

2. Regional Data, Displays for Specific Purpose and the Case Studies
2.1 Natural regional resources data

Table 2.5 - Soil mapping (UM) of Espirito Santo State, class components, attributes and original vegetation phases related to each class.

UM ^{1/}	CLASS ^{2/}	COMPONENT 1				CLASS	COMPONENT 2				CLASS	COMPONENT 3		
		A HORIZON ^{3/}	TEXTURE, STONINESS AND ROCK OUTCROPS ^{4/}	RELIEF ^{5/}	VEGETATION ^{6/}		A HORIZON	TEXTURE, STONINESS AND ROCK OUTCROPS	RELIEF	A HORIZON		TEXTURE, STONINESS AND ROCK OUTCROPS	RELIEF	
LAa1	LAa	A	r	s,o	SP									
LAa2	LAa	A	r,r*	p,s	P	PAaTbab(ab)	A	a,m/r,a/m	p					
LAa3	LAa	A	r,r*	o,s	SP	PAaTb	A	m/r	o,s					
LAa4	LAa	A	r	p,s	SP	PVaTb	A	m/r	o					
LAa5	LAa	A	r	o,s	SP	LEe	A	r	o,s					
LAa6	LAa	A	r	o,s	SP	LVa	A	r	o,s					
LAa7	LAa	A	r	o	SP	PEeTb	A	m/r,r	o	PVdTb	A	m/r	o	
LAa8	LAa	A	r	o	SP	PVdTb	A	m/r	o	PEeTb	A	m/r	o	
LVa1	LVa	A	r,r*	o,f	SP									
LVa2	LVa	A	r	f	SP,SC									
LVa3	LVa	A	r	o	SP	LVHa	Ah	r	o,f					
LVa4	LVa	A	r,r*	o	SP	PVaTb	A	m/r	o					
LVa5	LVa	A	r	s,o	SC	PEeTb	A	m/r	o					
LVa6	LVa	A	r	o	SP	PVeTb	A	m/r	o					
LVa7	LVa	A	r	f	P	PVaTb	A	m/r,r*	f					
LVa8	LVa	A	r	m,f	SC	PVLa	A	r	m,f					
LVa9	LVa	A	r	m,f	SP	CaTb	A	r	m					
LVa10	LVa	A	r	m,f	SP	CaTb	A	r,m	m,e					
LVa11	LVa	A	m,r	f,m	C	CaTb	A	m,r	f,m					
LVa12	LVa	A	r	f,m	SC	LVHa	Ah	r	f,m	PEeTb	A	m/r	f,m	
LVa13	LVa	A	r,r*	f,o	SC	PEeTb	A	m/r,r	f,o	PVdTb	A	m/r,r	f,o	
LVa14	LVa	A	r	o	SP	AR			o	PVdTb	A	m/r	o	
LVa15	LVa	A	r	o,f	SC	PVdTb	A	m/r	o,f	PEeTb	A	m/r	o,f	
LVa16	LVa	A	r	f,o	SC	PEeTb	A	m/r	f,o	PVdTb	A	m/r	f,o	
LVa17	LVa	A	r	f,m	SP	LUa	A	r	f,m	CaTb	A	r,m(P)P	f,m	
LVa18	LVa	A	r	f,m	SP	PVaTb	A	m/r	f,m	AR				
LVa19	LVa	A	r	f,m	SP	AR			f,m	CaTb	A	r	f,m	
LVad1	LVad	A	r	o,f	SC									
LVad2	LVad	A	r	f,m	SP									
LVad3	LVad	A	r,r*	f,m	SP	PEeTb	A	r	f,m	AR				
LVad4	LVad	A	r,r*	m	SC	PEeTb	A	m/r,r	m	Ra	A	m,r	m,e	
LVad5	LVad	A	r	o,f	SC	LAad	A	r	o	PEeTb	A	m/r	o,f	
LVad6	LVad	A	r	f,o	SP	LAad	A	r	f,o	PVdTb	A	m/r	f,o	
LVda1	LVda	A	r	f	SP									
LVda2	LVda	A	r,r*	f	SP	PEeTb	A	m/r,r	f,o					
LVda3	LVda	A	r	f,o	SC	PVdaTb	A	m/r	f,o					
LVPa	LVPa	A	r,r*	o,f	SP									
LVHa1	LVHa	Ah	r	o,f	SP	LVa	A	r	o,f					
LVHa2	LVHa	Ah	r	f	SP	CaTb	A	r	f,m					
LVHa3	LVHa	Ah	r	f,m	SP	LUHa	Ah	r	f,m					
LVde1	LVde	A	r,r*	o,f	SP									
LVde2	LVde	A	r	f,o	SC	PEeTb	A	m/r,r		Cel	A	r	f,o	s
LEe	LEe	A	r,m	s	SP	LVda	A	r		LAda	A	r		
PAa1	PAaTbab(ab)	A	a/r,m/r	p,s	SP	LAa	A	r	p,s					
PAa2	PAaTbab(ab)	A	a/r,m/r	s,o	SP	LAa	A	r	o					
PAad1	PAadTbab(ab)	A	a,m/r;a/m	p,s	P,SP									
PAad2	PAadTbab(ab)	A	m,a/r	p,s	SP									
PAad3	PAadTbab(ab)	A	a,m/r	p,s	SP	LAad	A	r	s,p					
PAad4	PAadTbab(ab)	A	a/r,m/r	s,p	SP	LAad	A	r	s,o					
PVa	PVaTb	A	m/r,r	f	SP									
PVad	PVadTb	A	m/r	o,s	SC	LVad	A	r	o,s	PEeTb	A	m/r	o,s	
PVLd	PVLd	A	r	f,o	SP	LVd	A	r	f,o					
PVd1	PVdTb	A	m/r,r,r*	f,m	SC									
PVd2	PVdTb(ab)ab	A	r,r*	m,f	SC									
PVd3	PVdTb	A	m/r	f	SP	Rd	A	m,r	m	PEeTb	A	m/r	f	
PVde1	PVdeTb	A	m/r	o,s	SC	PVdTb	A	a/m	s					
PVde2	PVdeTb	A	m/r	f,o	SP	PEeTb	A	m/r	f,o					
PVde3	PVdeTb	A	m/r	f,o	SC	PEeTb	A	m/r	f,o	LVda	A	r	f,o	

