## 2. Sodic mottled brown and grey texture contrast soils on Palaeozoic granitic material


These soils have developed on granitic parent material (rock or colluvial material) in the Western Uplands.

The surface soil is often a dark weakly coherent to massive sandy loam to sandy clay loam over a weakly coherent to massive (coherent) conspicuously bleached loamy sand to sandy clay loam subsurface horizon with variable amounts of coarse fragments (quartz). There is a clear change to a mottled yellow brown (occasionally light grey or dark grey) strongly medium to coarsely structured medium clay, often with a red mottle and some quartz or rock fragments, grading into lighter weathered material. The subsoil is sodic. The depth is about 100 cm or more, with variable surface horizon depths, generally 15 cm for the surface and 25 cm for the subsurface, often deeper (as in the Lal Lal area) depending on topographic position. Some profiles have deeper A1 horizons than A2 (in more organic enriching positions); these may be slightly shallower.

Notable features include: texture contrast and associated structure differences between the surface horizons and subsoil, the sodic subsoil, coarse fraction component of the soil (particularly the lighter upper soil) with low nutrient capacity (nutrient decline) and low water holding capacity. These features make these soils vulnerable to erosion, particularly on sloping terrain given poor drainage characteristics, subsoil dispersion and less coherent lighter surface materials.

### Soil sites

| Site code | Soil-landform unit | Component | ASC | FK | 1:100 000 mapsheet |
|---|---|---|---|---|---|
| **MM162** | 15 | Lower slopes | Eutrophic, Mottled-Subnatric, Brown Sodosol | Dy3.41 | T7622 - BALLARAT |
| **MM411** | 18 | Lower slopes | Ferric, Mottled-Subnatric, Brown Sodosol | Dy3.42 | T7522 - SKIPTON |