

Table S4. Multiple linear regression model of the distribution of OTUs abundance in relation to the soil abiotic variables and the respective fit values (R-squared, p-value, vif and AIC).

Call:

lm(formula = log(OTUs) ~ log(DON) + Ca + K + log(SO4))

Residuals:

Min	1Q	Median	3Q	Max
-0.45504	-0.17456	0.07136	0.15599	0.38821

Coefficients:

	Estimate	Std. Error	t value	Pr(> t )
(Intercept)	7.5194	1.0555	7.124	2.41e-06 ***
log(DON)	0.5895	0.1983	2.972	0.00899 **
Ca	-4.9182	1.2889	-3.816	0.00152 **
K	-0.7555	0.2995	-2.523	0.02261 *
log(SO4)	-0.6553	0.2022	-3.241	0.00511 **

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Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 0.2763 on 16 degrees of freedom

Multiple R-squared: 0.5875, Adjusted R-squared: 0.4719

F-statistic: 5.467 on 4 and 16 DF, p-value: 0.005706

Shapiro-Wilk normality test:

data: resid(model)

W = 0.94164, p-value = 0.2348

Multicollinearity diagnostic using Variance Inflation Factor (VIF):

	log(DON)	Ca	K	log(SO4)
VIF	1.929899	2.160122	1.439595	1.741604

Akaike's information criterion (AIC): 11.869