Projec	ct Code:	BAGO-MARAGLE ESM BGM_ESM Site ID: CSIRO Division of Soils (A		Observation ID:	1				
Desc. I Date D Map Re Northin Eastin	esc.: 05 ef.: Sh ng/Long.: 60 g/Lat.: 60	. Ryan 5/04/95 heet No. : 8526 DGPS)46175 AMG zone: 55)9114 Datum: AGD66	Locality: Elevation: Rainfall: Runoff: Drainage:	1347 metres No Data Moderately rapid Well drained					
<u>Geolo</u> Expos Geol. F	ureType: So	oil pit GGH	Conf. Sub. is Parent. Mat.: Probable Substrate Material: No Data						
	ope Class: No . Type: Lo Type: H	o Data ower-slope illslope 6 %	Pattern Type: Relief: Slope Category: Aspect:	No Data					
	ce Soil Cond	lition (dry): Firm							
Erosio Soil C	lassification	<u>1</u>							
Acidic I	lian Soil Clas Mesotrophic Bi Clayey Very d	rown Kandosol Medium Non-gra		ing Unit: ipal Profile Form:	N/A Gn2.41				
ASC C All nec	Confidence: cessary analytic	cal data are available.		Soil Group:	Brown earth				
Veget	-	No effective disturbance. Natur	al						
		ragments: 0-2%, cobbly, 60-2	00mm, subrounded	tabular,					
O1	e Morpholog 0 - 0.03 m	I <u>V</u> Organic Layer; ;							
A1	0.03 - 0.18 r	 Dark brown (7.5YR3/2-Moist); Biological mixing, 2-10%, Faint; Loam; Strong grade of structure, 5-10 mm, Polyhedral; 100-200 mm, Lenticular; Rough-ped fabric; Moderately moist; Weak consistence; Field pH 6 (pH meter); Abundant, very fine (0-1mm) roots; Common, fine (1-2mm) roots; Common, medium (2-5mm) roots; Common, coarse (>5mm) roots; Clear, Wavy change to 							
B1	0.18 - 0.29 r	Moderate grade of structure Dry; Weak consistence; Fie	e, 5-10 mm, Polyhec eld pH 6 (pH meter);	Iral; 100-200 mm, L Abundant, very fine	dium sandy clay loam; enticular; Rough-ped fabric; (0-1mm) roots; Many, fine (1- 5mm) roots; Clear, Irregular				
B21	0.29 - 0.78 r	29 - 0.78 m Dark brown (7.5YR3/4-Moist); Biological mixing, 0-2%, Faint; Fine sandy light clay; Massive grade of structure; Earthy fabric; Dry; Weak consistence; 2-10%, coarse gravelly, 20-60mm, subrounded tabular, dispersed, coarse fragments; 2-10%, coarse gravelly, 20-60mm, subrounded tabular, dispersed, coarse fragments; Field pH 5.5 (pH meter); Many, very fine (0-1mm) roots; Common, fine (1-2mm) roots; Few, medium (2-5mm) roots; Few, coarse (>5mm) roots; Diffuse, Smooth change to -							
B22	0.78 - 1.13 r	Moderately moist; Weak co dispersed, coarse fragment	nsistence; 2-10%, c ts; 2-10%, coarse gr H 5 (pH meter); Few	oarse gravelly, 20-6 avelly, 20-60mm, su , very fine (0-1mm)	ubrounded tabular, dispersed, roots; Few, fine (1-2mm) roots;				
B3	1.13 - 1.58 r	2 %), Manganiferous, Medi %), Manganiferous, Mediun	um (2 -6 mm), Soft s n (2 -6 mm), Fragme	segregations, strong ents, strong, segreg	Moderately moist; Very few (0 - J, segregations;Very few (0 - 2 ations;Very few (0 - 2 %), Id pH 4.5 (pH meter); Gradual				

Project Name:	BAGO-MARAC	GLE ESM			
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Agency Name:	CSIRO Divisio	n of Soils (A	ACT)		

BC 1.58 - 1.93 m Strong brown (7.5YR5/6-Moist); Substrate influence, 2-10%, Faint; Coarse sandy clay loam; Earthy fabric; Moderately moist; Common (10 - 20%), Manganiferous, Medium (2 - 6 mm), Soft segregations, strong, segregations;Common (10 - 20%), Manganiferous, Medium (2 - 6 mm), Fragments, strong, segregations;Common (10 - 20%), Manganiferous, Medium (2 - 6 mm), Veins, strong, segregations;Field pH 4.5 (pH meter);

Morphological Notes

Course fragments mafic material and granodiorite.

Increase in MN segregations due to mafic substrate.

Observation Notes

PGP centre peg 10 m south east. Plot is just above creek line which has large ash, upslope ash replaced by snow gum mountain gum, substrate granodiorite seems to have intrusions of mafic mat.

Site Notes

B21 BC

PGP16, BAGO S.F., COMPT 62

Project Name: BAGO-MARAGLE ESM Project Code: BGM_ESM Site ID: 1023 Agency Name: CSIRO Division of Soils (ACT)

Observation ID: 1

Laboratory Test Results:

Depth	рН	1:5 EC	Ex Ca	changeab Mg	le Cations K	Na	Exchangeable Acidity	CEC	ECEC	ESP
m		dS/m	ou	ing	ĸ		(+)/kg			%
0.03 - 0.11	4.52C 5.28A		6.38H	1.15	0.66	0.04	4.36J 0K		12.59E	
0.18 - 0.29	4.85C 5.6A		1.48H	0.49	0.53	0.02	0.71J 0K		3.22E	
0.33 - 0.41	4.76C 5.44A		1.15H	0.9	0.5	0.03	0.69J 0K		3.27E	
0.83 - 1.03	4.09C 5.02A		0.11H	0.35	0.33	0.01	3.1J 0K		3.9E	
1.23 - 1.53	4.28C 5.21A		0.17H	0.4	0.46	0.07	1.45J 0K		2.55E	
1.63 - 1.93	4.58C 5.22A		0.09H	0.15	0.48	0.13	0.21J 0K		1.07E	

Depth	CaCO3	Organic	Avail.	Total	Total	Total	Bulk	Particle			
m	%	С %	P mg/kg	P %	N %	K %	Density Mg/m3	GV CS	FS %	Silt	Clay
0.03 - 0.11		9.31B		517.6B	0.3A		0.72	10.26			
0.18 - 0.29		2.82B		447.5B	0.13A		0.99	8.19			
0.33 - 0.41		1.18B		377.2B	0.07A		1.03	3.14			
0.83 - 1.03		0.64B		515.4B	0.03A		1.20	4			
1.23 - 1.53		0.29B		1586.3B	0.01A			1.83			
1.63 - 1.93		0.17B		2272.3B	0.01A			7.18			

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	3			mm/h	mm/h

0.03 - 0.11
0.18 - 0.29
0.33 - 0.41
0.83 - 1.03
1.23 - 1.53
1.63 - 1.93

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Laboratory Analyses Completed for this profile

15_NR 15E1_AL 15E1_CA 15E1_H 15E1_K	Sum of Ex. cations + Ex. acidity - Not recorded Exchangeable AI - by compulsive exchange, no pretreatment for soluble salts Exchangeable bases (Ca2+,Mg2+,Na+,K+) by compulsive exchange, no pretreatment for soluble Exchangeable H - by compulsive exchange, no pretreatment for soluble salts 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
4A1	pH of 1:5 soil/water suspension
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

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