PVc2	PVeTb	A	m/r	o	SP	AK		r/r*/m/r											
PVc3	PVeTb	A	r/r*, m/r	o	SC	PEcTb	A	r											
PVc4	PVeTbab(ab)	A	m/r, m/r*	o, f	SC	LVd	A	r											
PVe5	PVeTb	A	m/r	f, m	SC	PEcTbab(ab)	A	m/r, m/r*											
PEd	PEdTb	A	m/r; r	f, m	SC	CeTb	A	r					Rde	A		r, m			m, e
PEe1	PEeTb	A	r*	f, m	SC	PVeTb	A	r/r*											
PEe2	PEeTb	A	r*	m	SC	AR													
PEe3	PEeTb	A	r/r*	m	SP	PVeTb	A	r, r*											
PEe4	PEeTb	A	r	f, o	SC	PVeTb	A	r/r*											
PEe5	PEeTb	A	m/r; r	o, f	SC	PVdTb	A	m/r; r											
PEe6	PEeTb	A	m/r; r	f, m	SC	LVd	A	r											
PEe7	PEeTb	A	m/r	o, f	SC	CeTb	A	r, r*											
PEe8	PEeTb	A	m/r	f, m	SC	AR													
PEe9	PEeTb	A	m/r	m, e	SC	PVeTb	A	m/r											
PEe10	PEcTbab(ab)	A	m/r, a/r	o, s	SC	PVeTbab(ab)	A	m/r, a/r											
PEe11	PEcTbab	A	m/r	s	SC	PVeTb	A	r/r*											
PEe12	PEcTb, Ta	A	m/r	f, m	SC	CeTb, Ta	A	r					BV	Ac		m/r			f, m
PEe13	PEcTb	A	m/r	m, f	SC	CeTb	A	r					LVd	A		r			m, f
PEe14	PEcTb	A	m/rR	f	SP	AR							LVa	A		r, r*			f
PEe15	PEcTb, Ta	A	m/r	m, f	SC	CeTb, Ta	A	r					AR						
BV1	BV	Ac	m/r	m, f															
BV2	BV	Ac	r	m	SC														
Ca1	CaTb	A	m, r(P)	f, m	SC	PEcTb	A	m/r											
Ca2	CaTb	,A	m, r(R)R	m, e	P	CHa		m, r(R)R											
Ca3	CaTb	A	r, m	m, e	SP	LVa	A	r					AR						
Cd	CdTb	A	r, r*(P)P	f, o	SP	LVd	A	r											
CHa1	CHa	,A	r, m	m, e	PA	CaTb	,A	r, m											
CHa2	CHa		r, mR	m, e	cA	RHa		m, R					AR						
Ce1	CeTb	A	r, r*	p	Pv	AdTb	A	a											
Ce2	CeTb, Ta	A	rc(e)	m, f	SC	Red	A	m, r					PEcTb	A		m/r			f, m
Ce3	CeTb	A	r	p, s	C	V	A, Ac	r					BV	Ac		m/r, r			p, s
Ce4	CeTb	A	r	m, f	SC	AR							PEcTb	A		m/r			m, f
HPa1	HPa	,A	a	p	PR														
HPa2	HPa	,A	a	p	SPR, cR	AMd	Ai, A												
HOa	HOa		o	p	cHv	GHaTb		r											
Gad1	GadTb	A	r, r*	p	cv	HOad													
Gad2	GadTb	A	r, r*	p	cv	CeTb	A	r					HOad						p
Gd	GdTb	A	r	p	cv	GHDtB		r					AdTb	A		m			p
GHD1	GHDtB		r	p	cv	HOa		o											
GHD2	GHDtB		r	p	cv	AdTb	A	r					SKS			r*			p
HTI	HTI			p															
Aa	AaTb	A	m, r	p	SPv	GHaTb		r, r*											
Ad1	AdTb	A	r, m	p	SP														
Ad2	AdTb	Ai, A	m, r	p	Pv	GHDtB		r					GdTb	A		r			p
SKS	SKS		r*	p	c	HTI							HPa	,A		a			p
SM	SM				M, cHa														
AMa1	AMhi(hi)	Ai, A		p	SPR, cR														
AMa2	AMa	Ai, A			SPR, cR	HPa	A	a											
Ra	Ra	A	r, m	m	SP, SC	CaTb	A	r, m											
Rde1	Rde	A	r, m	m, e	SP	AR													
Rde2	Rde	A	m, r	m, e	SC	PEcTb, Ta	A	m/r(R)R					AR						
Re	Re	A	rPR	m	SC	PEcTb	A	r/r*PR											
AR1	AR				SP, SC	Re	A	m											
AR2	AR				SP, SC	LVda	A	r, m											
AR3	AR				SP, SC	PVdTb	A	m/r					PVdaTb	A		m/r			f, o
													PEcTb	A		m/r			o, s

