

Project Name: BAGO-MARAGLE FOREST SOIL SURVEY
Project Code: BGM_FSS **Site ID:** 0073 **Observation ID:** 1
Agency Name: CSIRO Division of Soils (ACT)

Site Information

Desc. By:	P. Ryan	Locality:	
Date Desc.:	14/12/95	Elevation:	637 metres
Map Ref.:	Sheet No. : 8526 DGPS	Rainfall:	No Data
Northing/Long.:	6020955 AMG zone: 55	Runoff:	No Data
Easting/Lat.:	613755 Datum: AGD66	Drainage:	Poorly drained

Geology

ExposureType:	Soil pit	Conf. Sub. is Parent. Mat.:	Probable
Geol. Ref.:	Dga	Substrate Material:	Adamellite

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:	30 %	Aspect:	270 degrees

Surface Soil Condition (dry): Firm

Erosion: Partial, Minor (sheet) Stable, Present (mass)

Soil Classification

Australian Soil Classification:	Mapping Unit:	N/A
Bleached-Acidic Kurosolic Redoxic Hydrosol Medium Non-gravelly Clay-loamy Clayey Very deep	Principal Profile Form:	Dy5.31
ASC Confidence:	Great Soil Group:	Gleyed podzolic soil
All necessary analytical data are available.		

Site Disturbance: No effective disturbance. Natural

Vegetation:

Surface Coarse Fragments:

Profile Morphology

O1	0 - 0.04 m	Organic Layer; ;
A11	0.04 - 0.12 m	Very dark brown (10YR2/2-Moist); ; Medium sandy clay loam; Weak grade of structure, 5-10 mm, Polyhedral; Earthy fabric; Moist; Very weak consistence; Field pH 6 (Raupach); Many, very fine (0-1mm) roots; Many, fine (1-2mm) roots; Common, medium (2-5mm) roots; Few, coarse (>5mm) roots; Clear, Wavy change to -
A12	0.12 - 0.25 m	Brown (10YR4/3-Moist); Substrate influence, 10YR54, 2-10% , Faint; Coarse sandy clay loam; Weak grade of structure, 10-20 mm, Subangular blocky; Earthy fabric; Moist; Weak consistence; Field pH 6 (Raupach); Common, very fine (0-1mm) roots; Few, fine (1-2mm) roots; Common, medium (2-5mm) roots; Few, coarse (>5mm) roots; Clear, Wavy change to -
A2j	0.25 - 0.36 m	Light brownish grey (10YR6/2-Moist); White (10YR8/2-Dry); Substrate influence, 10YR53, 2-10% , Faint; Coarse sandy loam; Massive grade of structure; Sandy (grains prominent) fabric; Moist; Weak consistence; Field pH 6 (Raupach); Few, very fine (0-1mm) roots; Few, fine (1-2mm) roots; Few, medium (2-5mm) roots; Abrupt, Wavy change to -
B2t	0.36 - 1.04 m	Brownish yellow (10YR6/8-Moist); Substrate influence, 10YR71, 20-50% , Distinct; Light medium clay; Moderate grade of structure, 20-50 mm, Prismatic; 10-20 mm, Angular blocky; Smooth-ped fabric; Wet; Firm consistence; 0-2%, coarse gravelly, 20-60mm, rounded tabular, coarse fragments; Common cutans, 10-50% of ped faces or walls coated, distinct; 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; Gradual change to -
B31	1.04 - 1.49 m	Pale yellow (5Y8/3-Moist); ; Coarse sandy clay; Earthy fabric; Moderately moist; Field pH 5 (Raupach);
B32	1.49 - 1.79 m	Pale yellow (2.5Y7/4-Moist); Substrate influence, 5Y71, 20-50% , Distinct; Coarse sandy clay; Earthy fabric; Moderately moist; Field pH 6 (Raupach);
B33	1.79 - 2.14 m	Light grey (5Y7/1-Moist); Substrate influence, 2.5Y76, 20-50% , Prominent; Clayey coarse sand; Sandy (grains prominent) fabric; Wet; Field pH 6 (Raupach);

Morphological Notes

B2t Grey mottle occurs along root channels. These channels are preferential flow paths through layer and therefore wetter than surrounding soil.

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B32 Pale colour indicates prior waterlogging. Old perched watertable.

B33 Water table reached.

Observation Notes

Site is on old landslide beam. There is a bench upslope and a swamp downslope.

Site Notes

COMP41H,12961-1,275D,1011M FR 13216-1

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Laboratory Test Results:

Depth	pH	1:5 EC	Ca	Exchangeable Cations		Exchangeable	CEC	ECEC	ESP
m		dS/m		Mg	K	Na	Acidity		%
						Cmol (+)/kg			
0 - 0.04									
0.04 - 0.12	4.95C		12.93H	1.91	0.55	0.12	0.01J 0K	15.52E	
0.12 - 0.25	4.63C		3.1H	0.64	0.24	0.06	0.19J 0K	4.22E	
0.25 - 0.36	4.44C		0.77H	0.29	0.06	0.05	0.12J 0K	1.29E	
0.36 - 1.04	3.76C		0.85H	1.12	0.17	0.1	1.29J 0K	3.52E	
1.04 - 1.49	4.22C		0.76H	1.24	0.11	0.33	0.1J 0K	2.53E	
1.49 - 1.79	4.64C		2.11H	2.63	0.09	0.68	0.04J 0.07K	5.61E	
1.79 - 2.14	4.34C		0.66H	0.64	0.06	0.09	0.15J 0K	1.6E	

Depth	CaCO3	Organic C	Avail. P	Total P	Total N	Total K	Bulk Density	Particle Size		Analysis	
m	%	%	mg/kg	%	%	%	Mg/m3	GV	CS	FS %	Silt Clay
0 - 0.04											
0.04 - 0.12		6.42B		280.9B	0.25A		0.86	19.85			
0.12 - 0.25		1.19B		140.1B	0.09A		1.34	16.21			
0.25 - 0.36		0.44B		66.1B	0.03A		1.66	18.63			
0.36 - 1.04		0.31B		38.1B	0.02A		1.43	26.83			
1.04 - 1.49		0.07B		19.5B	0A			17.97			
1.49 - 1.79		0.1B		27.3B	0A			19.81			
1.79 - 2.14		0.03B		44.9B	0A			19.92			

[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