

Soil pit description: PF14

Images:

Soil class:	Lutz
Map unit:	Lu
Location:	50 m up Donato Trail from Lutz Creek
Site position:	Lower midslope
Slope:	20%, irregular, aspect 320 ⁰
Parent material:	Caimito marine sedimentary facies
Forest structure:	Closed canopy, moderately dense understory, few palms
Litter:	90% cover, 3 layers, thin +/- continuous root mat
Outcrops:	None
Stones:	Few coarse (to 1 m) hard boulders
Cracks:	Continuous network, up 12 mm wide, partly infilled
Microrelief:	Slight micro-gilgai
Faunal activity:	Many fine & medium worm casts
Other surface features:	None

Horizon [cm]		Samples [cm]
0 - 5	7.5YR 3/3 (dark brown); no mottles; clay loam; weak medium breaking to moderate fine subangular blocky; no cutans; many coarse pores including common worm channels; slightly moist & friable; common fine & medium tree roots; no stones; few fine black ferrimanganiferous concretions; no charcoal; gradual regular boundary to:	[0-5]
5 - 12	5YR 3/3 (dark reddish brown); no mottles; silty clay loam; weak medium breaking to moderate fine subangular blocky & pockets of old ant nest; no cutans; many coarse pores including old ant nest channels; moist & slightly friable; common fine & medium & coarse tree roots; few fine slightly hard grey & orange weathered stones & rare very fine quartz grit; no concretions; no charcoal; diffuse boundary to:	[5-15]
12 - 25	5YR 3/3 (dark reddish brown); no mottles; silty clay; moderate medium breaking to moderate fine subangular blocky & pockets of worm casts; no cutans; few fine & medium pores; slightly moist & slightly firm; common fine & medium tree roots; rare very fine quartz grit; common fine black ferrimanganiferous concretions; no charcoal; clear wavy boundary to:	[15-25]
25 - 40	2.5YR 4/4 (reddish brown); no mottles; gritty silty clay; moderate coarse breaking to moderate medium subangular blocky & many worm casts; moderate discontinuous clayskins; common fine pores & common old ant nest channels; moist & firm; few fine & medium tree roots; many fine slightly hard grey & orange weathered stones; few fine black ferrimanganiferous concretions; no charcoal, clear wavy boundary to:	[25-35] [35-45]
40 - 75	10R 4/4 (weak red) with many medium distinct 10R 4/2 (weak red) mottles; weathered rock hand textures as gritty clay loam; massive with fissures & few patches of worm casts; strong continuous clayskins & weathering films; common nest channels; moist & firm; rare fine & medium tree roots; many fine patches of less weathered grey & orange weathered saprolite; no concretions; no charcoal, clear wavy boundary to:	[45-55] [55-65] [65-75]
75 - 166+	Light grey, with purple, orange & yellow patches & white streaks & spots; slightly hard weathered rock; dipping to E at 40o, strong clayskins & weathering films; very rare fine tree roots	None

Correlations

Catapan (1970): O C M Cv 3
 M C 1 1

World Reference Base: (Hyper) Eutric Cambisol

Soil Taxonomy: Typic Eutrudept

Features: Colours appeared darker in field than Munsell indicate. High exchangeable Ca but Mg also high so Ca:Mg ratios are moderate . Moderate exchangeable K.