

5. Brown and black sodic and strongly sodic texture contrast soils on Cretaceous sediments

These soils occur on drier aspects of terrain underlain by Cretaceous sediments at the edges of the Southern Uplands and are sometimes influenced by surrounding basic volcanic terrain.

The surface soil is a moderately fine structured dark organic fine sandy loam to clay loam (5-40 cm deep) with a clear change to a massive (occasionally weak structure) bleached hardsetting subsurface sandy loam to clay loam soil (A2 horizon 30–60 cm) which clearly overlies a dark medium to heavy clay subsoil which is often mottled, particularly with depth. Subsoil structure ranges from coarse to medium depending on texture and cation dominance (coarser structure indicates higher sodicity). Subsoils are sodic in the upper subsoil. Soil depth is usually greater than 100 cm before grading into weathered sandstone, often clearly. Combined with steep slopes these soils are slip prone.



Notable characteristics include: high clay content with fine sand component, weathered deep profiles with little rock fragment content, texture contrast with variable surface soil depth, pale mottled lower subsoils which are sodic, and high nutrient capacity (magnesian) despite relatively low pH.

Soil sites

Site code	Soil-landform unit	Component	ASC	FK	1:100 000 mapsheet
CLRA40	123	Hillcrest	Melanic, Mottled-Subnatric, Black Sodosol	Dd2.13	T7821 - SORRENTO
MM5050	70	Gentle crests	Eutrophic, Mottled-Mesonatric, Brown Sodosol	Dy3.42	T7721 - GEELONG
MM5078	70	Lower slopes	Ferric, Mottled-Mesonatric, Brown Sodosol	Db2.41	T7721 - GEELONG