Project Name: Cooloola
Project Code: Cooloola **Site ID:** B872 **Observation ID:** 1
Agency Name: CSIRO Division of Soils (QLD)

Site Information

Desc. By:	C.H. Thompson	**Locality:**	Townshend Island. SWB survey site SD32.
Date Desc.:	17/05/76	**Elevation:**	30 metres
Map Ref.:	Sheet No. : 8953-1 1:50000	**Rainfall:**	No Data
Northing/Long.:	150.4799825	**Runoff:**	No Data
Easting/Lat.:	-22.21152083	**Drainage:**	Imperfectly drained

Geology

ExposureType:	No Data	**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:**	30 metres
Elem. Type:	Dune	**Slope Category:**	No Data
Slope:	%	**Aspect:**	No Data

Surface Soil Condition (dry):

Erosion:

Soil Classification

Australian Soil Classification:
Podosol
ASC Confidence:
Confidence level not specified

Mapping Unit: N/A
Principal Profile Form: N/A
Great Soil Group: Podzol

Site Disturbance:

Vegetation:

Surface Coarse Fragments:

Profile Morphology

A11	0 - 0.01 m	Grey (10YR6/1-Moist); Grey (10YR5/1-Moist); ; Sand; Single grain grade of structure; Loose consistence;
A12	0.01 - 0.1 m	Very dark grey (10YR3/1-Moist); , 10YR41; Sand; Single grain grade of structure; Weak consistence; Field pH 4.5 (Raupach);
A12	0.1 - 0.2 m	Very dark grey (10YR3/1-Moist); , 10YR41; Sand; Single grain grade of structure; Weak consistence;
A12	0.2 - 0.3 m	Very dark grey (10YR3/1-Moist); , 10YR41; Sand; Single grain grade of structure; Weak consistence;
A12	0.3 - 0.5 m	Very dark grey (10YR3/1-Moist); , 10YR41; Sand; Single grain grade of structure; Weak consistence; Many, coarse (>5mm) roots; Diffuse change to -
A13	0.5 - 0.6 m	Dark grey (10YR4/1-Moist); Very dark grey (10YR3/1-Moist); ; Sand; Single grain grade of structure; Weak consistence;
A14	0.6 - 0.9 m	Dark greyish brown (10YR4/2-Moist); Grey (10YR5/1-Moist); ; Sand; Single grain grade of structure; Very weak consistence;
A15	0.9 - 1.2 m	Greyish brown (10YR5/2-Moist); Dark grey (10YR4/1-Moist); ; Sand; Single grain grade of structure; Very weak consistence;
A2	1.2 - 1.35 m	Pale brown (10YR6/3-Moist); Very pale brown (10YR7/3-Dry); ; Sand; Single grain grade of structure; Loose consistence; Field pH 6.3 (Raupach);
B2	1.35 - 1.5 m	Dark reddish brown (5YR3/4-Moist); Dark brown (7.5YR3/3-Moist); ; Sand; Single grain grade of structure; Weak consistence; Field pH 5.5 (Raupach);
B2	1.5 - 1.8 m	Dark reddish brown (5YR3/4-Moist); Dark brown (7.5YR3/3-Moist); ; Sand; Weak consistence;
B22	1.8 - 2.1 m	Dark brown (7.5YR3/3-Moist); Brown (7.5YR4/4-Moist); , 7.5YR56; Sand; Single grain grade of structure; Weak consistence;
B3	2.1 - 2.4 m	Strong brown (7.5YR5/6-Moist); , 7.5YR44; , 7.5YR66; Sand; Single grain grade of structure; Very weak consistence;
B3	2.4 - 2.7 m	Strong brown (7.5YR5/6-Moist); , 7.5YR44; , 7.5YR66; Sand; Very weak consistence;

Project Name: **Cooloola**
Project Code: **Cooloola** **Site ID:** **B872** **Observation ID:** **1**
Agency Name: **CSIRO Division of Soils (QLD)**

C1	2.7 - 3 m	Reddish yellow (7.5YR6/6-Moist); Strong brown (7.5YR5/6-Moist); ; Sand; Single grain grade of structure; Loose consistence;
C1	3 - 3.3 m	Reddish yellow (7.5YR6/6-Moist); ; Sand;
C1	3.3 - 3.6 m	Reddish yellow (7.5YR6/6-Moist); ; Sand;
C2	3.6 - 3.9 m	Reddish yellow (7.5YR6/6-Moist); ; Sand;

