Project Name: **BAGO-MARAGLE FOREST SOIL SURVEY**
Project Code: **BGM_FSS** **Site ID:** **0165** **Observation ID:** **1**
Agency Name: **CSIRO Division of Soils (ACT)**

Site Information

Desc. By: P. Ryan
Date Desc.: 06/05/97
Map Ref.: Sheet No. : 8526 DGPS
Northing/Long.: 6030795 AMG zone: 55
Easting/Lat.: 617215 Datum: AGD66
Locality:
Elevation: No Data
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: 31 %
Pattern Type: No Data
Relief: No Data
Slope Category: No Data
Aspect: 270 degrees

Surface Soil Condition (dry): Loose

Erosion:

Soil Classification

Australian Soil Classification:
Haplic Mesotrophic Red Dermosol Medium Moderately gravelly Clay-loamy Clayey Moderately deep

ASC Confidence:
All necessary analytical data are available.

Mapping Unit: N/A
Principal Profile Form: Um6.33
Great Soil Group: No suitable group

Site Disturbance: No effective disturbance. Natural

Vegetation:

Surface Coarse Fragments: 10-20%, medium gravelly, 6-20mm, subangular tabular, ; 10-20%, coarse gravelly, 20-60mm, subangular tabular,

Profile Morphology

O1	0 - 0.04 m	Organic Layer; ;
A1	0.04 - 0.21 m	(7.5YR2.5/1-Moist); Biological mixing, 7.5YR32, 2-10% , Faint; Clay loam; Moderate grade of structure, 2-5 mm, Polyhedral; 5-10 mm, Polyhedral; Rough-ped fabric; Moderately moist; Weak consistence; 20-50%, medium gravelly, 6-20mm, subangular, coarse fragments; Field pH 5.5 (Raupach); Many, very fine (0-1mm) roots; Few, fine (1-2mm) roots; Common, medium (2-5mm) roots; Common, coarse (>5mm) roots; Clear, Wavy change to -
B1	0.21 - 0.34 m	Dark reddish brown (5YR3/3-Moist); Biological mixing, 5YR2.52, 2-10% , Faint; Light clay; Strong grade of structure, 5-10 mm, Polyhedral; 2-5 mm, Polyhedral; Smooth-ped fabric; Moderately moist; Weak consistence; 20-50%, medium gravelly, 6-20mm, subangular, coarse fragments; Few cutans, <10% of ped faces or walls coated, faint; Field pH 5.5 (Raupach); Common, very fine (0-1mm) roots; Common, fine (1-2mm) roots; Few, medium (2-5mm) roots; Gradual, Wavy change to -
B2	0.34 - 0.64 m	Dark red (2.5YR3/6-Moist); Biological mixing, 5YR2.52, 2-10% , Distinct; Light clay; Moderate grade of structure, 5-10 mm, Angular blocky; 20-50 mm, Subangular blocky; Smooth-ped fabric; Moderately moist; Weak consistence; 10-20%, medium gravelly, 6-20mm, subangular, coarse fragments; Few cutans, <10% of ped faces or walls coated, faint; Field pH 5 (Raupach); Few, very fine (0-1mm) roots; Few, fine (1-2mm) roots; Few, medium (2-5mm) roots; Gradual, Irregular change to -
BC	0.64 - 0.89 m	Red (2.5YR4/6-Moist); Biological mixing, 7.5YR2.52, 0-2% , Distinct; Clay loam; Weak grade of structure, 5-10 mm, Subangular blocky; Rough-ped fabric; Moderately moist; Weak consistence; 50-90%, medium gravelly, 6-20mm, subangular, coarse fragments; Field pH 4.5 (Raupach); Few, very fine (0-1mm) roots;

Morphological Notes

A1	Colluvial gravel.
B1	Colluvial gravel.

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B2	One infilled root channel.
BC	Increase in insitu gravel.

Observation Notes

Site Notes

WARNIPERS RD, COMP 14 GROWTH PLOT A

Project Name: BAGO-MARAGLE FOREST SOIL SURVEY
Project Code: BGM_FSS **Site ID:** 0165 **Observation ID:** 1
Agency Name: CSIRO Division of Soils (ACT)

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 - 0.04										
0.04 - 0.21	3.94C		15.03H	2.74	1.3	0.03	0.89J 0K		19.99E	
0.21 - 0.34	5.09C		7.15H	1.58	0.66	0	0.65J 0K		10.03E	
0.34 - 0.64	5.05C		1.44H	1.29	0.55	0	2.18J 0K		5.45E	
0.64 - 0.89	4.06C		0.13H	0.71	0.75	0	4.31J 0K		5.91E	

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 - 0.04												
0.04 - 0.21		8.54B		609.6B	0.31A		0.85	33.08				
0.21 - 0.34		3.25B		378.5B	0.15A		1.20	15.55				
0.34 - 0.64		1.2B		284B	0.07A		1.16	18.28				
0.64 - 0.89		0.44B		284.6B	0.04A			33.57				

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 - 0.04										
0.04 - 0.21										
0.21 - 0.34										
0.34 - 0.64										
0.64 - 0.89										

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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