

Project Name: BAGO-MARAGLE FOREST SOIL SURVEY
Project Code: BGM_FSS **Site ID:** 0136 **Observation ID:** 1
Agency Name: CSIRO Division of Soils (ACT)

Site Information

Desc. By: P. Ryan	Locality:
Date Desc.: 17/05/96	Elevation: 541 metres
Map Ref.: Sheet No. : 8526 DGPS	Rainfall: No Data
Northing/Long.: 6060549 AMG zone: 55	Runoff: No Data
Easting/Lat.: 614257 Datum: AGD66	Drainage: Rapidly drained

Geology

ExposureType: Soil pit	Conf. Sub. is Parent. Mat.: No Data
Geol. Ref.: Os	Substrate Material: Schist

Land Form

Rel/Slope Class: No Data	Pattern Type: No Data
Morph. Type: Mid-slope	Relief: No Data
Elem. Type: Hillslope	Slope Category: No Data
Slope: 46 %	Aspect: 45 degrees

Surface Soil Condition (dry):

Erosion: Partial, Minor (sheet)

Soil Classification

Australian Soil Classification:	Mapping Unit: N/A
Acidic Orthic Tenosol Thin Moderately gravelly Loamy Clayey Moderately deep	Principal Profile Form: Gn4.31
ASC Confidence:	Great Soil Group: Brown earth
All necessary analytical data are available.	

Site Disturbance: No effective disturbance. Natural

Vegetation:

Surface Coarse Fragments: 20-50%, fine gravelly, 2-6mm, subangular tabular, Schist; 20-50%, medium gravelly, 6-20mm, subangular platy, Schist;
20-50%, coarse gravelly, 20-60mm, subangular platy, Schist

Profile Morphology

O1	0 - 0.06 m	Organic Layer; ;
A1	0.06 - 0.08 m	Very dark greyish brown (10YR3/2-Moist); ; Loam; Weak grade of structure, <2 mm, Granular; Rough-ped fabric; Moderately moist; Loose consistence; 20-50%, fine gravelly, 2-6mm, subangular tabular, Schist, coarse fragments; Field pH 5.5 (Raupach); Abrupt, Smooth change to -
A2	0.08 - 0.25 m	Yellowish brown (10YR5/4-Moist); ; Clay loam; Massive grade of structure; Earthy fabric; Moderately moist; Weak consistence; 20-50%, fine gravelly, 2-6mm, subangular tabular, Schist, coarse fragments; Field pH 5 (Raupach); Many, very fine (0-1mm) roots; Many, fine (1-2mm) roots; Common, medium (2-5mm) roots; Clear, Irregular change to -
B2	0.25 - 0.42 m	Strong brown (7.5YR4/6-Moist); ; Light medium clay; Weak grade of structure, 5-10 mm, Subangular blocky; Rough-ped fabric; Moderately moist; Weak consistence; 50-90%, fine gravelly, 2-6mm, subangular tabular, Schist, coarse fragments; Field pH 5 (Raupach); Common, very fine (0-1mm) roots; Few, fine (1-2mm) roots; Few, medium (2-5mm) roots; Few, coarse (>5mm) roots; Gradual, Irregular change to -
BC	0.42 - 0.69 m	Strong brown (7.5YR4/6-Moist); ; Light medium clay; Massive grade of structure; Earthy fabric; Moderately moist; Firm consistence; 50-90%, medium gravelly, 6-20mm, subangular tabular, Schist, coarse fragments; Field pH 5 (Raupach); Few, very fine (0-1mm) roots; Few, fine (1-2mm) roots; Clear, Irregular change to -

Morphological Notes

A1	No root abundance measures due to thinness. Steep slopes and frequent fire regime has stripped this layer.
A2	Several patches of fungal hyphae producing hydrophobic soil.
B2	Increasing gravel.
BC	Increase in situ gravel.

Observation Notes

A steep exposed slope. Last fire >20yrs. Almost pure stringybark.

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Site Notes

COMP 121H 898-1 90D 320M FROM 876-1

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Laboratory Test Results:

Depth m	pH	1:5 EC dS/m	Ca	Exchangeable Mg	Cations K	Na Cmol (+)/kg	Exchangeable Acidity	CEC	ECEC	ESP %
0 - 0.06										
0.06 - 0.08	3.45C		2.31H	0.93	1.06	0.12	7.06J 4.1K		15.58E	
0.08 - 0.25	3.86C		0.13H	0.2	0.68	0.1	3.6J 0K		4.72E	
0.25 - 0.42	3.97C		0.11H	0.23	0.67	0.08	3.4J 0K		4.5E	
0.42 - 0.69	3.98C		0.04H	0.22	0.49	0.08	1.98J 0K		2.81E	

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 - 0.06												
0.06 - 0.08		12.44B		263.7B	0.4A		0.80	11.88				
0.08 - 0.25		3.02B		176.8B	0.11A			42.39				
0.25 - 0.42		1.74B		209B	0.1A			52.45				
0.42 - 0.69		0.43B		308.6B	0.07A			53.47				

[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