

Project Name: BAGO-MARAGLE FOREST SOIL SURVEY
Project Code: BGM_FSS **Site ID:** 0029 **Observation ID:** 1
Agency Name: CSIRO Division of Soils (ACT)

Site Information

Desc. By:	P. Ryan	Locality:	
Date Desc.:	16/02/96	Elevation:	1043 metres
Map Ref.:	Sheet No. : 8526 DGPS	Rainfall:	No Data
Northing/Long.:	6027877 AMG zone: 55	Runoff:	No Data
Easting/Lat.:	614375 Datum: AGD66	Drainage:	Poorly drained

Geology

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

Land Form

Rel/Slope Class:	No Data	Pattern Type:	No Data
Morph. Type:	Flat	Relief:	No Data
Elem. Type:	Footslope	Slope Category:	No Data
Slope:	3 %	Aspect:	315 degrees

Surface Soil Condition (dry): Firm

Erosion:

Soil Classification

Australian Soil Classification:	Mapping Unit:	N/A
Acidic Dystrophic Brown Dermosol Medium Non-gravelly Clay-loamy Clayey Very deep	Principal Profile Form:	Gn.

ASC Confidence:	Great Soil Group:	N/A
All necessary analytical data are available.		

Site Disturbance: No effective disturbance. Natural

Vegetation:

Surface Coarse Fragments:

Profile Morphology

O1	0 - 0.03 m	Organic Layer; ;
A1	0.03 - 0.13 m	Very dark greyish brown (10YR3/2-Moist); Biological mixing, 10YR54, 2-10% , Faint; Coarse sandy clay loam; Weak grade of structure, 10-20 mm, Subangular blocky; Earthy fabric; Moderately moist; Weak consistence; 20-50%, fine gravelly, 2-6mm, subangular, Quartz, coarse fragments; Field pH 4.5 (Raupach); Common, very fine (0-1mm) roots; Few, fine (1-2mm) roots; Abrupt, Wavy change to -
A2j	0.13 - 0.21 m	Yellowish brown (10YR5/4-Moist); Light grey (10YR7/2-Dry); Biological mixing, 10YR42, 10-20% , Distinct; Substrate influence, 7.5YR56, 2-10% , Faint; Coarse sandy clay loam; Moderate grade of structure, 2-5 mm, Polyhedral; 5-10 mm, Polyhedral; Rough-ped fabric; Moderately moist; Weak consistence; 20-50%, fine gravelly, 2-6mm, subangular, Quartz, coarse fragments; Field pH 3.5 (Raupach); Common, very fine (0-1mm) roots; Clear, Smooth change to -
B21	0.21 - 0.41 m	Yellowish brown (10YR5/6-Moist); Biological mixing, 10YR42, 2-10% , Distinct; Medium sandy clay loam; Strong grade of structure, 5-10 mm, Polyhedral; 10-20 mm, Angular blocky; Rough-ped fabric; Moist; Weak consistence; Field pH 4.5 (Raupach); Few, very fine (0-1mm) roots; Few, fine (1-2mm) roots; Few, medium (2-5mm) roots; Few, coarse (>5mm) roots; Diffuse, Smooth change to -
B22	0.41 - 0.75 m	Strong brown (7.5YR5/6-Moist); ; Light clay; Moderate grade of structure, 10-20 mm, Subangular blocky; Rough-ped fabric; Moist; Weak consistence; Few cutans, <10% of ped faces or walls coated, faint; Field pH 4.5 (Raupach); Few, very fine (0-1mm) roots; Gradual, Wavy change to -
B23	0.75 - 1.23 m	Strong brown (7.5YR5/6-Moist); ; Coarse sandy clay loam; Massive grade of structure; Sandy (grains prominent) fabric; Moist; Weak consistence; 10-20%, fine gravelly, 2-6mm, subangular, Quartz, coarse fragments; Field pH 4.5 (Raupach); Clear change to -
B31	1.23 - 1.43 m	Pale brown (10YR6/3-Moist); Substrate influence, 10YR58, 10-20% , Faint; Clay loam; Earthy fabric; Moist; Firm consistence; Field pH 4.5 (Raupach); Clear change to -
B32	1.43 - 2.33 m	Yellowish brown (10YR5/4-Moist); Substrate influence, 10YR58, 20-50% , Distinct; Substrate influence, 10YR62, 10-20% , Distinct; Coarse sandy clay loam; Sandy (grains prominent) fabric; Moist; Weak consistence; 10-20%, fine gravelly, 2-6mm, subangular, Quartz, coarse fragments; Field pH 4.5 (Raupach); Clear change to -

