

Project Name: BAGO-MARAGLE ESM
Project Code: BGM_ESM **Site ID:** 1026 **Observation ID:** 1
Agency Name: CSIRO Division of Soils (ACT)

Site Information

Desc. By:	P. Ryan	Locality:	
Date Desc.:	06/04/95	Elevation:	1240 metres
Map Ref.:	Sheet No. : 8526 DGPS	Rainfall:	No Data
Northing/Long.:	6046015 AMG zone: 55	Runoff:	Slow
Easting/Lat.:	599214 Datum: AGD66	Drainage:	Well drained

Geology

ExposureType:	Soil pit	Conf. Sub. is Parent. Mat.:	Probable
Geol. Ref.:	SGGH	Substrate Material:	Granodiorite

Land Form

Rel/Slope Class:	No Data	Pattern Type:	No Data
Morph. Type:	Upper-slope	Relief:	No Data
Elem. Type:	Hillslope	Slope Category:	No Data
Slope:	13 %	Aspect:	45 degrees

Surface Soil Condition (dry): Firm

Erosion:

Soil Classification

Australian Soil Classification:		Mapping Unit:	N/A
Acidic Magnesic Red Kandosol Medium Slightly gravelly Clayey Clayey Very deep		Principal Profile Form:	Gn.

ASC Confidence:		Great Soil Group:	N/A
All necessary analytical data are available.			

Site Disturbance: No effective disturbance. Natural

Vegetation:

Surface Coarse Fragments: 0-2%, , angular tabular,

Profile Morphology

O1	0 - 0.02 m	Organic Layer; ;
A1	0.02 - 0.15 m	Dark brown (7.5YR3/3-Moist); Biological mixing, 2-10% , Faint; Fine sandy clay; Moderate grade of structure, 2-5 mm, Granular; 100-200 mm, Prismatic; Rough-ped fabric; Common (1-5 per 100mm2) Very fine (0.075-1mm) macropores, Common (1-5 per 100mm2) Fine (1-2mm) macropores, Common (1-5 per 100mm2) Medium (2-5mm) macropores, Moderately moist; Weak consistence; 2-10%, fine gravelly, 2-6mm, angular tabular, dispersed, Coal, coarse fragments; Field pH 6 (pH meter); Common, very fine (0-1mm) roots; Common, fine (1-2mm) roots; Common, medium (2-5mm) roots; Clear, Smooth change to -
B1	0.15 - 0.26 m	Dark reddish brown (5YR3/3-Moist); Biological mixing, 2-10% , Faint; Light clay; Weak grade of structure, 5-10 mm, Polyhedral; Rough-ped fabric; Few (<1 per 100mm2) Very fine (0.075-1mm) macropores, Few (<1 per 100mm2) Fine (1-2mm) macropores, Few (<1 per 100mm2) Medium (2-5mm) macropores, Moderately moist; Weak consistence; 2-10%, fine gravelly, 2-6mm, angular tabular, dispersed, Coal, coarse fragments; Field pH 5.5 (pH meter); Many, very fine (0-1mm) roots; Common, fine (1-2mm) roots; Common, medium (2-5mm) roots; Few, coarse (>5mm) roots; Clear, Irregular change to -
B21	0.26 - 0.52 m	Dark reddish brown (2.5YR3/4-Moist); Biological mixing, 2-10% , Faint; Light clay; Moderate grade of structure, 10-20 mm, Subangular blocky; 100-200 mm, Lenticular; Smooth-ped fabric; Few (<1 per 100mm2) Very fine (0.075-1mm) macropores, Few (<1 per 100mm2) Fine (1-2mm) macropores, Common (1-5 per 100mm2) Medium (2-5mm) macropores, Common (1-5 per 100mm2) Coarse (>5mm) macropores, Moderately moist; Weak consistence; 2-10%, medium gravelly, 6-20mm, angular tabular, dispersed, Coal, coarse fragments; Few cutans, <10% of ped faces or walls coated, faint; Field pH 5 (pH meter); Common, very fine (0-1mm) roots; Few, fine (1-2mm) roots; Diffuse, Irregular change to -
B22	0.52 - 1.52 m	Red (2.5YR4/6-Moist); Biological mixing, 0-2% , Faint; Light clay; Massive grade of structure; Earthy fabric; Few (<1 per 100mm2) Fine (1-2mm) macropores, Common (1-5 per 100mm2) Medium (2-5mm) macropores, Common (1-5 per 100mm2) Coarse (>5mm) macropores, Dry; Firm consistence; 0-2%, fine gravelly, 2-6mm, angular tabular, dispersed, Coal, coarse fragments; 0-2%, medium gravelly, 6-20mm, subrounded, dispersed, Granodiorite, coarse fragments; Field pH 4.5 (pH meter); Few, very fine (0-1mm) roots; Few, fine (1-2mm) roots; Diffuse change to -

Project Name: BAGO-MARAGLE ESM
Project Code: BGM_ESM **Site ID:** 1026 **Observation ID:** 1
Agency Name: CSIRO Division of Soils (ACT)

B3	1.52 - 1.92 m	Yellowish red (5YR4/6-Moist); ; Medium sandy clay loam; Sandy (grains prominent) fabric; Moderately moist; 0-2%, medium gravelly, 6-20mm, subrounded, dispersed, Granodiorite, coarse fragments; Field pH 4.5 (pH meter); Clear change to -
C1	1.92 - 2.37 m	Dark yellowish brown (10YR3/5-Moist); ; Clayey sand; Sandy (grains prominent) fabric; Moderately moist; 2-10%, medium gravelly, 6-20mm, subrounded, dispersed, Granodiorite, coarse fragments; Field pH 6 (pH meter); Clear change to -
C2	2.37 - 2.67 m	Yellowish red (5YR5/6-Moist); ; Clayey sand; Sandy (grains prominent) fabric; Moderately moist; 2-10%, medium gravelly, 6-20mm, subrounded, dispersed, Granodiorite, coarse fragments; Field pH 5.5 (pH meter);

Morphological Notes

A1	Abundant fungal hyphae.
B1	Fungal hyphae also present.
B21	Dry pit face had lattice of cracks (both horizontal and vertical).
B22	Cracks as above. Several old root channels have been infilled with soil.
C1	Pale colour would indicate partially weathered tor.

Observation Notes

PGP centre peg 2m north of pit. Site was post TSI. Dry ash site.

Site Notes

PGP14, BAGO S.F., COMPT 106

Observation ID: 1

[illegible]

Project Name: BAGO-MARAGLE ESM
Project Code: BGM_ESM **Site ID:** 1026 **Observation ID:** 1
Agency Name: CSIRO Division of Soils (ACT)

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 (Ca ²⁺ ,Mg ²⁺ ,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/cm ³