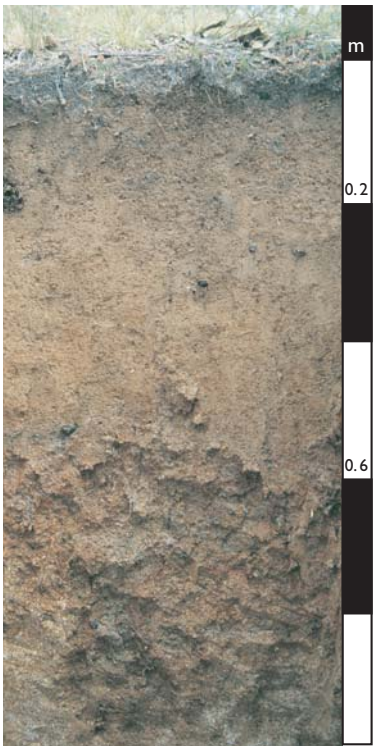
KU6: Bleached, Mesotrophic, **Yellow Kurosol**



Tumbarumba district, New South Wales

General description of the soil

A strongly acid, texture-contrast soil with a moderate base status (i.e. Mesotrophic) in the major part of the yellow clayey B2 horizon. A conspicuously bleached A2e horizon is present.

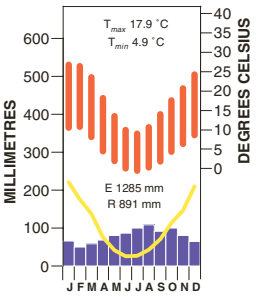
Distribution:	Often associated with dry sclerophyll forest in south-eastern Australia.
Typical land use:	Forestry and extensive grazing.
Common variants:	Thinner A horizons are common.
World Reference Base:	Abruptic Lixisol.
Other names:	Yellow Podzolic and Yellow Duplex soils.

Environment and location of the example profile

Landform:	Upper hillslope.
Parent material or substrate:	Granite.
Drainage class:	Moderately well-drained.
Surface condition:	Firm.
Site disturbance:	Selective logging.
Native vegetation:	Open forest.

