

郑甲佳, 黄松宇, 贾昕, 田赞, 牟钰, 刘鹏, 查天山 (2019). 中国森林生态系统土壤呼吸温度敏感性的空间变异特征及影响因素. 植物生态学报, 44, 687–698. DOI: 10.17521/cjpe.2019.0300

Zheng JJ, Huang SY, Jia X, Tian Y, Mu Y, Liu P, Zha TS (2019). Spatial variation and controlling factors of temperature sensitivity of soil respiration in forest ecosystems across China. *Chinese Journal of Plant Ecology*, 44, 687–698. DOI: 10.17521/cjpe.2019.0300

<http://www.plant-ecology.com/CN/10.17521/cjpe.2019.0300>

附录II 不同森林类型的土壤呼吸温度敏感性( $Q_{10}$ )与影响因素之间的线性回归

**Supplement II Line regression equation between the temperature sensitivity of soil respiration ( $Q_{10}$ ) and controlling factors among different forest types**

影响因素 Effect factor	森林类型 Forest type	回归方程 Regression equation	$R^2$	$p$	$n$
纬度 Latitude	DBF	$Y = 0.044x + 0.97$	0.09	<0.01	88
	ENF	$Y = 0.045x + 1.04$	0.10	<0.01	110
	MMF + MBF	$Y = 0.027x + 1.70$	0.08	0.01	75
	MMF	$Y = 0.027x + 1.70$	0.08	0.01	69
经度 Longitude	DNF	$Y = -0.26x + 34.10$	0.60	0.02	8
	EBF	$Y = -0.049x + 7.86$	0.12	<0.01	118
	ENF	$Y = -0.033x + 5.98$	0.06	0.01	110
海拔 Altitude	DBF	$Y = 0.00059x + 1.92$	0.26	<0.01	88
	DNF	$Y = 0.0012x + 2.03$	0.83	<0.01	8
	EBF	$Y = 0.00063x + 2.06$	0.17	<0.01	117
	ENF	$Y = 0.00044x + 2.01$	0.28	<0.01	104
	MMF+MBF	$Y = 0.00041x + 2.20$	0.13	<0.01	73
	MMF	$Y = 0.00041x + 2.20$	0.13	<0.01	67
年平均温度 Mean annual temperature	DBF	$Y = -0.052x + 3.11$	0.10	<0.01	85
	EBF	$Y = -0.076x + 3.78$	0.08	<0.01	118
	ENF	$Y = -0.067x + 3.35$	0.30	<0.01	110
	MMF+MBF	$Y = -0.053x + 3.31$	0.22	<0.01	75
	MMF	$Y = -0.051x + 3.30$	0.21	<0.01	69
平均年降水量 Mean annual precipitation	DNF	$Y = -0.0025x + 4.72$	0.59	0.03	8
干旱指数 Aridity Index	MMF+MBF	$Y = 1.06x + 1.45$	0.36	0.03	13
	MMF	$Y = 1.06x + 1.45$	0.36	0.03	13
土壤有机碳含量 Soil organic carbon content	DBF	$Y = 0.016x + 1.85$	0.31	<0.01	54
	EBF	$Y = 0.020x + 1.84$	0.26	<0.01	61
	ENF	$Y = 0.012x + 2.02$	0.22	<0.01	62
	MMF+MBF	$Y = 0.019x + 1.84$	0.26	<0.01	34
	MMF	$Y = 0.020x + 1.85$	0.25	<0.01	29
土壤全氮含量 Soil total nitrogen content	DBF	$Y = 0.35x + 1.54$	0.35	<0.01	46
	EBF	$Y = 0.41x + 1.59$	0.44	<0.01	61
	ENF	$Y = 0.18x + 1.89$	0.17	<0.01	62

$n$ , 样本量。DBF, 落叶阔叶林; DNF, 落叶针叶林; EBF, 常绿阔叶林; ENF, 常绿针叶林; MBF, 常绿落叶阔叶混交林; MMF, 针阔混交林。

$n$ , sample size. DBF, deciduous broadleaf forest; DNF, deciduous needleleaf forest; EBF, evergreen broadleaf forest; ENF, evergreen needleleaf forest; MBF, mixed evergreen deciduous broadleaved forest; MMF, mixed broadleaf-conifer forest.