**Project Name:** **BRUCEDALE/LADYSMITH/GRIGGWARD - Soil Landscape Modelling**
**Project Code:** **Wagga_SLM** **Site ID:** **BD18** **Observation ID:** **1**
**Agency Name:** **CSIRO Division of Soils (ACT)**

## Site Information

**Desc. By:** McKane, Dermot
**Date Desc.:** 15/07/93
**Map Ref.:** Sheet No. : 8327 1:25000
**Northing/Long.:** 6125670 AMG zone: 55
**Easting/Lat.:** 535230 Datum: AGD66
**Locality:**
**Elevation:** 233 metres
**Rainfall:** No Data
**Runoff:** No Data
**Drainage:** No Data

## Geology

**ExposureType:** Undisturbed soil core
**Geol. Ref.:** No Data
**Conf. Sub. is Parent. Mat.:** No Data
**Substrate Material:** No Data

## Land Form

**Rel/Slope Class:** No Data
**Morph. Type:** No Data
**Elem. Type:** Hillslope
**Slope:** 4 %
**Pattern Type:** Low hills
**Relief:** No Data
**Slope Category:** No Data
**Aspect:** 0 degrees

## Surface Soil Condition (dry): Firm

## Erosion:

## Soil Classification

**Australian Soil Classification:**
Mottled Eutrophic Red Kandosol Thin Non-gravelly Loamy Clayey Deep
**Mapping Unit:** N/A
**Principal Profile Form:** N/A
**ASC Confidence:**
Confidence level not specified
**Great Soil Group:** N/A

## Site Disturbance: Cultivation. Rainfed

## Vegetation:

## Surface Coarse Fragments:

## Profile Morphology

| | | |
|---|---|---|
| A1 | 0 - 0.09 m | Yellowish red (5YR4/6-Moist); ; Sandy loam; Massive grade of structure; Earthy fabric; Few (<1 per 100mm2) Very fine (0.075-1mm) macropores, Dry; Firm consistence; Field pH 5.5 (pH meter); Common, very fine (0-1mm) roots; Few, fine (1-2mm) roots; Gradual, Smooth change to |
| B1 | 0.09 - 0.45 m | Yellowish red (5YR5/8-Moist); ; Mottles; Light clay; Massive grade of structure; Earthy fabric; Few (<1 per 100mm2) Very fine (0.075-1mm) macropores, Dry; Weak consistence; 0-2%, fine gravelly, 2-6mm, subrounded, Quartz, coarse fragments; Very few (0 - 2 %), Ferruginous, Medium (2 -6 mm), Fragments, weak, segregations;Field pH 6 (pH meter); Few, very fine (0-1mm) roots; Gradual, Smooth change to - |
| B21 | 0.45 - 1.15 m | Yellowish brown (10YR5/6-Moist); Mottles, 2-10% , Faint; Mottles, 0-2% , Faint; Light clay; Weak grade of structure, 2-5 mm, Subangular blocky; Rough-ped fabric; Common (1-5 per 100mm2) Very fine (0.075-1mm) macropores, Dry; Firm consistence; 0-2%, fine gravelly, 2-6mm, subrounded, Quartz, coarse fragments; 2-10%, fine gravelly, 2-6mm, subangular, coarse fragments; Very few (0 - 2 %), Ferromanganiferous, Medium (2 -6 mm), Nodules, strong, segregations;Field pH 6 (pH meter); Few, very fine (0-1mm) roots; Gradual, Smooth change to - |
| B22 | 1.15 - 1.3 m | Red (2.5YR4/6-Moist); Mottles, 2-10% , Distinct; Light medium clay; Weak grade of structure; Dry; 0-2%, fine gravelly, 2-6mm, subangular, Quartz, coarse fragments; 2-10%, fine gravelly, 2-6mm, subangular, coarse fragments; Field pH 7 (pH meter); |

## Morphological Notes

## Observation Notes

## Site Notes

**Project Name:** BRUCEDALE/LADYSMITH/GRIGGWARD - Soil Landscape Modelling
**Project Code:** Wagga_SLM **Site ID:** BD18 **Observation ID:** 1
**Agency Name:** CSIRO Division of Soils (ACT)

## Laboratory Test Results:

| Depth | pH | 1:5 EC | Exchangeable Cations | | | | Exchangeable | CEC | ECEC | ESP |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Ca | Mg | K | Na | Acidity | | | |
| m | | dS/m | Cmol (+)/kg | | | | | | | % |
| 0 - 0.09 | 5.84A | 0.047A | 3.1J | 0.84 | 0.81 | 0.04 | | 7.6I | | 0.53 |
| 0.09 - 0.45 | 6.95A | 0.024A | 4.8J | 1.5 | 0.63 | 0.06 | | 9.1I | | 0.66 |
| 0.45 - 1.15 | 7.8A | 0.063A | 5.7J | 4.3 | 0.87 | 0.18 | | 10.2I | | 1.76 |
| 1.15 - 1.3 | 8.22A | 0.061A | 8J | 7.7 | 1.2 | 0.48 | | 19I | | 2.53 |

| Depth | CaCO3 | Organic C | Avail. P | Total P | Total N | Total K | Bulk Density | Particle Size Analysis | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | GV | CS | FS | Silt | Clay |
| m | % | % | mg/kg | % | % | % | Mg/m3 | | | % | | |
| 0 - 0.09 | | 1.18C | | | | | | | 30.8I | | 13.5 | 55.7 |
| 0.09 - 0.45 | | 0.26C | | | | | | | 40.9I | | 10.4 | 48.7 |
| 0.45 - 1.15 | | 0.23C | | | | | | | 50.1I | | 11.7 | 38.2 |
| 1.15 - 1.3 | | 0.12C | | | | | | | 47I | | 13.9 | 39.1 |

| 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 - 0.09 | | | | | | | | | |
| 0.09 - 0.45 | | | | | | | | | |
| 0.45 - 1.15 | | | | | | | | | |
| 1.15 - 1.3 | | | | | | | | | |

**Project Name:** **BRUCEDALE/LADYSMITH/GRIGGWARD - Soil Landscape Modelling**
**Project Code:** **Wagga_SLM** **Site ID:** **BD18** **Observation ID:** **1**
**Agency Name:** **CSIRO Division of Soils (ACT)**

**Laboratory Analyses Completed for this profile**

| | |
|---|---|
| 15F1_CA | Exchangeable bases by 0.01M silver-thiourea (AgTU)+, no pretreatment for soluble salts |
| 15F1_K | Exchangeable bases by 0.01m (AgTU)+, no pretreatment for soluble salts |
| 15F1_MG | Exchangeable bases by 0.01m (AgTU)+, no pretreatment for soluble salts |
| 15F1_NA | Exchangeable bases by 0.01m (AgTU)+, no pretreatment for soluble salts |
| 15F3 | CEC by 0.01M silver-thiourea (AgTU)+ |
| 15L1 | Base saturation percentage (BSP) |
| 15N1 | Exchangeable sodium percentage (ESP) |
| 3A1 | EC of 1:5 soil/water extract |
| 4A1 | pH of 1:5 soil/water suspension |
| 6B3 | Total organic carbon - high frequency induction furnace, infrared |
| P10_NR_C | Clay (%) - Not recorded |
| P10_NR_S | Sand (%) - Not recorded |
| P10_NR_Z | Silt (%) - Not recorded |