Morphological Notes

A11	Discrete OM. Rain washed surface is much thinner than at Cooloola - rainfall intensities are unlikely to be lower but are fires less frequent?
A12	Thick A2 with diffuse OM. A2 is bleached dry and boundary to B is clear and uneven over 135/145cm depth.
A12	Many roots at 30 - 40cm depth - up to 20mm size slight root development 5-10mm size top of B but few roots in lower A1 and A2.
A13	Diffuse OM.
A14	Sl diffuse OM.
A15	Sl diffuse OM.
B2	Translocated OM and Fe.
B22	Translocated OM and Fe.
B3	Sl translocated OM and Fe > with depth.

Observation Notes

Parent material: Aeolian siliceous sands. Landform: nose of V-shaped sand dune.

Site Notes

Project Name: Cooloola
Project Code: Cooloola **Site ID:** B872 **Observation ID:** 1
Agency Name: CSIRO Division of Soils (QLD)

Laboratory Test Results:

Depth	pH	1:5 EC	Exchangeable Cations				Exchangeable	CEC	ECEC	ESP
			Ca	Mg	K	Na	Acidity			
m		dS/m	Cmol (+)/kg							%
0 - 0.01										
0 - 0.1	4.9H	<0.03B								
0.1 - 0.2	4.7H	<0.03B	0.6K	0.6	<0.1	<0.1	0.7D		1.9F	
0.2 - 0.3	4.6H	<0.03B								
0.3 - 0.5	4.5H	<0.03B								
0.5 - 0.6	4.6H	<0.03B								
0.6 - 0.9	4.7H	<0.03B								
0.9 - 1.2	4.9H	<0.03B								
1.2 - 1.35	4.9H	<0.03B								
1.35 - 1.5	4.7H	<0.03B	<0.1K	<0.1	<1	<0.1	0.6D		0.6F	
1.5 - 1.8	4.9H	<0.03B								
1.8 - 2.1	5H	<0.03B								
2.1 - 2.4	4.9H	<0.03B	<0.1K	<0.1	<0.1	<0.1	0.3D		0.4F	
2.4 - 2.7	5H	<0.03B								
2.7 - 3										
3 - 3.3	4.9H	<0.03B	<0.1K	<0.1	<0.1	<0.1	0.4D		0.5F	
3.3 - 3.6										
3.6 - 3.9	5H	<0.03B								

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 - 0.01												
0 - 0.1												
0.1 - 0.2									98I		0	0
0.2 - 0.3												
0.3 - 0.5												
0.5 - 0.6												
0.6 - 0.9												
0.9 - 1.2												
1.2 - 1.35												
1.35 - 1.5									99I		0	0
1.5 - 1.8												
1.8 - 2.1												
2.1 - 2.4												
2.4 - 2.7		0.04E			0.004B							
2.7 - 3									99I		0	0
3 - 3.3		0.07E	4B		0.003B							
3.3 - 3.6												
3.6 - 3.9		0.03E	4B		0.001B							

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 - 0.01										
0 - 0.1										
0.1 - 0.2										
0.2 - 0.3										
0.3 - 0.5										

Project Name: **Cooloola**
Project Code: **Cooloola** **Site ID:** **B872** **Observation ID:** **1**
Agency Name: **CSIRO Division of Soils (QLD)**

0.5 - 0.6
0.6 - 0.9
0.9 - 1.2
1.2 - 1.35
1.35 - 1.5
1.5 - 1.8
1.8 - 2.1
2.1 - 2.4
2.4 - 2.7
2.7 - 3
3 - 3.3
3.3 - 3.6
3.6 - 3.9

Project Name: **Cooloola**
Project Code: **Cooloola** **Site ID:** **B872** **Observation ID:** **1**
Agency Name: **CSIRO Division of Soils (QLD)**

Laboratory Analyses Completed for this profile

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
15J1	Effective CEC
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
8A1	Total organic carbon/total nitrogen ratio
9G_BSES	Available P (mg/kg) - Acid P - 0.005M H2SO4 (BSES)
P10_NR_C	Clay (%) - Not recorded
P10_NR_S	Sand (%) - Not recorded
P10_NR_Z	Silt (%) - Not recorded