DEEP SAND

General Description: *Thick bleached sand over a brownish sandy subsoil (colour B horizon), becoming paler with depth*

Landform: Gently undulating dunefield.

Substrate: Windblown siliceous sand.

Vegetation:

Type Site:

Site No.:	SE051	1:50,000 mapsheet:	7024-4 (Keppoch)
Hundred:	Beeamma	Easting:	472750
Section:	31	Northing:	5957950
Sampling date:	01/02/1996	Annual rainfall:	540 mm average

Crest of dune, 4% slope. Soft surface with no stones.

Soil Description:

Depth (cm)	*Description*
0-7	Dark grey soft single grain sand. Gradual to:
7-15	Greyish brown loose single grain sand. Diffuse to:
15-32	Very pale brown, with dark greyish brown inclusions, loose single grain fine sand. Diffuse to:
32-70	Pale brown loose single grain sand with strong brown earthy lamellae. Diffuse to:
70-129	Brownish yellow and dark grey loose single grain sand. Gradual to:
129-165	Yellow loose single grain sand.

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

Summary of Properties

Drainage: Rapidly drained. The soil rarely remains wet for more than a few hours.

Fertility: Inherent fertility is very low, as indicated by the exchangeable cation data. There is very little nutrient retention capacity, due to low clay and organic matter contents. Phosphorus, sulphur, calcium, magnesium and potassium all appear to be deficient.

pH: Acidic throughout.

Rooting depth: 165 cm in pit.

Barriers to root growth:

Physical: There are no physical barriers.

Chemical: There are no chemical barriers, but low nutrient status and retention capacity are the main reasons for sub-optimal root growth.

Waterholding capacity: Approximately 100 mm in the potential rootzone.

Seedling emergence: Satisfactory. Water repellence affects establishment in some seasons.

Workability: The soft surface is easily worked.

Erosion Potential:

Water: Moderately low.

Wind: Moderately high.

Laboratory Data

Depth cm	pH H_2O	pH $CaC1_2$	CO_3 %	EC1:5 dS/m	ECe dS/m	Org.C %	Avail. P mg/kg	Avail. K mg/kg	SO_4 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	6.4	5.6	0	0.03	0.27	0.7	9	58	4	0.7	0.21	12	2.27	1.09	2.6	2.16	0.37	0.10	0.08	na
0-7	6.0	5.2	0	0.02	0.21	0.7	9	51	4	0.7	-	-	-	-	2.4	1.85	0.26	0.08	0.09	na
7-15	5.6	4.7	0	0.01	0.15	0.2	8	30	2	0.7	-	-	-	-	1.1	0.64	0.14	0.07	0.03	na
15-32	5.5	4.7	0	0.01	0.09	0.1	11	53	1	0.7	-	-	-	-	0.7	0.32	0.07	0.07	0.04	na
32-70	5.5	4.7	0	0.01	0.06	<0.1	8	36	2	0.7	-	-	-	-	0.7	0.31	0.09	0.08	0.04	na
70-110	6.3	5.4	0	0.01	0.05	<0.1	6	38	1	0.7	-	-	-	-	0.6	0.32	0.08	0.06	0.04	na
110-129	6.5	5.8	0	0.01	0.05	<0.1	5	44	2	0.6	-	-	-	-	0.8	0.45	0.14	0.08	0.06	na
129-165	6.4	5.6	0	0.01	0.06	<0.1	<4	54	1	0.6	-	-	-	-	0.7	0.33	0.11	0.06	0.07	na

Note: Paddock sample bulked from 20 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.

Further information: DEWNR Soil and Land Program