

KU1: Bleached-Mottled, Natric, Red Kurosol

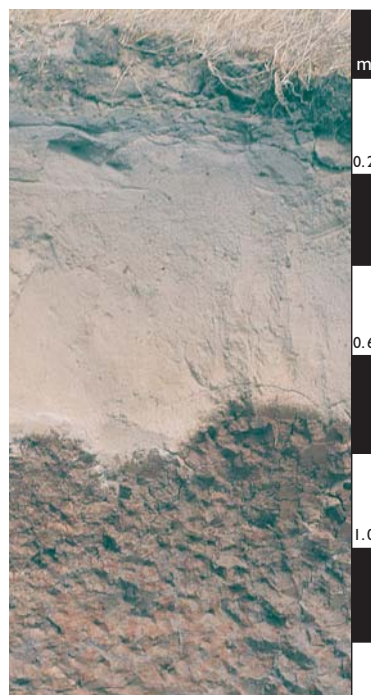
General description of the soil

A strongly acid texture-contrast soil with a red, mottled upper B horizon which is sodic. A conspicuously bleached A2e horizon is present.

Distribution:	These soils are confined to the higher rainfall districts of South Australia, principally the Fleurieu Peninsula and the Lower South East.
Typical land use:	Permanent perennial pastures used for grazing.
Common variants:	The degree of B horizon mottling is variable, as is A horizon thickness. B horizons commonly have a very low Ca/Mg ratio (less than 0.1).
World Reference Base:	Arenic Luvisol.
Other names:	Red Podzolics and Soloths.

Environment and location of the example profile

Landform:	Rolling low hills and prominent crests.
Parent material or substrate:	Sandy clays deposited in ancient glacial valleys.
Drainage class:	Moderately well to well-drained.
Surface condition:	Loose.
Site disturbance:	Cultivated.
Native vegetation:	Eucalypt woodland to open forest.

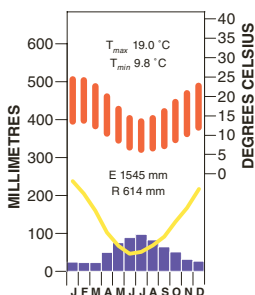


Near Yankalilla, South Australia

Site location



Site climate



Soil morphology

Horizon	Depth (m)	Colour	Mottles	Texture	Structure			Consistence	Coarse fragments	Segregations	Boundary
					Grade	Shape	Size				
A11	0.00–0.10	very dark greyish brown (10YR 3/2)	–	sand	single grain	–	–	very soft (dry)	–	–	clear
A12	0.10–0.22	brown (10YR 4/3)	–	light loamy sand	single grain	–	–	very soft (dry)	–	–	gradual
A2e	0.22–0.75	white (10YR8/2 d) light yellowish brown (10YR 6/4)	–	sand	single grain	–	–	very soft (dry)	–	–	sharp
B21	0.75–0.85	red (2.5YR 4/6)	yellowish red (5YR 4/6)	medium heavy clay	strong	columnar	100–200 mm	very hard (moderately moist)	–	–	gradual
B22	0.85–1.30	greyish brown (2.5Y 5/2)	dark red (10R 3/6) and yellowish brown	medium heavy clay	weak	prismatic	100–200 mm	very hard (moderately moist)	–	–	diffuse
B3	1.30–1.70	light yellowish brown (2.5Y 6/4)	red (2.5YR 4/8) and brownish yellow	sandy medium clay	massive	–	–	very hard (moderately moist)	–	–	gradual
B3/C	1.70–2.00	pale yellow (2.5Y 7/4)	brownish yellow (10YR 6/8) and greyish brown	sandy light clay	massive	–	–	firm (moderately moist)	–	–	

Soil chemical and physical properties

Horizon	Sample Depth (m)	pH H ₂ O ^A	pH CaCl ₂ ^B	Elect. Cond. dS/m ^A	CaCO ₃ %	Org. C % ^D	Extr. P mg/kg ^A	Tot. P %	Tot. K %	Cation exchange properties ^E						ESP % ^A	Bulk dens. Mg/m ³	Particle size % ^A			
										Ca	Mg	K	Na	H+Al	CEC			ECEC	CS	FS	Silt
A11	0.00–0.10	5.5	5.0	0.07		0.9	18			1.5	0.5	0.2	0.1		3		74	23	1	2	
A12	0.10–0.22	4.7	4.2	0.04		0.1	9			0.2	0.1	0.1	0.1		1						
A2e	0.22–0.75	5.1	4.7	0.04		0.0	8			0.2	0.1	0.1	0.1		1		58	40	2	1	
B21	0.75–0.85	5.1	4.1	0.06		0.5	4			3.4	8.7	0.6	1.3		18		36	15	2	47	

