

Table: Coefficient estimates^a (\pm SE) of effects of soil texture, vegetation characteristics and topographical attributes on SOC concentrations and total SOC stocks in all land-use types (regenerating or highly disturbed forest and mature forest combined, tea plantation and grassland combined) in a tropical montane landscape in SW China.

Response	Effect	All land-use types combined (n=27)	
		Estimate	P value
SOC concentration (%) at 0-0.15 m	Intercept	1.52 (1.02)	0.14
	Land-use type ^b	Not included	Not included
	Silt-plus-clay percentage (%)	0.01 (0.01)	0.34
	ECEC ^c at 0.6-0.9 m (cmol _c kg ⁻¹ clay)		ns
	Litter layer carbon stock (Mg C ha ⁻¹)	0.17 (0.04)	<0.01
	Litter layer C:N ratio		
	Tree basal area (m ² ha ⁻¹)	0.04 (0.01)	<0.01
	Slope (%)		ns
	Relative elevation ^d (m)	0.003 (0.001)	<0.01
	Compound Topographic Index		ns
SOC concentration (%) at 0.15-0.30 m	Intercept	1.41 (0.80)	0.08
	Land-use type ^b	Not included	Not included
	Silt-plus-clay percentage (%)	0.008 (0.01)	0.38
	ECEC ^c at 0.6-0.9 m (cmol _c kg ⁻¹ clay)		ns
	Litter layer carbon stock (Mg C ha ⁻¹)	0.17 (0.03)	<0.01
	Litter layer C:N ratio		ns
	Tree basal area (m ² ha ⁻¹)	0.009 (0.01)	<0.01
	Slope (%)		ns
	Relative elevation ^d (m)	0.002 (0.001)	0.04
	Compound Topographic Index		ns
Total SOC stock (Mg C ha ⁻¹) at 0-0.9 m	Intercept	120.61 (22.29)	<0.01
	Land-use type ^b	Not included	Not included
	Silt-plus-clay percentage (%)		ns
	ECEC ^c at 0.6-0.9 m (cmol _c kg ⁻¹ clay)		ns
	Litter layer carbon stock (Mg C ha ⁻¹)	5.21 (1.39)	<0.01
	Litter layer C:N ratio		ns
	Tree basal area (m ² ha ⁻¹)	0.79 (0.31)	0.01
	Slope (%)		ns
	Relative elevation ^d (m)	0.07 (0.04)	0.08
	Compound Topographic Index		ns

^aLinear mixed effects models with sampling plot as random intercept. All effects were included in the full model, and model simplification resulted in the minimum adequate model. ns - not significant (i.e., the effects excluded by model simplifications)

^bLand-use type has not been included as a categorical factor in the full model.

^cECEC, Effective Cation Exchange Capacity.

^dRelative elevation is the change in elevation compared to the lowest situated sampling plot.