¹UM = Mapping units.

²CLASSES: Soil classes of mapping units (the first class is more common than the second; the second, more common than the third and so on; the soil classes and non-soils occurring on less than 35% of the mapping units areas were considered as inclusions): LA = Yellow Latosol, LV = Red Yellow Latosol, LE = Una Latosol, L = Dark Red Latosol, PA = Yellow Podzolic, PV = Red Yellow Podzolic, PE = Dark Red Podzolic, BV = Reddish Brunizem, HP = Hydromorphic Podzol, C = Cambisol, A = Alluvial, SKS = Sodic Solonchack, HTI = Thiomorphic Gley, HO = Organic, G = Gley, HGH = Humic Gley, HGP = Low Humic Gley, V = Vertisol, AM = Arenosols, R = Litholic, AR = rock outcrops, SM = mangrove undifferentiated soils, a = allitic, e = eutrophic, d = dystrophic, p = podzolic, LVH = Humic Red Yellow Latosol, CH = Humic Cambisol, L = latosolic, H = humic, ab = abrupt textural transition, (ab) non-abrupt textural transition, Ta = high activity clay, Tb = low activity clay, hi = hydromorphic, (hi) = non hydromorphic.

³A Horizon: Ai = weak A horizon (weakly developed ochric epipedon), A = A horizon moderately developed (well developed ochric epipedon), A' = umbric epipedon, Ah = humic, Ac = mollic epipedon

⁴Texture, stoniness and rock outcrops: a = sandy, m = medium, r = clayey, r* = heavy clayey, o = organic, a/m = sandy over medium, m/r = medium/clayey, and so on; c = gravelly, (c) = non-gravelly; P = stony, (P) = non stony; R = rocky; (R) = non-rocky.

⁵Relief: p = flat (0- 3%); s = gently undulating (3- 8%); o = rolling (8- 20%); f = hilly (20- 45%); m = mountainous (45- 75%); e = escarpment (> 75%).

⁶Original Vegetation: P = evergreen (ombrophilous) tropical forest, PA = evergreen subtropical (altitude) forest, Pv = evergreen forest of flood plain, PR = evergreen forest of sandy coastal area; SP = semi evergreen tropical forest, SPv = semi-evergreen forest of flood plain, SPR = semi-evergreen forest of sandy coastal area; SC = semi-deciduous tropical forest; C = deciduous tropical forest, cv = flood plain grassland, R = herbaceous vegetation of sandy coastal area, CHa = grass vegetation of saline areas, cA = grass vegetation of high altitude; M = mangrove forest.

SOURCE: Information of vegetation adapted from ACHA PANOSO et al. (1978) and soil units from OLIVEIRA et al. (1983), SANTOS et al. (1987) and IBGE (1994). The format for synthesis of soil unit information was developed by RESENDE et al. (1993c) and this Table was completed by NEPUT/EMCAPA team under his scientific supervision.