

MUD Mudi Land System

- Area:** 79.2 km²
- Landscape:** Gently undulating rises formed on highly calcareous Woorinen Formation silty sands over Ripon / Bakara Calcretes
- Annual rainfall:** 285 – 320 mm average
- Main soils:** Magarey - A1a (Supravescent, Regolithic, Hypercalcic / Lithocalcic Calcarosol)
Very highly calcareous (more than 40% CaCO₃) soft sandy loam to light sandy clay loam grading to very highly calcareous light sandy clay loam with variable rubble content.
Bookabie - A4a (Regolithic, Hypercalcic / Lithocalcic Calcarosol)
Calcareous soft sandy loam to sandy clay loam, becoming more clayey and calcareous with depth, over Class III A, B or C fine to rubbly carbonate in a sandy clay loam to light clay matrix, from about 40 cm.
- Minor soils:** Chintumba - B1 (Hypervescent, Petrocalcic, Lithocalcic Calcarosol)
Medium thickness highly calcareous sandy loam to sandy clay loam containing increasing amounts of rubble with depth, over sheet calcrete at less than 50 cm.
Magnesia soil - A1b / A4b (Hypervescent / Epihypersodic, Regolithic, Hypercalcic Calcarosol)
Very highly calcareous (A1b) to calcareous (A4b) sandy loam to loam becoming more clayey and calcareous at depth with variable rubble, continuing below 120 cm, and saline throughout.
- Summary:** Very gently undulating rises characterized by calcareous to very highly calcareous sandy loams. These have marginal to moderate fertility, but are susceptible to wind erosion and sometimes limited soil depth. High subsoil boron and salt, and sporadic magnesia patches reduce productive potential. Minor areas of shallow stony soils are semi arable.

Soil Landscape Unit summary: 5 Soil Landscape Units (SLUs) mapped in the Mudi Land System:

SLU	% of area	Component	Main soils	Prop#	Notes
SMB	21.2	Sandy loam rises	Bookabie	D	Very gently undulating rises formed on Woorinen Formation deposits. The land is mostly arable, but some shallow stony soils are only marginally suitable for cropping. There are minor magnesia patches throughout.
SxB	22.1	Sandy loam rises	Bookabie / Magarey	D	
SzB	11.9	Sandy loam rises	Bookabie	V	Main soils: <u>Bookabie</u> - Moderate fertility calcareous sandy loam with moderate subsoil boron and salt. Slight wind erosion potential.
		Stony rises	Chintumba	E	
YPL	10.3	Sandy loam flats	Magarey	D	<u>Magarey</u> - Marginal fertility highly calcareous sandy loam with high subsoil boron and salt. Slight wind erosion potential.
YPP	34.5	Sandy loam rises	Magarey	D	<u>Chintumba</u> - Very shallow, restricted waterholding capacity, extensive surface stone, often semi arable.

PROPORTION codes assigned to Soil Landscape Unit (SLU) components:

D	Dominant in extent (>90% of SLU)	C	Common in extent (20–30% of SLU)
V	Very extensive in extent (60–90% of SLU)	L	Limited in extent (10–20% of SLU)
E	Extensive in extent (30–60% of SLU)	M	Minor in extent (<10% of SLU)

Further information: [DEWNR Soil and Land Program](#)

