

TE8: Basic, Arenic, Yellow-Orthic Tenosol

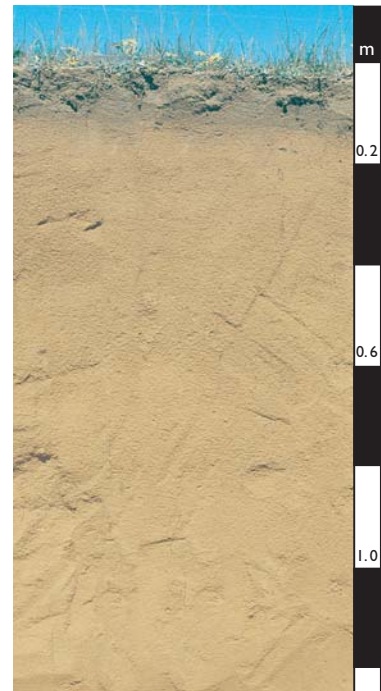
General description of the soil

A deep sandy soil with a weakly developed Bw horizon in terms of colour and texture and a slightly acid to near neutral soil reaction. The laboratory data below are from a similar soil in the same environment.

Distribution:	These soils are most common on the yellow sandplains of southwest Western Australia with much smaller local occurrences in eastern and northern Australia.
Typical land use:	Dryland cropping.
Common variants:	Slight differences in depth, subsoil colour and texture are common.
World Reference Base:	Profundic Lixosol.
Other names:	Earthy Sands.

Environment and location of the example profile

Landform:	Gently undulating sandplain.
Parent material or substrate:	Undetermined.
Drainage class:	Rapidly drained.
Surface condition:	Loose.
Site disturbance:	Cultivated.
Native vegetation:	Heathland.

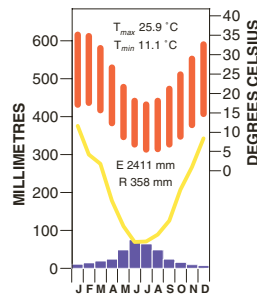


Three Springs district, south-west Western Australia

Site location



Site climate



Soil morphology

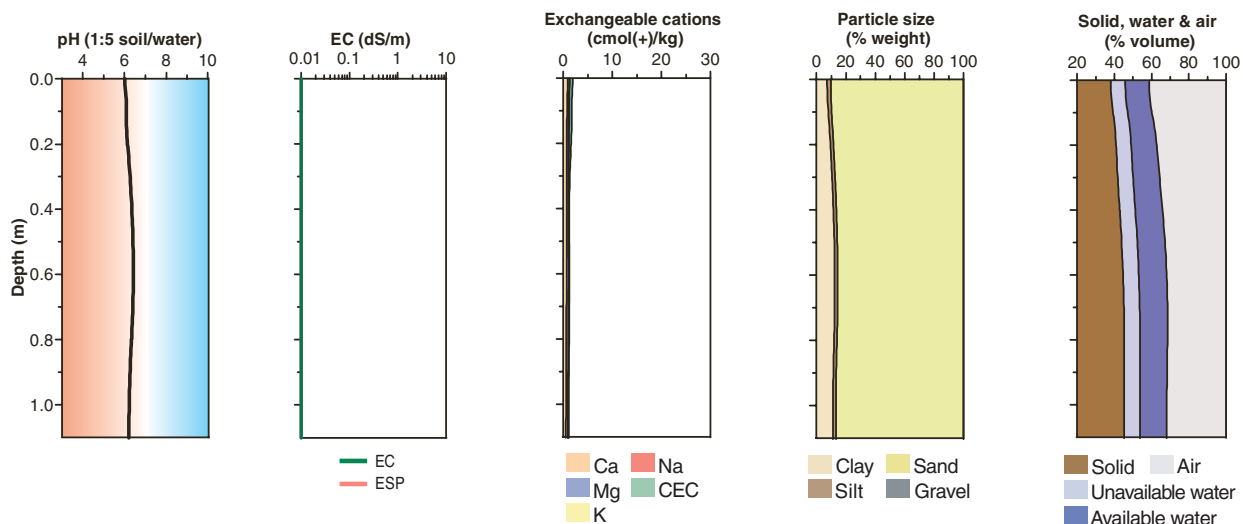
Horizon	Depth (m)	Colour	Mottles	Texture	Structure			Consistence	Coarse fragments	Segregations	Boundary
					Grade	Shape	Size				
A1	0.00–0.10	brown (10YR 5/3)	–	loamy sand	single grain	–	–	loose	–	–	gradual
B1w	0.10–0.75	brownish yellow (10YR 6/6)	–	clayey sand	massive	–	–	loose	–	–	diffuse
B2w	0.75–1.50	yellow (10 YR 7/8)	–	clayey sand	massive	–	–	loose	–	–	

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 % ^A	Extr. P mg/kg ^A	Tot. P % ^B	Tot. K %	Cation exchange properties ^D cmol(+)/kg						ESP %	Bulk dens. Mg/m ³	Particle size % ^B				
										Ca	Mg	K	Na	H+Al	CEC			ECEC	CS	FS	Silt	Clay
										< 0.1	< 0.1	< 0.1	< 0.1									
A11	0.00–0.05	6.0	5.1	0.01		0.4	2	0.003		0.9	0.3	< 0.1	< 0.1		2			77	13	3	7	
A12	0.05–0.10	6.2	5.3	0.01		0.3	< 2	0.002		0.7	0.3	< 0.1	< 0.1		1			83	8	2	7	
B1w	0.10–0.20	6.0	5.1	0.01		0.2	< 2	0.002		0.7	0.3	0.1	< 0.1		2			76	13	2	9	
B1w	0.20–0.40	6.3	5.4	0.01		0.2	< 2	0.002		0.6	0.3	< 0.1	< 0.1		1			72	15	2	11	
B1w	0.40–0.80	6.5	5.8	0.01		0.1	< 2	0.002		0.7	0.4	< 0.1	< 0.1		1			65	20	2	13	
B2w	0.80–1.10	6.2	5.8	0.01		0.1	< 2	0.002		0.5	0.4	< 0.1	< 0.1		1			72	15	2	11	

Note: Laboratory data for a similar soil (McArthur 1991).

Key profile properties



General qualities of the soil

Infiltration:	Rapid unless water-repellent.
Available water store:	Moderate.
Permeability:	High to very high.
Physical root limitations:	None.
Erosion hazard:	Susceptible to wind erosion on bare surface soils.
Nutrient availability:	Very low inherent fertility.
Toxicities:	Acidification can lead to aluminium toxicity.



Gently undulating sandplain, Three Springs District, Western Australia

Acknowledgements: Soil image, soil description and laboratory data: Agriculture Western Australia. Laboratory data are for a similar soil from McArthur (1991), Site GTN 5. Landscape image: Agriculture Western Australia.