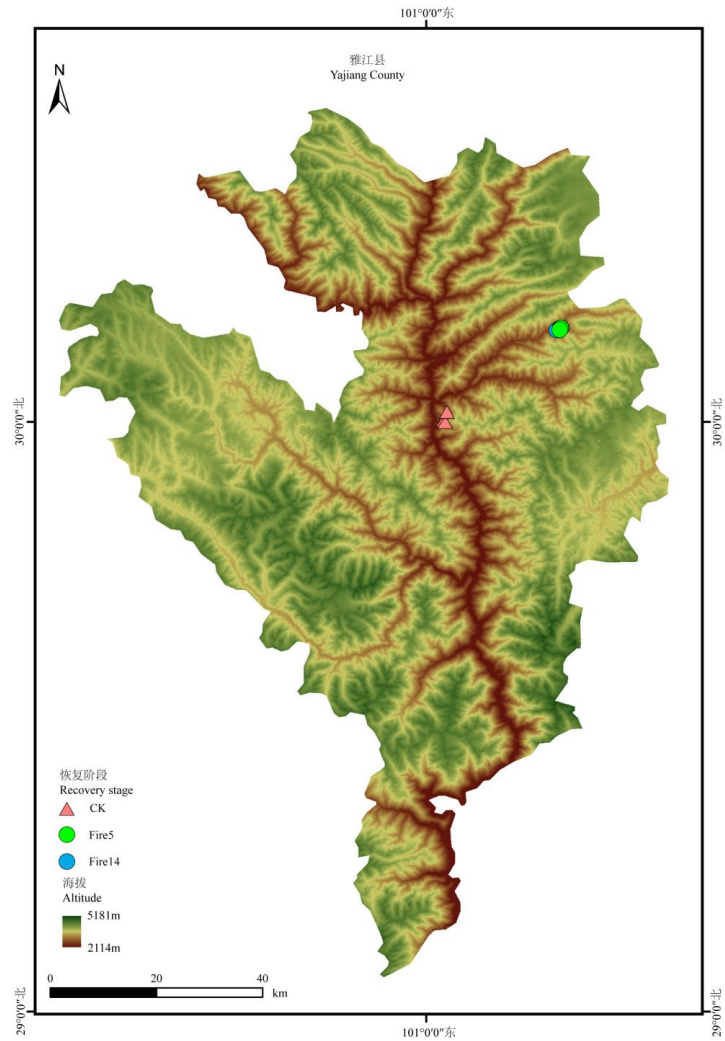
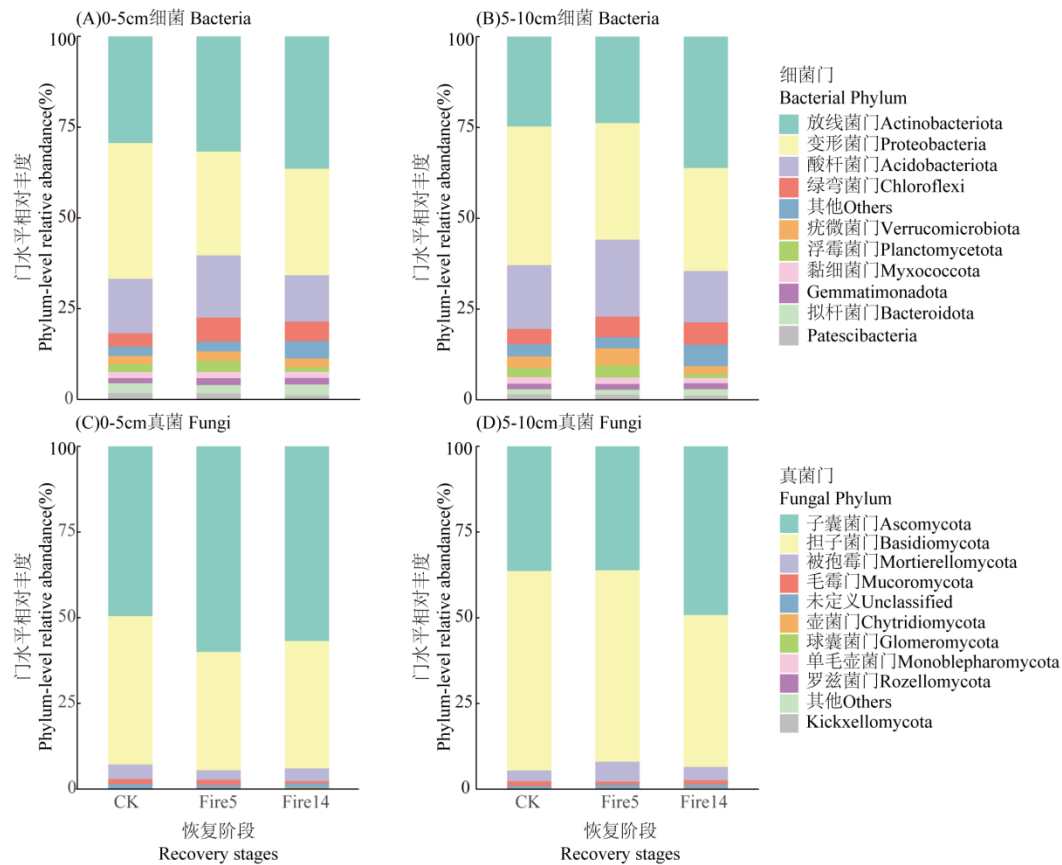




