

Project Name: BAGO-MARAGLE FOREST SOIL SURVEY
Project Code: BGM_FSS **Site ID:** 0138 **Observation ID:** 1
Agency Name: CSIRO Division of Soils (ACT)

Site Information

Desc. By:	P. Ryan	Locality:	
Date Desc.:	20/05/96	Elevation:	529 metres
Map Ref.:	Sheet No. : 8526 DGPS	Rainfall:	No Data
Northing/Long.:	6059906 AMG zone: 55	Runoff:	No Data
Easting/Lat.:	613065 Datum: AGD66	Drainage:	Well drained

Geology

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

Land Form

Rel/Slope Class:	No Data	Pattern Type:	No Data
Morph. Type:	Lower-slope	Relief:	No Data
Elem. Type:	Hillslope	Slope Category:	No Data
Slope:	21 %	Aspect:	315 degrees

Surface Soil Condition (dry): Firm

Erosion:

Soil Classification

Australian Soil Classification:	Acidic Mesotrophic Brown Dermosol Thin Slightly gravelly Clayey Clayey Moderately deep	Mapping Unit:	N/A
ASC Confidence:	All necessary analytical data are available.	Principal Profile Form:	Uf6.12
Site Disturbance:	No effective disturbance. Natural	Great Soil Group:	Brown podzolic soil

Vegetation:

Surface Coarse Fragments:

Profile Morphology

O1	0 - 0.02 m	Organic Layer; ;
A1	0.02 - 0.11 m	Very dark greyish brown (10YR3/2-Moist); Biological mixing, 10YR61, 10-20% , Distinct; Light clay; Moderate grade of structure, 5-10 mm, Polyhedral; 10-20 mm, Subangular blocky; Rough-ped fabric; Moderately moist; Firm consistence; 2-10%, fine gravelly, 2-6mm, angular tabular, Coal, coarse fragments; Field pH 5.5 (Raupach); Common, very fine (0-1mm) roots; Few, fine (1-2mm) roots; Few, medium (2-5mm) roots; Common, coarse (>5mm) roots; Clear, Wavy change to -
B21	0.11 - 0.28 m	Brown (7.5YR4/4-Moist); Biological mixing, 10YR43, 2-10% , Faint; Light medium clay; Strong grade of structure, 20-50 mm, Subangular blocky; 10-20 mm, Subangular blocky; Rough-ped fabric; Moderately moist; Very firm consistence; 2-10%, fine gravelly, 2-6mm, subangular, Schist, coarse fragments; 2-10%, fine gravelly, 2-6mm, angular tabular, Coal, coarse fragments; Few cutans, <10% of ped faces or walls coated, faint; Field pH 4.5 (Raupach); Common, very fine (0-1mm) roots; Few, fine (1-2mm) roots; Common, medium (2-5mm) roots; Few, coarse (>5mm) roots; Gradual, Irregular change to -
B22	0.28 - 0.47 m	Strong brown (7.5YR5/6-Moist); ; Light medium clay; Moderate grade of structure, 5-10 mm, Polyhedral; 10-20 mm, Subangular blocky; Rough-ped fabric; Moderately moist; Firm consistence; 10-20%, fine gravelly, 2-6mm, subangular tabular, Schist, coarse fragments; Field pH 4.5 (Raupach); Few, very fine (0-1mm) roots; Few, fine (1-2mm) roots; Gradual, Irregular change to -
BC	0.47 - 0.67 m	Brownish yellow (10YR6/6-Moist); ; Light clay; Weak grade of structure, 5-10 mm, Angular blocky; Rough-ped fabric; Moderately moist; Firm consistence; 50-90%, medium gravelly, 6-20mm, subangular tabular, Schist, coarse fragments; Field pH 4.5 (Raupach); Few, very fine (0-1mm) roots; Clear, Irregular change to -

Morphological Notes

A1	Pale patches of fungal hyphae occur below O2 horizon.
BC	Gravel material more weathered than previous sites.

Observation Notes

Surface disturbance by lyrebirds.

Site Notes

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COMP 121H 1193-1 237D 460M FROM 1125

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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 - 0.02										
0.02 - 0.11	4.4C		4.94H	1.87	0.33	0.16	0.58J 0.35K		8.25E	
0.11 - 0.28	4.08C		1.91H	2.11	0.15	0.13	2.79J 0K		7.09E	
0.28 - 0.47	3.96C		0.84H	2.95	0.08	0.14	3.71J 0K		7.72E	
0.47 - 0.67	4.02C		0.52H	3.87	0.07	0.21	3.43J 0K		8.11E	

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 - 0.02												
0.02 - 0.11		6.23B		539.7B	0.21A		0.85	17.64				
0.11 - 0.28		1.31B		342.2B	0.08A		1.15	26.64				
0.28 - 0.47		0.68B		240.5B	0.05A		1.39	14.11				
0.47 - 0.67		0.31B		114B	0.03A			16.49				

[illegible]

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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