Project Name: **BAGO-MARAGLE FOREST SOIL SURVEY**
Project Code: **BGM_FSS** **Site ID:** **0039** **Observation ID:** **1**
Agency Name: **CSIRO Division of Soils (ACT)**

Site Information

Desc. By: P. Ryan
Date Desc.: 16/12/95
Map Ref.: Sheet No. : 8526 DGPS
Northing/Long.: 6030286 AMG zone: 55
Easting/Lat.: 615089 Datum: AGD66
Locality:
Elevation: 1139 metres
Rainfall: No Data
Runoff: No Data
Drainage: Well drained

Geology

ExposureType: Soil pit
Geol. Ref.: Os
Conf. Sub. is Parent. Mat.: Probable
Substrate Material: Schist

Land Form

Rel/Slope Class: No Data
Morph. Type: Mid-slope
Elem. Type: Hillslope
Slope: 33 %
Pattern Type: No Data
Relief: No Data
Slope Category: No Data
Aspect: 225 degrees

Surface Soil Condition (dry): Firm

Erosion:

Soil Classification

Australian Soil Classification:
Acidic Dystrophic Red Dermosol Medium Gravelly Clay-loamy Clayey Deep
Mapping Unit: N/A
Principal Profile Form: Gn2.11

ASC Confidence:
All necessary analytical data are available.
Great Soil Group: No suitable group

Site Disturbance: No effective disturbance. Natural

Vegetation:

Surface Coarse Fragments: 2-10%, coarse gravelly, 20-60mm, angular platy, Schist

Profile Morphology

O1	0 - 0.01 m	Organic Layer; ;
A1	0.01 - 0.17 m	Dark reddish brown (5YR2.5/2-Moist); Biological mixing, 2.5YR32; Clay loam; Moderate grade of structure, 5-10 mm, Polyhedral; 2-5 mm, Polyhedral; Rough-ped fabric; Moist; Weak consistence; 10-20%, medium gravelly, 6-20mm, subrounded platy, Schist, coarse fragments; Field pH 5 (Raupach); Many, very fine (0-1mm) roots; Common, fine (1-2mm) roots; Few, medium (2-5mm) roots; Clear, Wavy change to -
B21	0.17 - 0.39 m	Dark reddish brown (2.5YR3/4-Moist); Biological mixing, 7.5YR32, 2-10% , Faint; Light clay; Strong grade of structure, 5-10 mm, Polyhedral; 2-5 mm, Polyhedral; Rough-ped fabric; Moist; Weak consistence; 10-20%, medium gravelly, 6-20mm, subrounded tabular, Schist, coarse fragments; Field pH 4.5 (Raupach); Common, very fine (0-1mm) roots; Common, fine (1-2mm) roots; Few, medium (2-5mm) roots; Few, coarse (>5mm) roots; Gradual, Smooth change to -
B22	0.39 - 0.57 m	Dark red (2.5YR3/6-Moist); ; Light clay; Moderate grade of structure, 5-10 mm, Polyhedral; 10-20 mm, Angular blocky; Rough-ped fabric; Moist; Weak consistence; 20-50%, medium gravelly, 6-20mm, subrounded tabular, Schist, coarse fragments; Field pH 4.5 (Raupach); Few, very fine (0-1mm) roots; Few, fine (1-2mm) roots; Common, medium (2-5mm) roots; Gradual, Irregular change to -
B23	0.57 - 1.01 m	Red (2.5YR4/6-Moist); ; Clay loam; Weak grade of structure, 5-10 mm, Polyhedral; Earthy fabric; Moist; Weak consistence; 20-50%, coarse gravelly, 20-60mm, subrounded tabular, Schist, coarse fragments; Field pH 4.5 (Raupach); Few, very fine (0-1mm) roots; Gradual, Irregular change to -
BC	1.01 - 1.26 m	Red (2.5YR4/6-Moist); Substrate influence, 7.5YR56, 2-10% , Faint; Loam; Earthy fabric; Moist; Weak consistence; 10-20%, medium gravelly, 6-20mm, subangular tabular, Schist, coarse fragments; Field pH 4.5 (Raupach);

Morphological Notes

B22	Increase in colluvial gravel content and size.
B23	Gravel as above.
BC	Gravel content decreases. Weathered substrate increases.

Observation Notes

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Site Notes

COMP 37H,73977-1,233DEG 250M FROM ROAD

Project Name: BAGO-MARAGLE FOREST SOIL SURVEY
Project Code: BGM_FSS **Site ID:** 0039 **Observation ID:** 1
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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 - 0.01										
0.01 - 0.17	4.63C		10.52H	2.13	0.86	0.01	1.49J 0K		15E	
0.17 - 0.39	3.98C		0.47H	0.49	0.61	0.01	3.83J 0K		5.42E	
0.39 - 0.57	3.89C		0.01H	0.54	0.56	0.01	3.98J 0K		5.1E	
0.57 - 1.01	3.91C		0.04H	0.6	0.43	0.01	3.15J 0K		4.22E	
1.01 - 1.26	3.91C		0H	0.32	0.2	0	2.62J 0K		3.13E	

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												
0.01 - 0.17		7.01B		271.4B	0.24A		0.76	44.1				
0.17 - 0.39		2.09B		149.4B	0.09A		1.09	36.03				
0.39 - 0.57		0.84B		117.8B	0.05A		1.27	41.76				
0.57 - 1.01		0.37B		119.5B	0.03A			47.04				
1.01 - 1.26		0.2B		209.9B	0.02A			42.57				

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										
0.01 - 0.17										
0.17 - 0.39										
0.39 - 0.57										
0.57 - 1.01										
1.01 - 1.26										

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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