附录1 雅江县火干扰及对照样地分布图。CK: 未受火干扰; Fire5: 火干扰后5年; Fire14: 火干扰后14年。
Appendix 1 Distribution map of fire disturbance and control plots in Yajiang County. CK, Unburned; Fire5, 5 years post-fire; Fire14, 14 years post-fire.



附录 2 不同恢复阶段土壤微生物优势菌门的相对丰度。(A) 0-5 cm 细菌; (B) 5-10 cm 细菌; (C) 0-5 cm 真菌; (D) 5-10 cm 真菌。CK: 未受火干扰; Fire5: 火干扰后 5 年; Fire14: 火干扰后 14 年。
Appendix 2 Relative abundance of dominant phyla of soil microorganisms at different recovery stages. (A) 0-5 cm Bacteria; (B) 5-10 cm Bacteria; (C) 0-5 cm Fungi; (D) 5-10 cm Fungi. CK, Unburned; Fire5, 5 years post-fire; Fire14, 14 years post-fire.

温昊, 林波, 陈婧, 尚鹤, 陈展 (2026) 高山松林火烧迹地不同恢复阶段土壤微生物多样性和群落特征. 生物多样性, 34, 26080. <https://www.biodiversity-science.net/CN/10.17520/biods.2026080>.

附录 3 火干扰后恢复阶段和土层对土壤微生物群落结构影响的双因素 PERMANOVA 检验
Appendix 3 Two-way PERMANOVA test of the effects of recovery stage after fire disturbance and soil layer on soil microbial community structure

