

Supplementary Materials

Table S1 Basic physicochemical characteristics of the soil from the treatment plots before fertilization. There are no significant differences of any soil properties.

	SOC	Total N	Total P	pH	C:N
	(g kg ⁻¹)	(g kg ⁻¹)	(g kg ⁻¹)		
CT	21.20±2.20	1.29±0.13	0.29±0.02	4.30±0.04	16.60±1.09
N	20.82±1.98	1.24±0.12	0.29±0.02	4.42±0.07	17.05±1.50
P	18.98±0.67	1.14±0.05	0.33±0.02	4.58±0.06	16.64±0.53
NP	18.97±1.04	1.10±0.06	0.30±0.02	4.51±0.08	17.23±0.53

Table S2 Results (*P* values) of one-way ANOVA for N and P fertilization on the chemical variables in different aggregate fractions.

	MeA	MaA	MiA
SOC	0.097	0.011	0.009
Total N	0.076	0.050	0.043
Total P	<0.001	0.002	<0.001
C:N	0.755	0.194	0.184
LSOC	0.008	0.001	0.016
K ⁺	0.946	0.842	0.928
Na ⁺	0.724	0.154	0.034
Ca ²⁺	0.629	0.827	0.537
Mg ²⁺	0.382	0.542	0.473
pH	0.003	<0.001	<0.001

MeA, MaA and MiA represent mega-aggregates (> 2.0 mm), macro-aggregates (0.25–2.0 mm)

and micro-aggregates (< 0.25 mm). SOC and LSOC denote soil organic C and labile SOC, respectively. K, Na⁺, Ca²⁺ and Mg²⁺ denote exchangeable K, Na, Ca and Mg cations, respectively.

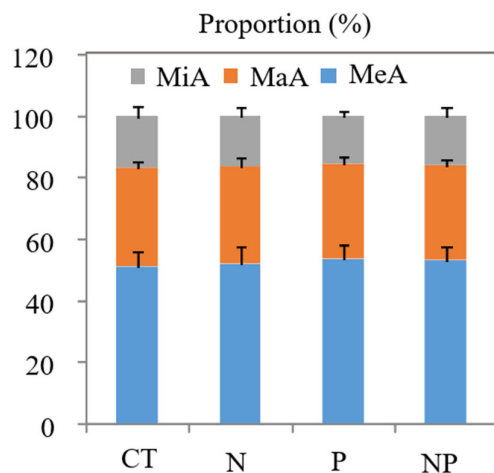


Figure S1 N and P fertilization had no effect on soil aggregate fractions in a subtropical forest.

MeA, MaA and MiA represent mega-aggregates (> 2.0 mm), macro-aggregates (0.25–2.0 mm) and micro-aggregates (< 0.25 mm).

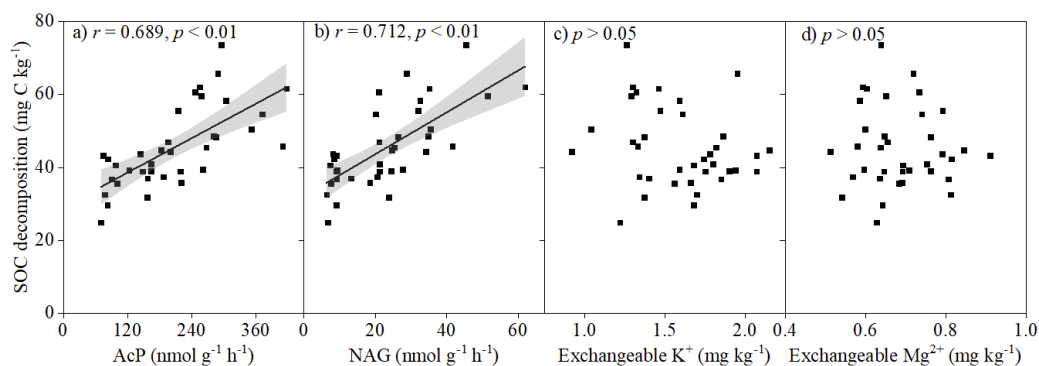


Figure S2 Pearson's correlation coefficients of enzyme activities (a, b) and soil chemical properties (c, d) with cumulative soil organic carbon (SOC) decomposition. AcP and NAG represent acid phosphatase and β -N-acetyl-glucosaminidase, respectively. The shaded area represents 95% confidence interval.