

SITE: IT21

Land unit: Dundas Trachyte

Aust. Soil Class.: Sodic, ?, Brown CHROMOSOL (confidence level 3)

General Land Unit Description:

There are a few isolated outcrops of Jurassic trachyte in the north-western portion of the study area, with the largest outcrop being north east of Coleraine. There are also some colluvial slopes on the edge of trachyte outcrops around the Dundas and Merino Tablelands.

The trachyte hills often have rock outcrop and reasonably shallow soils on the crests and upper slopes. The main soil type on the upper slopes is a Brown Sodosol although Chromosols also occur and they are commonly sodic at depth. The soils on the colluvial slopes tend to be black cracking clays (Vertosols) or Black Vertic Sodosols. These soils are similar to the black soils of the dissected Merino Tablelands land unit. The soils on these slopes are a complex mix of different soil forming processes.

Site Description:

Slope: 5.5%

Geology: Jurassic trachyte

Position in landscape: Upper slope

Landform pattern: Undulating rises

Internal drainage: Moderately well drained

Soil Profile Morphology:

Topsoil

A11 0-25 cm Dark brown (10YR3/3) *sandy clay loam*, medium subangular blocky structure (2-5 mm), very weak consistence when moderately moist, pH 6; gradual transition to:

A12 25-35 cm Dark greyish brown (10YR4/2) *clay loam*, weak subangular blocky structure (2-5 mm), very weak consistence when moderately moist, pH 6; gradual transition to:

A13 35-55 cm Dark greyish brown (10YR4/2) *clay loam*, weak subangular blocky structure (2-5 mm), very weak consistence when moderately moist, pH 6.5; diffuse transition to:

Subsoil

B2 55-75⁺ cm Brown (10YR5/3) *medium clay loam*, moderate subangular blocky structure (5-10 mm), weak consistence when moderately moist, pH 7.

Key profile features:

- [Strong texture contrast between topsoil and subsoil](#)