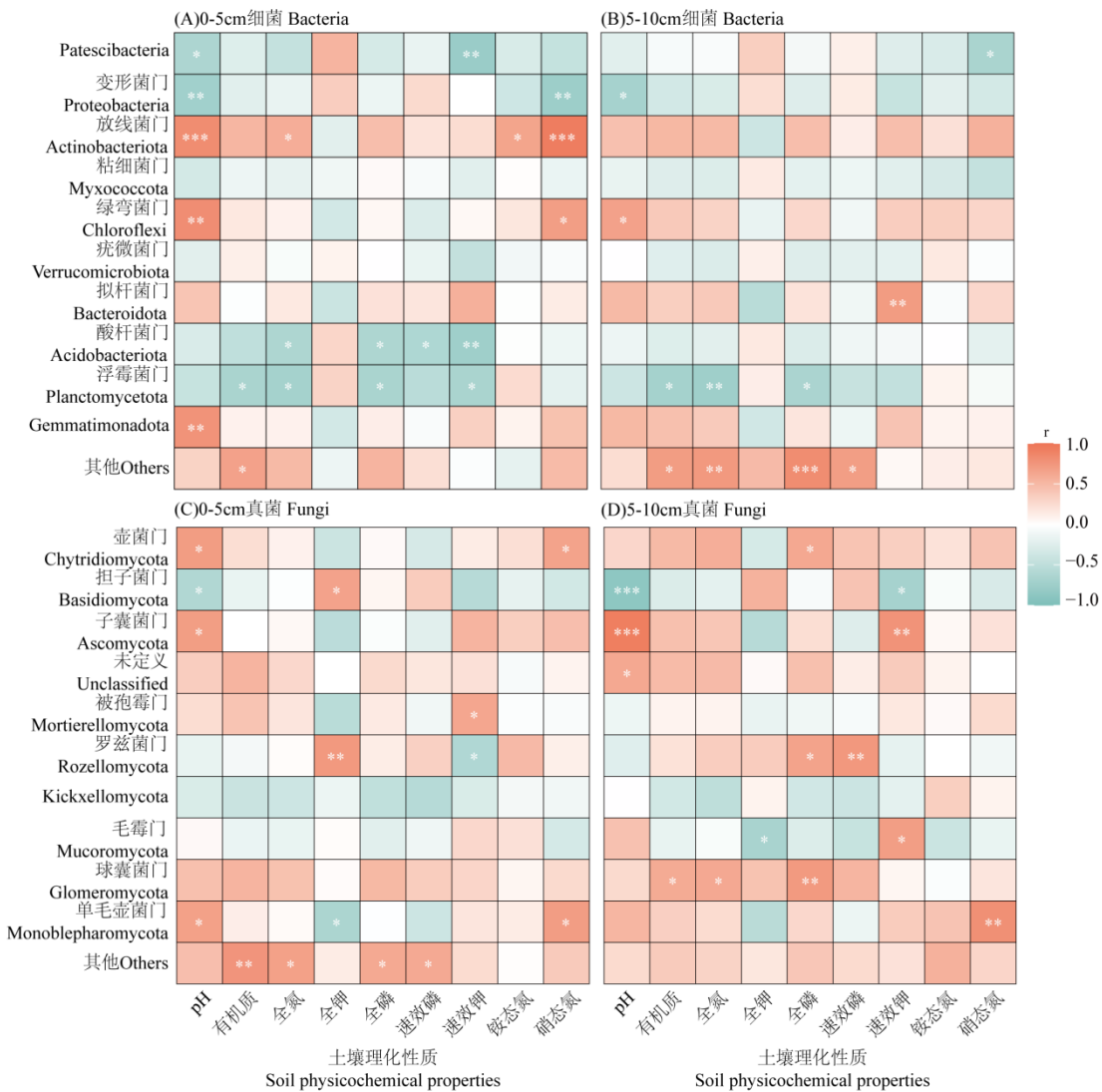
微生物 Microorganism	因素 Factor	R^2	P
细菌 Bacteria	土层 Soil layer	0.071	0.020
	恢复阶段 Recovery stage	0.347	0.001
	土层 × 恢复阶段 Soil layer × recovery stage	0.043	0.779
真菌 Fungi	土层 Soil layer	0.042	0.397
	恢复阶段 Recovery stage	0.200	0.001
	土层 × 恢复阶段 Soil layer × recovery stage	0.030	1.000

温昊, 林波, 陈婧, 尚鹤, 陈展 (2026) 高山松林火烧迹地不同恢复阶段土壤微生物多样性和群落特征. 生物多样性, 34, 26080. <https://www.biodiversity-science.net/CN/10.17520/biods.2026080>.

附录 4 火干扰后不同恢复阶段的土层对微生物群落结构影响的 PERMANOVA 检验
Appendix 4 PERMANOVA test of the impact of soil layers on microbial community structure at different recovery stages after fire disturbance

微生物	Microorganism	CK		Fire5		Fire14	
		R^2	P	R^2	P	R^2	P
细菌	Bacteria	0.114	0.164	0.362	0.1	0.119	0.8
真菌	Fungi	0.056	0.854	0.222	0.5	0.056	0.7

CK: 未受火干扰; Fire5: 火干扰后 5 年; Fire14: 火干扰后 14 年。
CK, Unburned; Fire5, 5 years post-fire; Fire14, 14 years post-fire.



附录 5 土壤微生物优势菌门和土壤理化性质的相关性分析。(A) 0-5 cm 细菌; (B) 5-10 cm 细菌; (C) 0-5 cm 真菌; (D) 5-10 cm 真菌。* $P < 0.05$; ** $P < 0.01$; *** $P < 0.001$ 。

Appendix 5 Correlation analysis between dominant phyla of soil microorganisms and soil physicochemical properties. (A) 0-5 cm Bacteria; (B) 5-10 cm Bacteria; (C) 0-5 cm Fungi; (D) 5-10 cm Fungi. * $P < 0.05$; ** $P < 0.01$; *** $P < 0.001$.