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Soil Research

Supplementary Material

Structural and hydraulic responses of humid tropical soils to lime and organic residue amendments

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Table S1. Water stable aggregates under rapid wetting, saturated hydraulic conductivity, Organic Matter, pH, bulk density and plasticity index of three humid tropic soils amended with lime and organic residues in short term incubation study.

OM; organic matter, Db; bulk density, PI; plasticity index, NR; no residue, OR; organic residue, NL; no lime, L; lime, CS: corn stover, VC: vermicompost, ns: not significant ($p > 0.05$), * ; $p \leq 0.05$, **; $p \leq 0.001$, *** ; $p \leq 0.0001$)

Soil	Residue	WSA _r %		K _{sat} cm hr ⁻¹		OM%		pH		Db		PI	
		No-Lime	Lim e	No-Lime	Lime	No-Lime	Lime	No-Lime	Lime	No-Lime	Lime	No-Lime	Lime
Cunupia	CS	39.3 ^a	37.5 ^a	160.2 ^{ab}	189.8 ^a	2.19 ^a	1.96 ^a	4.97 ^f	5.94 ^c	0.79 ^c	0.82 ^{bc}	6.81 ^b	5.55 ^c
	VC	35.2 ^a	28.5 ^b	54.3 ^b	96.3 ^{ab}	1.86 ^a	1.66 ^a	5.24 ^d	6.44 ^a	0.89 ^{ab}	0.88 ^{ab}	5.58 ^c	8.95 ^a
	NR	35.0 ^a	26.7 ^b	44.3 ^b	111.4 ^{ab}	1.70 ^a	1.71 ^a	5.16 ^e	6.12 ^b	0.90 ^a	0.85 ^{abc}	6.07 ^{bc}	8.99 ^a
<i>Lime (L)</i>	**							**		*		**	
	*		ns			ns		*		*		*	
	**							**				**	
<i>Organic residue (OR)</i>	*		**			*		*		*		*	
								**				**	
<i>L x OR</i>	*		ns			ns		*			ns	*	
Sangre Grande	CS	52.0 ^a	50.4 ^a	49.9 ^a	66.5 ^a	1.88 ^b	2.01 ^b	5.10 ^f	5.98 ^c	0.82 ^a	0.83 ^a	16.59 ^a	6.99 ^b
	VC	33.9 ^b	28.0 ^b	17.8 ^b	15.1 ^b	1.73 ^b	3.20 ^a	5.89 ^d	6.77 ^a	0.81 ^a	0.82 ^a	13.88 ^a	17.42 ^a
	NR	31.2 ^b	27.5 ^b	15.5 ^b	12.0 ^b	1.78 ^b	1.36 ^b	5.44 ^e	6.28 ^b	0.81 ^a	0.81 ^a	14.70 ^a	17.35 ^a
<i>Lime (L)</i>								**				**	
	ns		ns			*		*		ns		ns	
	**					*		**				**	
<i>Organic residue (OR)</i>	*		***			*		*		ns		**	
						*		*				**	
<i>L x OR</i>	ns		ns			*		*		ns		*	
Talparo	CS	85.5 ^a	84.5 ^a	357.3 ^a	343.2 ^a	2.40 ^a	1.93 ^b	4.97 ^f	5.94 ^c	0.80 ^b	0.81 ^b	15.79 ^a	18.64 ^a
	VC	79.6 ^b	79.3 ^b	105.2 ^b	126.0 ^b	1.63 ^b	1.94 ^{ab}	5.24 ^d	6.44 ^a	0.83 ^{ab}	0.81 ^b	18.14 ^a	18.11 ^a
	NR	78.3 ^b	79.3 ^b	62.9 ^b	114.6 ^b	1.81 ^b	1.85 ^b	5.16 ^e	6.12 ^b	0.85 ^a	0.81 ^b	16.51 ^a	19.17 ^a
<i>Lime (L)</i>								**		*		**	
	ns		ns			ns		*		*		ns	
	**					*		**				**	
<i>Organic residue (OR)</i>	*		***			*		*		*		ns	

<i>LxOR</i>	ns	ns	*	**	ns	ns
			*	*		
