Project Na Project Co Agency Na	de: BG	AGO-MARAGLE ESM GM_ESM Site ID: SIRO Division of Soils (A	1005 CT)	0	bservatio	on ID:	1	
Site Inform	nation							
Desc. By: Date Desc.: Map Ref.: Northing/Lo Easting/Lat.	P. Ry 14/12 Shee ong.: 6058		Locality: Elevation: Rainfall: Runoff: Drainage:		1031 met No Data Slow Well drair			
<u>Geology</u> ExposureTy Geol. Ref.:	SGG		Conf. Sub. is Parent. Mat.:ProbableSubstrate Material:Granode					
Land Form Rel/Slope C Morph. Type Elem. Type: Slope:	ilass: No D e: Mid-s	slope lope	Relief:	Slope Category: No Data				
Surface So	oil Conditi	on (dry): Firm						
Erosion:								
<u>Soil Classi</u>	<u>ification</u>							
Australian S Acidic Mesot Clay-loamy (	trophic Red	Kandosol Medium Slightly gra	avelly		ng Unit: pal Profile	Form:	N/A Gn2.24	
ASC Confic				Great	Soil Group	<b>)</b> :	Red podzolic soil	
	, ,	data are available.						
		mited clearing, for example se	elective loggir	ng				
Vegetation		monto						
Surface Co		inents.						
<b>Profile Mo</b> 01 0 -	0.02 m	Organic Layer; ;						
A1 0.02 - 0.12 m Dark reddish brown (5YR3/2-Moist); Biological mixing, 2-10%, Faint; Clay Ioam; Moderate grade of structure, 5-10 mm, Polyhedral; 100-200 mm, Lenticular; Rough-ped fabric; Dry; Weak consistence; 2-10%, medium gravelly, 6-20mm, subrounded, dispersed, Coal, coarse fragments; Field pH 6 (pH meter); Abundant, very fine (0-1mm) roots; Common, fine (1-2mm) roots; Common, medium (2-5mm) roots; Few, coarse (>5mm) roots; Clear, Wavy change to -							ped fabric; Dry; Weak rsed, Coal, coarse ts; Common, fine (1-2mm)	
A2 0.1	A2 0.12 - 0.24 m Dark reddish brown (5YR3/3-Moist); Brown (7.5YR4/4-Dry); Biological mixing, 2-10%, Faint; Ioam; Moderate grade of structure, 5-10 mm, Polyhedral; Smooth-ped fabric; Moderately mo Weak consistence; 0-2%, fine gravelly, 2-6mm, subrounded, dispersed, Coal, coarse fragmer Few cutans, <10% of ped faces or walls coated, faint; Field pH 6 (pH meter); Many, very fine 1mm) roots; Common, fine (1-2mm) roots; Few, medium (2-5mm) roots; Few, coarse (>5mm) roots; Clear, Smooth change to -					ped fabric; Moderately moist; sed, Coal, coarse fragments; oH meter); Many, very fine (0-		
B21 0.24 - 0.42 m Dark red (2.5YR3/6-Moist); Biological mixing, 2-10%, Faint; Light clay; Moderate grade of structure, 5-10 mm, Subangular blocky; 50-100 mm, Columnar; Smooth-ped fabric; Moderately moist; Weak consistence; 2-10%, medium gravelly, 6-20mm, subrounded, dispersed, Granodiorite, coarse fragments; 0-2%, fine gravelly, 2-6mm, angular, dispersed, Quartz, coarse fragments; Few cutans, <10% of ped faces or walls coated, faint; Field pH 5.5 (pH meter); Few, very fine (0-1mm) roots; Few, fine (1-2mm) roots; Common, medium (2-5mm) roots; Common, coarse (>5mm) roots; Gradual, Smooth change to -								
B22 0.4	2 - 0.92 m	<ul> <li>0.92 m Red (2.5YR4/6-Moist); ; Clay loam; Massive grade of structure; Earthy fabric; Moderately moist; Weak consistence; 2-10%, medium gravelly, 6-20mm, angular, dispersed, Granodiorite, coarse fragments; 2-10%, fine gravelly, 2-6mm, angular, dispersed, Quartz, coarse fragments; Field pH 5 (pH meter); Few, very fine (0-1mm) roots; Few, fine (1-2mm) roots; Few, medium (2-5mm) roots; Few, coarse (&gt;5mm) roots; Gradual, Smooth change to -</li> </ul>						
B23 0.9	2 - 1.32 m	Yellowish red (5YR5/8-Moist); ; Clay loam; Massive grade of structure; Earthy fabric; Field pH 5 (pH meter);						
B3 1.3	1.32 - 1.82 m Strong brown (7.5YR5/6-Moist); Substrate influence, 2-10% , Faint; Coarse sandy clay; Field pH 5 (pH meter);						Coarse sandy clay; Field pH	
C 1.8	2 - 2.82 m	Light yellowish brown (10YI	R6/4-Moist); ;	Coarse	e sandy clay	y loam; F	Field pH 5 (pH meter);	
Morpholog	gical Notes	<u>6</u>						
		-						

