

Supplementary Materials

Table S1. Results of the fixed effects of the Generalized Linear Mixed Models (GLMMs) [*summary()* outputs] in the three study sites (Mediterranean, Transition and Oceanic), indicating the effects of the variables fire frequency (number of fires), and burn severity (dNBR ranging from -2 to 2) on soil properties.

Response variable	Predictor variable	Mediterranean			Transition			Oceanic		
		Estimate	SE	P	Estimate	SE	P	Estimate	SE	P
β -glucosidase	Intercept	1.09	0.19	<0.01	1.64	0.27	<0.01	0.95	0.32	<0.01
	Frequency	-0.08	0.05	0.16	0.11	0.10	0.24	-0.10	0.15	0.50
	Severity	-0.54	0.23	0.03	-0.06	0.34	0.87	0.51	0.23	0.04
Urease	Intercept	6.60	1.04	<0.01	3.10	0.97	<0.01	3.77	2.91	0.21
	Frequency	0.12	0.29	0.66	0.94	0.33	<0.01	-1.16	1.39	0.42
	Severity	-3.17	1.25	0.02	-1.89	1.17	0.11	7.35	2.19	<0.01
Phosphatase	Intercept	1.08	0.31	<0.01	0.68	0.39	0.09	4.17	0.37	<0.01
	Frequency	0.11	0.09	0.25	0.94	0.16	<0.01	-0.27	0.18	0.15
	Severity	0.24	0.39	0.54	-0.81	0.47	0.09	-0.41	0.25	0.12
Microbial biomass C	Intercept	448.9	79.2	<0.01	6.21	0.22	<0.01	-7.58	135.12	0.96
	Frequency	79.6	22.6	<0.01	0.24	0.07	<0.01	0.26	61.29	1.00
	Severity	-225.8	96.9	0.03	-1.06	0.27	<0.01	671.30	116.11	<0.01

Significant interactions were not found. SE = standard error. Significant P-values ($P < 0.05$) are in bold face.