Project Name: BAGO-MARAGLE FOREST SOIL SURVEY
Project Code: BGM_FSS **Site ID:** 0029 **Observation ID:** 1
Agency Name: CSIRO Division of Soils (ACT)

B33 2.33 - 3.03 m Yellowish brown (10YR5/4-Moist); Substrate influence, 2.5Y62, 20-50% , Distinct; Substrate influence, 7.5YR56, 10-20% , Distinct; Light clay; Smooth-ped fabric; Wet; Firm consistence; Few cutans, <10% of ped faces or walls coated, distinct; Field pH 5 (Raupach);

Morphological Notes

A1 Common coarse sand (quartz).

A2j As for layer 1.

B21 Quartz sand decreases.

B23 Quartz sand increases again.

B31 Pale, dense, little quartz sand.

B32 Sand increases again.

B33 Watertable reached. Sand decreases clay increases and structure is present.

Observation Notes

Site on long footslope/terrace adjacent to swampy drainage line. Texture indicates depositional layers.

Site Notes

COMP 38H,76618-1,100D,825M FROM RD-CK

Project Name: BAGO-MARAGLE FOREST SOIL SURVEY
Project Code: BGM_FSS Site ID: 0029 Observation ID: 1
Agency Name: CSIRO Division of Soils (ACT)

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 - 0.03										
0.03 - 0.13	4.13C		2.72H	0.44	0.33	0.01	1.77J 0K		5.26E	
0.13 - 0.21	3.99C		0.06H	0.12	0.15	0	2J 0K		2.34E	
0.21 - 0.41	4.05C		0.04H	0.1	0.14	0	1.26J 0K		1.55E	
0.41 - 0.75	3.96C		0.45H	0.43	0.3	0.01	2.14J 0K		3.32E	
0.75 - 1.23	3.91C		0.13H	0.44	0.42	0.03	2.29J 0K		3.32E	
1.23 - 1.43	3.75C		0H	0.24	0.48	0.02	3.81J 0K		4.55E	
1.43 - 2.33	3.73C		0.16H	0.52	0.36	0.04	3.75J 0K		4.83E	
2.33 - 3.03	3.8C		0.96H	1.19	0.35	0.06	2.93J 0K		5.5E	

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												
0.03 - 0.13		3.4B		155B	0.13A		1.24	33.85				
0.13 - 0.21		1.62B		108.4B	0.05A		1.39	25.73				
0.21 - 0.41		0.67B		84.1B	0.02A		1.46	37.18				
0.41 - 0.75		0.31B		141.5B	0.02A		1.44	28.87				
0.75 - 1.23		0.14B		140.1B	0.01A		1.45	39.88				
1.23 - 1.43		0.1B		94.5B	0.01A			31.74				
1.43 - 2.33		0.09B		114.2B	0.01A			42.47				
2.33 - 3.03		0.19B		82.6B	0.02A			38.49				

[illegible]

Project Name: BAGO-MARAGLE FOREST SOIL SURVEY
Project Code: BGM_FSS **Site ID:** 0029 **Observation ID:** 1
Agency Name: CSIRO Division of Soils (ACT)

Laboratory Analyses Completed for this profile

15_NR	Sum of Ex. cations + Ex. acidity - Not recorded
15E1_AL	Exchangeable Al - by compulsive exchange, no pretreatment for soluble salts
15E1_CA	Exchangeable bases (Ca2+,Mg2+,Na+,K+) by compulsive exchange, no pretreatment for soluble
15E1_H	Exchangeable H - 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_NA	Exchangeable bases, CEC and AEC by compulsive exchange, no pretreatment for soluble salts
2A1	Air-dry moisture content
4B2	pH of 1:5 soil/0.01M calcium chloride extract - following Method 4A1
6B2	Total organic carbon - high frequency induction furnace, volumetric
7A2	Total nitrogen - semimicro Kjeldahl , automated colour
9A3	Total Phosphorus (ppm) - semimicro kjeldahl, automated colour
P10_GRAV	Gravel (%)
P3A1	Bulk density - g/cm3