2.33 before cultivation.

Site Notes

Site a and b are no more than 10 to 20m apart

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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 - 10	6.9A	0.18A	9.1A	7.4	1.2	1.6	4.7D		24B	
10 - 20	8.1A	0.21A								
20 - 30	9A	0.45A	6.5E	14.3	0.9	5.1	0D		26.8B	
30 - 40	9A	0.66A								
40 - 60	8.9A	1.04A								
60 - 80	8A	2.8A								

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 - 10							1.31		10C	32	16	42
10 - 20							1.45					
20 - 30	0.53B						1.45		4C	22	12	62
30 - 40							1.54					
40 - 60							1.58					
60 - 80							1.59					

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 - 10								0.16B		
10 - 20										
20 - 30								0.19B		
30 - 40								0.19B		
40 - 60								0.19B		
60 - 80								0.18B		

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Laboratory Analyses Completed for this profile

15_NR_H	Hydrogen Cation - meq per 100g of soil - Not recorded
15A1_CA	Exchangeable bases (Ca2+,Mg2+,Na+,K+) - 1M ammonium chloride at pH 7.0, no pretreatment for soluble salts
15A1_K	Exchangeable bases (Ca2+,Mg2+,Na+,K+) - 1M ammonium chloride at pH 7.0, no pretreatment for soluble salts
15A1_MG	Exchangeable bases (Ca2+,Mg2+,Na+,K+) - 1M ammonium chloride at pH 7.0, no pretreatment for soluble salts
15A1_NA	Exchangeable bases (Ca2+,Mg2+,Na+,K+) - 1M ammonium chloride at pH 7.0, no pretreatment for soluble salts
15C1_CA	Exchangeable bases (Ca2+,Mg2+,Na+,K+) - 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
15J_H	Sum of Ex. cations + Ex. acidity - Sum of basic exch. cations and exch. (Hydrogen)
19B1	Carbonates - manometric
3A1	EC of 1:5 soil/water extract
4A1	pH of 1:5 soil/water suspension
5A1	Chloride - 1:5 soil/water extract, potentiometric titration
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
P3A1	Bulk density - g/cm3
P3B_GV_15	15 BAR Moisture g/g - Gravimetric using pressure plate
P6_LP	Dispersion Index (Loveday and Pyle, 1973)