

BROWN CRACKING CLAY

General Description: *Reddish brown to brown well structured clay, becoming more clayey and coarser structured with depth, and having variable fine carbonate accumulations, often to the surface*

Landform: Flat to very gently undulating plains.

Substrate: Tertiary clay, coarsely structured, usually with slickensides.

Vegetation:

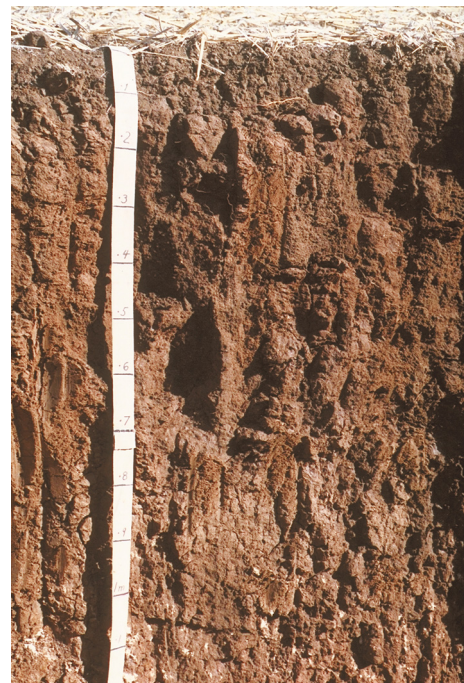


Type Site:	Site No.:	CM908	1:50,000 mapsheet:	6630-2 (Apoinga)
	Hundred:	Stanley	Easting:	294350
	Section:	335	Northing:	6246400
	Sampling date:	March 1990	Annual rainfall:	525 mm average

Level plain, 0% slope. Firm, seasonally cracking surface.

Soil Description:

Depth (cm)	Description
0-15	Dark brown firm light clay with strong medium granular structure. Abrupt to:
15-40	Brown hard medium clay with strong coarse prismatic structure. Gradual to:
40-80	Brown hard heavy clay with coarse prismatic structure. Gradual to:
80-100	Brown hard very highly calcareous heavy clay with very coarse prismatic structure.



Classification: Epicalcareous-Endohypersodic?, Epipedal, Brown Vertosol



Summary of Properties

Drainage: Imperfectly drained. The soil may remain wet for up to two weeks following heavy or prolonged rainfall, due to high clay content.

Fertility: Inherent fertility is high, due to high clay and organic matter contents.

pH: Neutral at the surface, alkaline with depth.

Rooting depth: 100 cm in pit, but few roots below 60 cm.

Barriers to root growth:

Physical: High soil strength restricts root growth to some extent.

Chemical: There are no apparent chemical barriers to root growth.

Waterholding capacity: Approximately 105 mm in the potential rootzone.

Seedling emergence: Satisfactory to fair. Surface soil may seal over, particularly if organic carbon levels are low.

Workability: Clayey surface tends to become sticky and intractable when wet.

Erosion Potential:

Water: Low.

Wind: Low.

Laboratory Data

Depth cm	pH H ₂ O	pH CaCl ₂	CO ₃ %	EC 1:5 dS/m	ECe dS/m	Org.C %	Avail. P mg/kg	Boron mg/kg
0-15	6.6	6.2	2	0.14	-	1.56	86	2.3
15-40	7.8	7.0	3	0.06	-	0.62	7	2.6
40-80	8.4	7.4	3	0.13	-	0.49	7	2.5
80-100	8.5	7.7	55	0.26	-	0.46	6	4.0

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

