

BLEACHED SILICEOUS SAND

General Description: *Deep bleached sand with an organically darkened surface and a yellowish sandy subsoil at depth*

Landform: Gently undulating dune field

Substrate: Windblown Molineaux Sand.

Vegetation: Mallee



Type Site: Site No.: MM065

1:50,000 sheet: 6927-3 (Jabuk)

Hundred: Peake

Annual rainfall: 400 mm

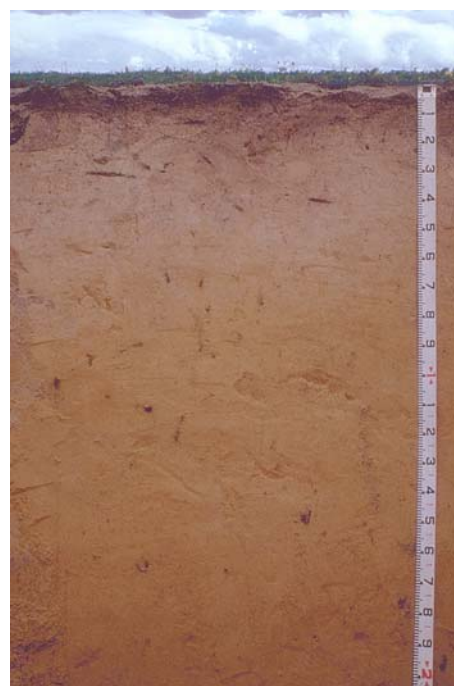
Sampling date: 01/09/92

Landform: Slope of moderate sandhill, 10% slope

Surface: Loose with no stones

Soil Description:

Depth (cm)	Description
0-13	Dark greyish brown loose single grain sand. Gradual to:
13-60	Very pale brown (bleached) loose single grain sand. Diffuse to:
60-160	Brownish yellow loose single grain sand. Diffuse to:
160-210	Brownish yellow loose single grain sand.



Classification: Basic, Arenic, Bleached-Orthic Tenosol; medium, non-gravelly, sandy / sandy, very deep

Summary of Properties

Drainage	Rapidly drained. Soil never remains wet for more than a few hours.
Fertility	Inherent fertility is very low as indicated by the exchangeable cation data. The soil has very limited capacity to retain nutrients, and deficiencies of phosphorus, nitrogen, zinc, copper and manganese are common. Organic carbon is low at sampling site.
pH	Neutral at the surface, slightly alkaline with depth.
Rooting depth	100 cm in pit, but a few roots to 200 cm.
Barriers to root growth	
Physical:	No physical barriers.
Chemical:	Low nutrient status and retention capacities prevent denser root growth.
Water holding capacity	60 mm in root zone.
Seedling emergence:	Reduced by water repellence.
Workability:	Soft / loose surface is easily worked.
Erosion Potential	
Water:	Low.
Wind:	Moderately high.

Laboratory Data

Depth cm	pH H ₂ O	pH CaCl ₂	CO ₃ %	EC1:5 dS/m	ECe dS/m	Org.C %	Avail. P mg/kg	Avail. K mg/kg	Boron mg/kg	Trace Elements mg/kg (DTPA)				CEC cmol (+)/kg	Exchangeable Cations cmol(+)/kg				ESP
										Cu	Fe	Mn	Zn		Ca	Mg	Na	K	
Paddock	6.8	6.5	0	0.04	0.28	0.53	8.6	150	0.3	-	-	-	-	1.9	3.04	0.44	0.09	0.16	na
0-13	7.0	6.7	<1	0.04	0.39	0.47	6.3	160	0.4	-	-	-	-	2.1	3.09	0.46	0.09	0.20	na
13-30	7.8	7.1	0	0.04	0.23	0.14	2.6	94	0.2	-	-	-	-	1.3	1.96	0.32	0.09	0.14	na
30-60	7.6	7.0	0	0.03	0.23	0.03	3.4	120	0.1	-	-	-	-	1.3	1.40	0.31	0.10	0.14	na
60-100	7.7	7.1	0	0.03	0.27	<0.01	3.1	130	0.2	-	-	-	-	1.3	1.19	0.33	0.08	0.14	na
100-160	7.9	7.3	0	0.04	0.21	<0.01	<2.0	130	0.2	-	-	-	-	2.0	1.46	0.55	0.09	0.14	na
160-210	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Note: Paddock sample bulked from cores (0-10 cm) taken around the pit.

CEC (cation exchange capacity) is a measure of the soil's capacity to store and release major nutrient elements.

ESP (exchangeable sodium percentage) is derived by dividing the exchangeable sodium value by the CEC.