Site location

Site climate



Soil morphology

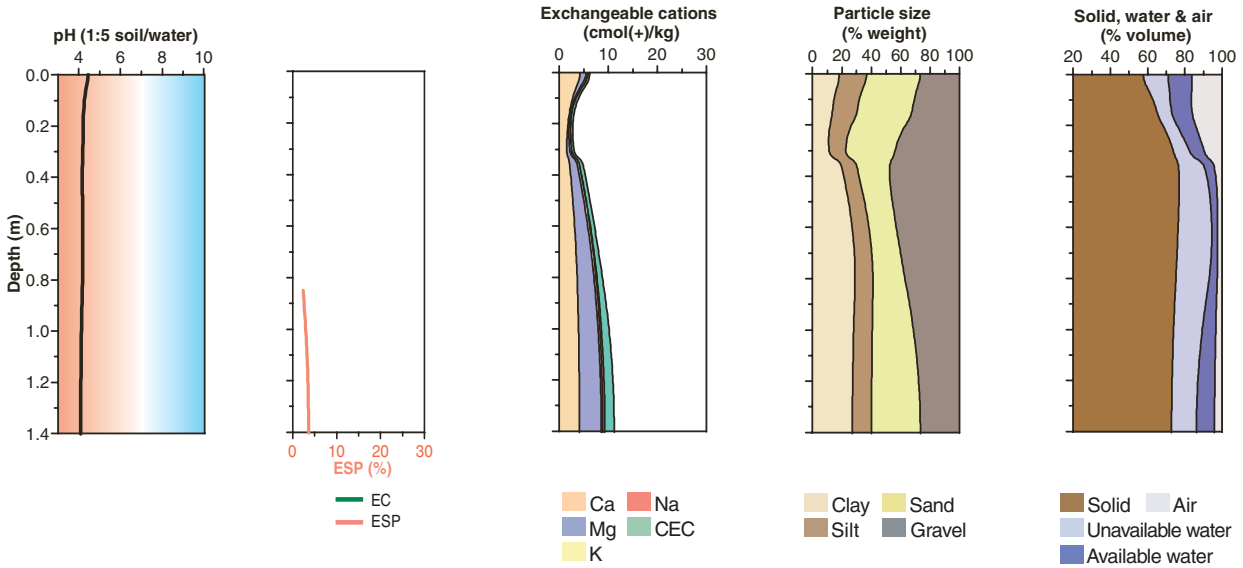
Horizon	Depth (m)	Colour	Mottles	Texture	Structure			Consistence	Coarse fragments	Segregations	Boundary
					Grade	Shape	Size				
A1	0.00–0.05	very dark greyish brown (10YR 3/2)	–	coarse sandy clay loam	moderate	subangular blocky parting to granular	5–10 mm parting to 2–5 mm	weak (moist)	20–50% subangular quartz gravel (2–6 mm)	–	abrupt smooth
A21	0.05–0.18	yellowish brown (10YR 5/4)	10–20% light yellowish brown (10YR 6/4) faint	coarse sandy loam	massive	–	–	very weak (moist)	20–50% subangular quartz gravel (2–6 mm)	–	clear irregular
A22e	0.18–0.33	very pale brown (10YR 8/3 d) light yellowish brown (10YR 6/4)	2–10% yellowish brown (10YR 5/4) faint	coarse sandy loam	massive	–	–	firm (moist)	20–50% subangular quartz gravel (2–6 mm)	–	clear wavy
B21t	0.33–0.47	reddish yellow (7.5YR 6/6)	10–20% light yellowish brown (10YR 6/4) faint	light medium clay	moderate	angular blocky	20–50 mm	firm (moist)	20–50% subangular quartz gravel (2–6 mm)	–	clear wavy
B22t	0.47–0.85	yellowish red (5YR 4/6)	10–20% light brown (7.5YR 5/4) faint and 2–10% very pale brown (10YR 7/4) distinct	medium clay	strong	prismatic parting to angular blocky	20–50 mm parting to 10–20 mm	weak (moist)	20–50% subangular quartz gravel (2–6 mm)	–	clear irregular
C	0.85–1.40	yellowish brown (10YR 5/6)	2–10% yellowish red (5YR 4/6) prominent	light clay	massive	–	–	weak (moist)	20–50% subangular quartz gravel (2–6 mm)	–	

Soil chemical and physical properties

Horizon	Sample Depth (m)	pH H_2O	pH $CaCl_2$ [C]	Elect. Cond. dS/m	$CaCO_3$ %	Org. C %[D]	Extr. P mg/kg	Tot. P %[B]	Tot. K %	Cation exchange properties[I*] cmol(+)/kg							ESP %[B]	Bulk dens. Mg/m^3	Particle size %			
										Ca	Mg	K	Na	H+Al[A]	CEC	ECEC[A]			CS	FS	Silt	Clay
A1	0.00–0.05		4.4			2.7		0.340		4.9	0.8	0.4	<0.1	0.8		7	–	1.3				
A21	0.05–0.18		4.1			0.5		0.190		0.6	0.4	0.2	<0.1	0.6		2	–	1.5				
A22e	0.18–0.33		4.2			0.2		0.120		0.9	0.6	0.3	<0.1	0.4		2	–	1.6				
B21t	0.33–0.47		4.1			0.3		0.010		2.5	1.7	0.4	<0.1	0.8		6	–	1.7				
B22t	0.47–0.85		4.2			0.3		0.020		3.6	2.9	0.5	0.1	0.8		8	–	1.7				
C	0.85–1.40		4.1			0.1		0.010		4.2	4.3	0.3	0.4	1.9		11	4					

* The data for H+Al are determined by method A. These data should approximate those determined by method B and are used to calculate ECEC (method A).

Key profile properties



General qualities of the soil

Infiltration:	Rapid, although water-repellence may restrict water entry particularly after fire.
Available water store:	Small water-holding capacity particularly in the dense B horizon.
Permeability:	Moderate to slowly permeable in the B horizon.
Physical root limitations:	Dense clay subsoil may limit root development and periods of saturation occur in the A2 horizon.
Erosion hazard:	Moderate to high when cleared or groundcover is reduced.
Nutrient availability:	Medium to low with low phosphorous, nitrogen and organic matter.
Toxicities:	None apparent.

Yellow Kurosols occur on rolling hills adjacent to the Maragle Range – the high point is Mt Black Jack within Kosciuszko National Park, New South Wales.

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