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Article

Differential Response of Soil Respiration and Total Belowground Carbon Allocation to Simulated Nitrogen and Phosphorus Deposition in Moso Bamboo Forests

Jingji Li [1,2], Zhihan Yang [3], Xiaolu Tang [1,2,4,*], Liang Liu [3], Yunsen Lai [3], Junjie Lei [3], Changli Zeng [1], Xinshan Ma [1], Manyi Du [5], Chunju Cai [6] and Shaohui Fan [6,*]

[1] College of Ecology and Environment, Chengdu University of Technology, Chengdu 610059, China
[2] State Key Laboratory of Geohazard Prevention and Geoenvironment Protection, Chengdu University of Technology, Chengdu 610059, China
[3] College of Earth Science, Chengdu University of Technology, Chengdu 610059, China
[4] State Environmental Protection Key Laboratory of Synergetic Control and Joint Remediation for Soil & Water Pollution, Chengdu University of Technology, Chengdu 610059, China
[5] Experimental Center of Forestry in North China, Chinese Academy of Forestry, Beijing 102300, China
[6] Key Laboratory of Bamboo and Rattan, International Centre for Bamboo and Rattan, Beijing 100102, China
* Correspondence: tangxiaolu17@cdut.edu.cn (X.T.); fansh@icbr.ac.cn (S.F.)

Table S1. Coefficients of the models between soil respiration (RS, μmol CO_2 m^{-2} s^{-1}), autotrophic respiration (RA, μmol CO_2 m^{-2} s^{-1}), heterotrophic respiration (RH, μmol CO_2 m^{-2} s^{-1}) and soil moisture (SM, %) at 5 cm depth.

Model	Coefficients	RS				RA				RH			
		N100	NP0	P50	N100P50	N100	NP0	P50	N100P50	N100	NP0	P50	N100P50
RS = a + b × SM	a	1.599	1.877	2.376	2.221	1.102	1.196	0.315	0.872	0.800	0.364	-0.174	1.521
	b	0.026	0.011	-0.008	-0.008	-0.009	-0.005	0.033	-0.008	0.017	0.024	0.061	-0.008
	R^2	0.011	0.003	0.002	0.001	0.003	0.001	0.078	0.007	0.016	0.043	0.100	0.006

NP0: water addition without N and P deposition; N100: understory N deposition with 100 kg N ha^{-1} $year^{-1}$; P50: understory P deposition with 50 kg N ha^{-1} $year^{-1}$; N100P50: understory NP deposition with 100 kg N ha^{-1} $year^{-1}$ and 50 kg P ha^{-1} $year^{-1}$.