## Project Name:BAGO-MARAGLE ESMProject Code:BGM\_ESMSite ID:1005Agency Name:CSIRO Division of Soils (ACT)

Observation ID: 1

B23Muscovite mica common in sand fraction.B3Muscovite mica common in sand fraction.

#### **Observation Notes**

Western downslope edge of trial. Good quality peppermint site. Downslope of windrow. Layer 7 is C horizon from 1.8 to 2.8 m.

### Site Notes

VI/1.81 CSIRO PROGENY TRIAL

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### Laboratory Test Results:

Depth	рН	1:5 EC			le Cations	Na	Exchangeable	CEC	ECEC	ESP
m		dS/m	Ca	Mg	K	Na Cmol	Acidity (+)/kg			%
0.02 - 0.1	4.63C 5.35A		10.53H	3.62	1.52	0.14	0.65J 0K		16.46E	
0.12 - 0.22	4.59C 5.53A		4.86H	2.4	1.22	0.12	0.68J 0K		9.27E	
0.32 - 0.4	4.08C 5.18A		1.8H	1.73	0.78	0.1	2.04J 0K		6.45E	
0.62 - 0.72	3.98C 5.15A		0.73H	1.4	0.68	0.1	1.94J 0K		4.85E	
0.72 - 1.52										
1.52 - 1.72	4.17C 4.86A		0.05H	0.04	0.15	0.08	0.22J 0.18K		0.73E	
2.22 - 2.42	4.13C 4.78A		0.05H	0.04	0.16	0.09	0.29J 0.05K		0.68E	

Depth	CaCO3	Organic	Avail.	Total	Total	Total	Bulk	Particle	Size	Analysis	
m	%	C %	P mg/kg	P %	N %	K %	Density Mg/m3	GV CS	FS %	Silt C	lay
0.02 - 0.1		6.68B		448.7B	0.27A		0.81	6.37			
0.12 - 0.22		2.7B		324.2B	0.14A		1.14	0.7			
0.32 - 0.4		1.22B		171.8B	0.05A		1.13	8.24			
0.62 - 0.72		0.74B		193.7B	0.04A		1.35	10.43			
0.72 - 1.52											
1.52 - 1.72		0.09B		121.4B	0.01A			6.57			
2.22 - 2.42		0.07B		70.4B	0.01A			9.24			

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	

0.02 - 0.1 0.12 - 0.22 0.32 - 0.4 0.62 - 0.72 0.72 - 1.52 1.52 - 1.72 2.22 - 2.42

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#### Laboratory Analyses Completed for this profile

15_NR 15E1 AL	Sum of Ex. cations + Ex. acidity - Not recorded Exchangeable AI - 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
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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