Project Name: BAGO-MARAGLE FOREST SOIL SURVEY

Project Code: BGM_FSS Site ID: 0024 Observation ID: 1

Agency Name: CSIRO Division of Soils (ACT)

Site Information

Desc. By: N.J. McKenzie Locality:

Date Desc.: 15/12/95 Elevation: 916 metres Sheet No.: 8526 DGPS Map Ref.: Rainfall: No Data Northing/Long.: 6023558 AMG zone: 55 Runoff: No Data 618482 Datum: AGD66 Well drained Easting/Lat.: Drainage:

Geology

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

Land Form

Rel/Slope Class:No DataPattern Type:No DataMorph. Type:Lower-slopeRelief:No DataElem. Type:FootslopeSlope Category:No DataSlope:35 %Aspect:90 degrees

Surface Soil Condition (dry): Firm

Erosion: Partial, Minor (sheet)

Soil Classification

Australian Soil Classification:Mapping Unit:N/AHaplic Mesotrophic Brown Kandosol Medium ModeratelyPrincipal Profile Form:Um5.52

gravelly Clay-loamy Clay-loamy Deep

ASC Confidence: Great Soil Group: N/A

All necessary analytical data are available.

Site Disturbance: No effective disturbance. Natural

Vegetation:

Surface Coarse Fragments:

Profile Morphology

A1 0 - 0.19 m Very dark grey (7.5YR3/1-Moist); ; Medium sandy clay loam; Weak grade of structure, 5-10 mm,

Polyhedral; Sandy (grains prominent) fabric; Moist; Very weak consistence; 10-20%, fine gravelly, 2-6mm, subrounded, dispersed, Quartz, coarse fragments; 20-50%, fine gravelly, 2-6mm, subrounded, dispersed, coarse fragments; 2-10%, cobbly, 60-200mm, subrounded, dispersed, Adamellite, coarse fragments; Field pH 6 (Raupach); Many, very fine (0-1mm) roots; Few, fine (1-2mm) roots; Few, medium (2-5mm) roots; Few, coarse (>5mm) roots; Clear, Wavy

change to

A3 0.19 - 0.4 m Reddish brown (5YR4/4-Moist); Biological mixing, 10-20%, Distinct; Medium sandy clay loam;

Weak grade of structure, 10-20 mm, Polyhedral; Sandy (grains prominent) fabric; Moist; Very weak consistence; 10-20%, fine gravelly, 2-6mm, subrounded, dispersed, Quartz, coarse fragments; 20-50%, fine gravelly, 2-6mm, subrounded, dispersed, coarse fragments; Field pH 6.5 (Raupach); Common, very fine (0-1mm) roots; Few, fine (1-2mm) roots; Few, medium (2-

5mm) roots; Few, coarse (>5mm) roots; Gradual, Smooth change to -

B21 0.4 - 0.65 m Brown (7.5YR4/4-Moist); ; Coarse sandy clay loam; Massive grade of structure; Sandy (grains

prominent) fabric; Moist; Very weak consistence; 10-20%, fine gravelly, 2-6mm, angular, dispersed, Quartz, coarse fragments; 20-50%, fine gravelly, 2-6mm, angular, dispersed, coarse fragments; Field pH 6.5 (Raupach); Common, very fine (0-1mm) roots; Few, fine (1-2mm) roots;

Diffuse, Smooth change to -

B22 0.65 - 1.05 m Yellowish red (5YR5/6-Moist); ; Coarse sandy clay loam; Massive grade of structure; Sandy

(grains prominent) fabric; Moist; Very weak consistence; 2-10%, fine gravelly, 2-6mm, angular, dispersed, Quartz, coarse fragments; 20-50%, fine gravelly, 2-6mm, angular, dispersed, coarse fragments; Field pH 6 (Raupach); Common, very fine (0-1mm) roots; Few, fine (1-2mm) roots;

Few, medium (2-5mm) roots; Few, coarse (>5mm) roots; Abrupt, Wavy change to -

R 1.05 - 1.06 m Rock

Morphological Notes

A1 Rounded coarse fragments - transportational.
A3 Rounded coarse fragments - transportational.

Observation Notes

Clods with fungal mats.

Site Notes

BAGO-MARAGLE FOREST SOIL SURVEY BGM_FSS Site ID: 0024 CSIRO Division of Soils (ACT) Observation ID: 1

Project Name: Project Code: Agency Name:

COMP 26H,9859-1,BRG 83,340M

BAGO-MARAGLE FOREST SOIL SURVEY

Project Name: BAGO-MARAGLE FOREST SOIL S
Project Code: BGM_FSS Site ID: 0024
Agency Name: CSIRO Division of Soils (ACT) Observation ID: 1

Laboratory Test Results:

Depth	рН	1:5 EC		hangeable			Exchangeable	CEC	ECEC	ESP
m		dS/m	Ca	Mg	К	Na Cmol (+	Acidity -)/kg			%
0 - 0.19	4.72C		7.15H	1.05	0.87	0.08	1.11J 0K		10.26	E
0.19 - 0.4	4.91C		3.69H	0.56	0.74	0.04	0.56J 0K		5.59E	•
0.4 - 0.65	4.54C		1.65H	0.56	0.78	0.06	0.59J 0K		3.64E	•
0.65 - 1.05	4.64C		0.99H	0.48	0.66	0.02	0.2J 0K		2.35E	Ē
Depth m	CaCO3	Organic C %	Avail. P mg/kg	Total P %	Total N %	Tota K %	I Bulk Density Mg/m3	Pai GV	rticle Size CS FS %	Analysis Silt Clay
0 - 0.19 0.19 - 0.4 0.4 - 0.65 0.65 - 1.05		5.22B 2.3B 0.9B 0.45B		215B 136.4B 93.4B 53.5B	0.2 0.1 0.0 0.0	IA 4A	0.95 0.97 1.23 1.15	50.9 44.93 43.03 43.7		
Depth	COLE		Gravimetric/Volumetric Water Contents K sat						K sat	K unsat
m		Sat.	0.05 Bar	0.1 Bar g/	0.5 Bar g - m3/m	1 Bar 3	5 Bar 15	Bar	mm/h	mm/h
0 - 0.19										

0.19 - 0.4 0.4 - 0.65 0.65 - 1.05

BAGO-MARAGLE FOREST SOIL SURVEY Project Name:

Project Code: BGM_FSS Site ID: 0024 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 15E1_CA 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 15E1_H

Exchangeable bases, CEC and AEC by compulsive exchange, no pretreatment for soluble salts 15E1_K 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

Air-dry moisture content 2A1

pH of 1:5 soil/0.01M calcium chloride extract - following Method 4A1 4B2 6B2 Total organic carbon - high frequency induction furnace, volumetric

7A2

Total nitrogen - semimicro Kjeldahl , automated colour Total Phosphorus (ppm) - semimicro kjeldahl, automated colour 9A3

P10_GRAV Gravel (%)

P3A1 Bulk density - g/cm3