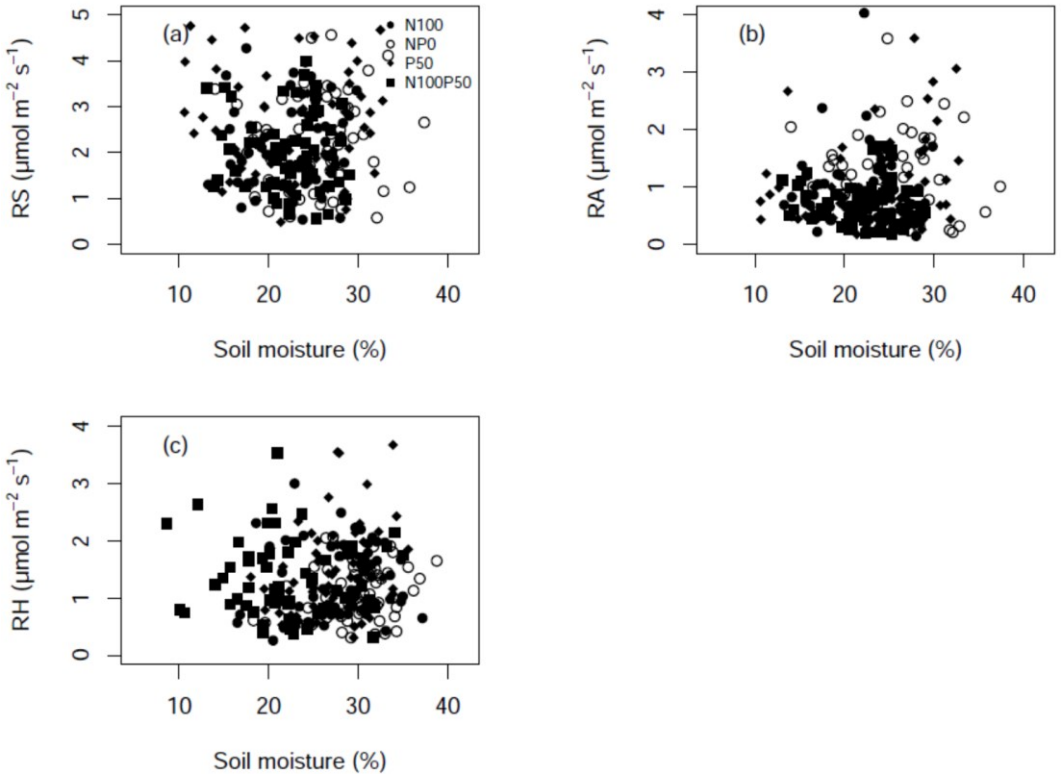

Figure S1. The correlations between total soil respiration (RS, μmol CO_2 m^{-2} s^{-1}), autotrophic respiration (RA, μmol CO_2 m^{-2} s^{-1}) and heterotrophic respiration (RH, μmol CO_2 m^{-2} s^{-1}) and soil moisture (SM, °C) at 5 cm depth. NP0: water addition without N and P deposition; N100: understory N deposition with 100 kg N ha^{-1} $year^{-1}$; P50: understory P deposition with 50 kg N ha^{-1} $year^{-1}$; N100P50: understory NP deposition with 100 kg N ha^{-1} $year^{-1}$ and 50 kg P ha^{-1} $year^{-1}$.

