

SITE: ELL98 (plot 4)

Land unit: Dundas Redgum

Aust. Soil Class.:

General Land Unit Description:

The flat surface of the Dundas Tablelands predominantly consists of Brown Chromosols and to a lesser extent Yellow Chromosols with a ferric horizon, typically occurring above the clay subsoil. The soil is commonly developed over a highly weathered mottled zone. This red and white mottling, sometimes referred to as 'tiger mottles', is thought to be the result of deep chemical weathering which occurred during the late Tertiary period. Red gums are the dominant vegetation found on this surface.

Two year old *Eucalyptus globulus* plantation on ex-agricultural land

Site Description:

Geology: Cainozoic duricrust

Landform pattern: Gently undulating plain

Internal drainage: Imperfectly drained

Soil Profile Morphology:

Surface Soil

A1 0 – 15 cm Dark brown (7.5YR3/2) *loamy sand*; weak granular structure (5-10 mm); very weak consistence when moist; common medium roots; clear and smooth transition to:

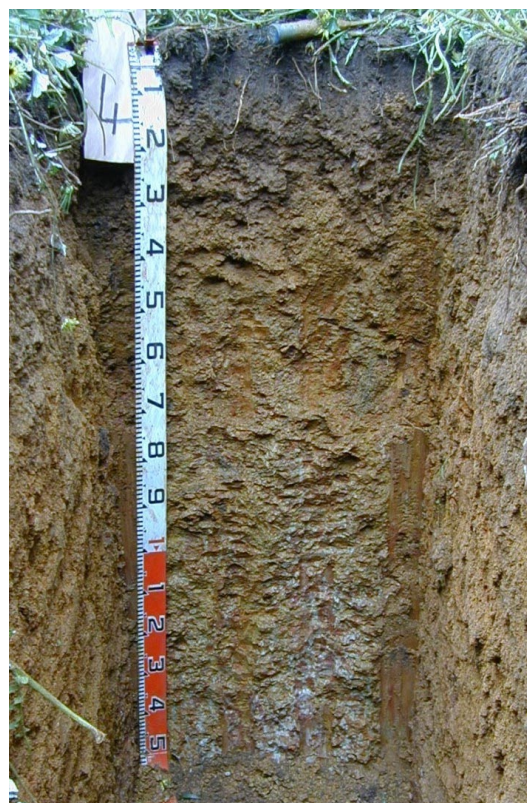
A2 15 – 40 cm Yellowish red (5YR5/6) *loamy sand*; weak granular structure (5-10 mm); very weak consistence when moist; very many coarse ferruginous nodules; common very fine roots; clear and smooth transition to:

Subsoil

B1 40 – 50 cm Yellowish red (5YR5/8), *fine sandy clay*; moderate polyhedral structure (10-20 mm); very weak consistence when moist; common coarse ferruginous nodules; common fine macropores; areal porosity 1.5%; few very fine roots; clear and smooth transition to:

B21 50 – 75 cm Strong brown (7.5YR5/8) with many coarse distinct red (2.5YR4/6) mottles, *light clay*; strong polyhedral structure (20-50 mm) parting to strong polyhedral structure (5-10 mm); weak consistence when moderately moist; common coarse ferruginous nodules; few fine macropores; areal porosity 0.05%; few very fine roots; gradual and smooth transition to:

B22 75 – 120 cm Red (2.5YR4/6) with many very coarse prominent pinkish white (7.5YR8/1) mottles, *light clay*; strong polyhedral structure (20-50 mm) parting to strong polyhedral structure



(10-20 mm); firm consistence when moderately moist; common coarse ferruginous nodules; few fine macropores; areal porosity 0.05%; few very fine roots.

B22 120 – 150 cm As above.

150-220 cm As above.

220 – 400 cm decomposing sedimentary material, tertiary sandstones and claystones, impeding layer to roots at 220 cm

Notes:

Sampled by: Ian Sergeant, Paul Feikema and Martin Clark (24 October 2000)