

CA4: Epihypersodic, Regolithic, Lithocalcic Calcarosol

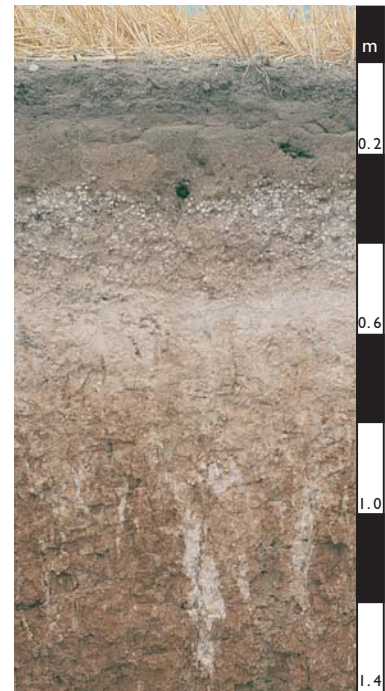
General description of the soil

A Lithocalcic Calcarosol (>50% hard carbonate) underlain by structured calcareous clays. An ESP of 15 or greater occurs within the upper 0.5 m of the profile.

Distribution:	These soils occur widely in the agricultural districts of south-eastern South Australia, particularly the Eastern Eyre Peninsula, Murray Mallee, Murray Plains, Northern Agricultural Districts, and Yorke Peninsula.
Typical land use:	Cereal cropping and annual pastures grazed by sheep.
Common variants:	Variation occurs in the amount, form and distribution of the carbonate segregations.
World Reference Base:	Luvic Calcisol.
Other names:	Solonised Brown Soils and Mallee Soils.

Environment and location of the example profile

Landform:	Plain
Parent material or substrate:	Substrate consists of structured calcareous clays.
Drainage class:	Well-drained. Soil is never saturated for more than a few days.
Surface condition:	Firm.
Site disturbance:	Cultivation.
Native vegetation:	Mallee shrubland.

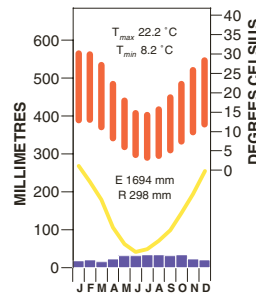


High levels of exchangeable sodium and calcrete rubble dominate, near Pinaroo, South Australia

Site location



Site climate



Soil morphology

Horizon	Depth (m)	Colour	Mottles	Texture	Structure			Consistence	Coarse fragments	Segregations	Boundary
					Grade	Shape	Size				
A1p	0.00–0.09	dark brown (7.5YR 3/2)	–	sandy loam	massive	–	–	–	–	<2% carbonate nodules (2–6 mm) highly calcareous*	abrupt
B2tk	0.09–0.20	dark brown (10YR 3/3)	–	light sandy clay loam	massive	–	–	–	–	<2% carbonate nodules (2–6 mm) very highly calcareous*	clear
B2k	0.20–0.45	brown (10YR 5/3)	–	sandy clay loam	massive	–	–	–	–	>50% carbonate nodules (2–6 mm) very highly calcareous*	diffuse
Ck	0.45–0.72	pink (7.5YR 7/4)	–	light clay	massive	–	–	–	–	2–10% carbonate nodules (2–6 mm) very highly calcareous*	diffuse
2C1k	0.72–1.00	strong brown (7.5YR 5/6)	–	medium clay	weak	prismatic	20–50 mm	–	–	highly calcareous*	diffuse
2C2k	1.00–1.40	yellowish red (5YR 5/6)	light brownish grey (10YR 6/2)	medium clay	moderate	prismatic	20–50 mm	–	–	moderately calcareous*	diffuse
2C	1.40–1.80	yellowish red (5YR 4/8)	light brownish grey (10YR 6/2)	heavy clay	strong	prismatic	20–50 mm	–	–	–	

* Fine earth fraction