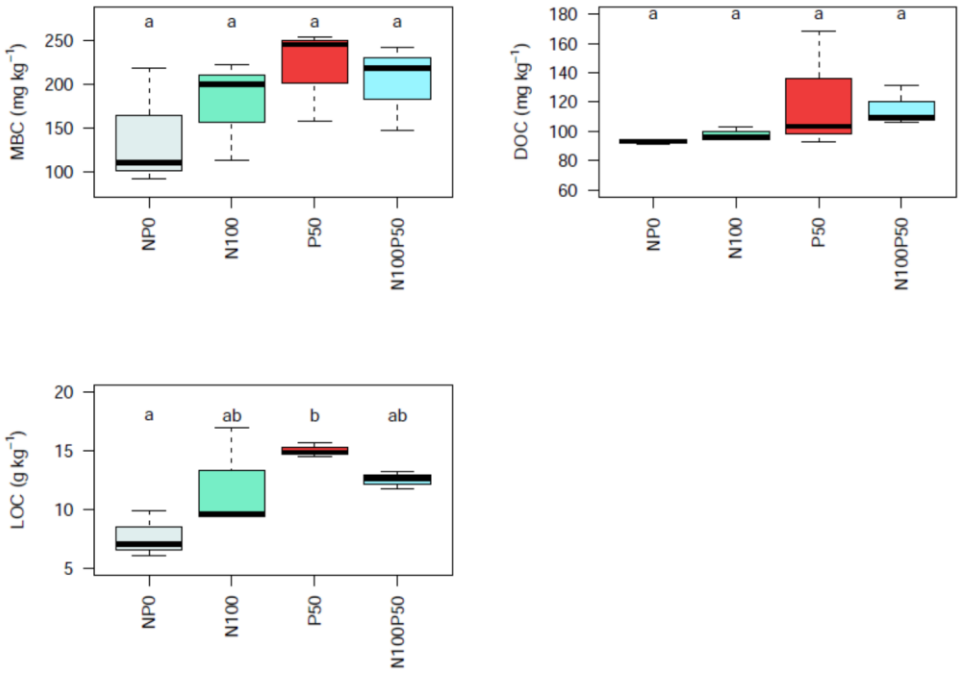

Figure S2. Boxplot of microbial biomass carbon (MBC), dissolved (DOC) and labile organic carbon (LOC) content under N or P or NP deposition. NP0: water addition without N and P deposition; N100: understory N deposition with 100 kg N ha^{-1} $year^{-1}$; P50: understory P deposition with 50 kg N ha^{-1} $year^{-1}$; N100P50: understory NP deposition with 100 kg N ha^{-1} $year^{-1}$ and 50 kg P ha^{-1} $year^{-1}$. The same letter above the error bar mean non-significant difference at $p = 0.05$.

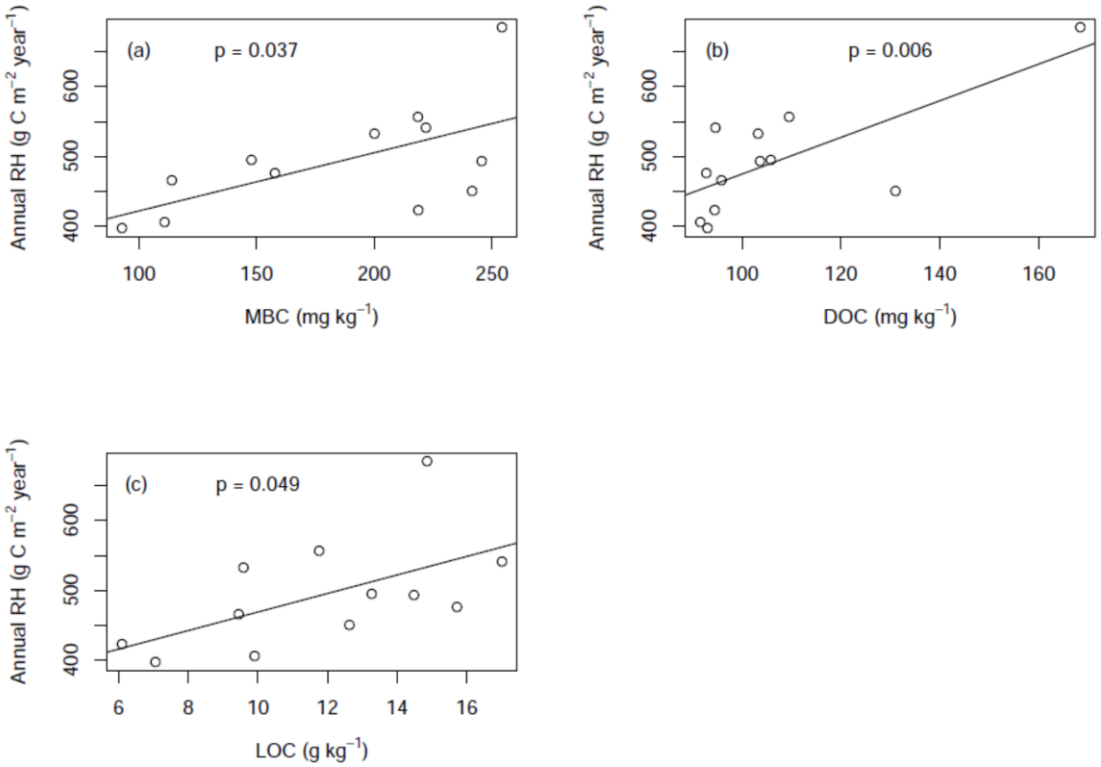

Figure S3. The correlations between soil heterotrophic respiration (RH) and microbial biomass carbon (MBC), dissolved (DOC) and labile organic carbon (LOC).