

Table S9. Percentage change (%) of and lnRR factors in response to warming under different soil texture. TC, total carbon; SWC, soil water content; FN, foliar nitrogen; FP, foliar phosphorus; FV/FM, Maximum quantum yield of PSII; SLA, specific leaf area; WUE, water use efficiency; Pn, net photosynthetic rate; Gs, stomatal conductance; T, transpiration rate; $\delta^{13}\text{C}$, carbon stable isotope composition; SD, stomatal density; SS, stomatal size.

Variables	Soil texture	QM	P(QM)	RR (%)	lnRR	95%CI
pH	Entisols	0.38	0.94	-0.95	-0.01	[-0.651,0.632]
	Histosols	0.38	0.94	-0.48	-0.005	[-0.374,0.364]
	Ultisols	0.38	0.94	2.54	0.025	[-0.055,0.105]
	Alfisols	3.55	0.47	13.48	0.127	[-0.19,0.443]
TC	Entisols	3.55	0.47	13.63	0.128	[-0.043,0.298]
	Mollisols	3.55	0.47	-0.89	-0.009	[-0.254,0.236]
	Ultisols	3.55	0.47	-9.67	-0.102	[-0.33,0.126]
	Alfisols	154.29	<0.0001	-19.89	-0.222	[-0.457,0.013]
SWC	Anthrosols	154.29	<0.0001	-32.74	-0.397	[-0.461, -0.332]
	Entisols	154.29	<0.0001	-7.81	-0.081	[-0.294,0.131]
	Histosols	154.29	<0.0001	-20.61	-0.231	[-0.756,0.294]
	Mollisols	154.29	<0.0001	-36.54	-0.455	[-1.18,0.27]
	Ultisols	154.29	<0.0001	8.10	0.078	[-0.03,0.186]
FN	Entisols	57.56	<0.0001	-15.25	-0.166	[-0.27, -0.061]
	Histosols	57.56	<0.0001	-40.78	-0.524	[-0.838, -0.21]
	Inceptisols	57.56	<0.0001	-7.94	-0.083	[-0.192,0.027]
	Mollisols	57.56	<0.0001	40.3	0.339	[0.225,0.452]
	Ultisols	57.56	<0.0001	-4.54	-0.047	[-0.152,0.059]
FP	Alfisols	4.57	0.2	-23.29	-0.265	[-0.98,0.45]
	Entisols	4.57	0.2	-7.89	-0.082	[-0.21,0.045]
	Ultisols	4.57	0.2	-7.92	-0.083	[-0.186,0.021]
FV/FM	Entisols	8.57	0.04	-0.8	-0.008	[-0.051,0.034]
	Mollisols	8.57	0.04	-9.79	-0.103	[-0.172, -0.033]
	Ultisols	8.57	0.04	-1.09	-0.011	[-0.103,0.082]
Chlorophyll	Entisols	8.42	0.01	-18.66	-0.074	[-0.216,0.069]
	Ultisols	8.42	0.01	-7.10	-0.207	[-0.361, -0.052]
	Alfisols	20.56	0.002	7.72	0.074	[-0.063,0.212]
SLA	Entisols	20.56	0.002	1.75	0.017	[-0.162,0.197]
	Histosols	20.56	0.002	-26.83	-0.312	[-0.735,0.11]
	Inceptisols	20.56	0.002	-17.06	-0.187	[-0.477,0.103]
	Mollisols	20.56	0.002	15.56	0.145	[-0.218,0.508]
	Ultisols	20.56	0.002	52.58	0.423	[0.209,0.636]
WUE	Alfisols	50.77	<0.0001	67.87	0.518	[0.318,0.719]
	Anthrosols	50.77	<0.0001	-32.23	-0.389	[-0.581, -0.196]
	Entisols	50.77	<0.0001	10.96	0.104	[0.003,0.206]
	Histosols	50.77	<0.0001	68.03	0.519	[-0.105,1.144]

Pn	Inceptisols	50.77	<0.0001	38.13	0.323	[-0.299,0.945]
	Mollisols	50.77	<0.0001	-2.37	-0.024	[-0.18,0.132]
	Ultisols	50.77	<0.0001	9.42	0.09	[-0.049,0.228]
	Alfisols	15.18	0.03	2.85	0.028	[-0.344,0.401]
	Anthrosols	15.18	0.03	-19.61	-0.218	[-0.418, -0.019]
	Entisols	15.18	0.03	7.51	0.072	[-0.049,0.194]
	Histosols	15.18	0.03	136.65	0.861	[0.196,1.527]
	Inceptisols	15.18	0.03	24.82	0.222	[-0.395,0.839]
	Mollisols	15.18	0.03	8.93	0.086	[-0.12,0.291]
	Ultisols	15.18	0.03	-11.06	-0.117	[-0.303,0.069]
Gs	Alfisols	24.9	0.0008	-8.04	-0.084	[-0.391,0.223]
	Anthrosols	24.9	0.0008	14.51	0.136	[-0.005,0.275]
	Entisols	24.9	0.0008	-2.98	-0.03	[-0.143,0.082]
	Histosols	24.9	0.0008	-42.41	-0.552	[-1.191,0.087]
	Inceptisols	24.9	0.0008	-33.77	-0.412	[-0.828,0.004]
	Mollisols	24.9	0.0008	-12.97	-0.139	[-0.424,0.146]
	Ultisols	24.9	0.0008	-22.0	-0.248	[-0.382, -0.115]
	Alfisols	15.41	0.017	22.14	0.2	[-0.365,0.765]
	Anthrosols	15.41	0.017	-8.14	-0.085	[-0.287,0.117]
	Entisols	15.41	0.017	11.14	0.106	[-0.01,0.221]
T	Histosols	15.41	0.017	25.89	0.23	[-0.346,0.806]
	Mollisols	15.41	0.017	-4.10	-0.042	[-0.217,0.133]
	Ultisols	15.41	0.017	-26.05	-0.302	[-0.488, -0.116]
	Alfisols	64.67	<0.0001	-1.53	-0.015	[-0.059,0.028]
	Anthrosols	64.67	<0.0001	15.2	0.141	[0.074,0.209]
$\delta^{13}\text{C}$	Entisols	64.67	<0.0001	12.63	0.119	[0.084,0.154]
	Inceptisols	64.67	<0.0001	-4.3	-0.044	[-0.14,0.051]
	Mollisols	64.67	<0.0001	-4.84	-0.05	[-0.163,0.064]
	Ultisols	64.67	<0.0001	0.70	0.007	[-0.045,0.059]
SD	Ultisols	31.89	0.03	-10.24	-0.108	[-0.195, -0.021]
SS	Ultisols	5.47	0.71	-2.9	-0.029	[-0.131,0.072]