

Article title: Phosphorus exchange in eutrophied coastal brackish water sediments – sorption pattern, potential and factors affecting them

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Authors: Anu Vaalama^{1,2}, Helinä Hartikainen², Henry Vallius³ and Kaarina Lukkari¹

¹Finnish Environment Institute, Marine Research Centre, Agnes Sjöbergin katu 2, FI-00790 Helsinki, Finland,

²University of Helsinki, Department of Food and Environmental Sciences, P.O. Box 56, FI-00014 University of Helsinki,

Finland, ³Geological Survey of Finland, GTK, Vuorimiehentie 5, FI-02151 Espoo, Finland

Corresponding author: Anu Vaalama, anu.vaalama@helsinki.fi

Table 1. Summary of the first two canonical discriminant functions used in the analyses, eigenvalues

Discriminant analysis	Function	Eigenvalue	% of Variance	Cumulative %	Canonical Correlation
EPC ₀ ¹	1	22.011	97.9	97.9	0.978
	2	0.475	2.1	100.0	0.567
EPC ₀ ²	1	16.932	99.2	99.2	0.972
	2	0.131	0.8	100	0.340
k _{EPC0} ³	1	7.096	92.8	92.8	0.936
	2	0.551	7.2	100.0	0.596
k _{EPC0} ⁴	1	6.012	90.8	90.8	0.926
	2	0.608	9.2	100.0	0.615
k ₁₅ ⁵	1	4.778	88.4	88.4	0.909
	2	0.627	11.6	100.0	0.621
k ₁₅ ⁶	1	5.914	92.3	92.3	0.925
	2	0.495	7.7	100.0	0.575

¹ predictor variable combination $\Sigma(\text{desorbable P, Al}_{\Sigma\text{Ext}}, \text{exposure index (EI), Si-P}_0)$

² predictor variable combination $\Sigma(\text{desorbable P, C:N ratio, EI})$

³ predictor variable combination $\Sigma(\text{desorbable P, Al}_{\text{Oxal}}, \text{SiP}_0 \text{ and EI})$

⁴ predictor variable combination $\Sigma(\text{desorbable P, Al}_{\Sigma\text{Ext}} \text{ and TP})$

⁵ predictor variable combination $\Sigma(\text{Al}_{\Sigma\text{Ext}}, \text{desorbable P and TP})$

⁶ predictor variable combination $\Sigma(\text{Al}_{\text{Oxal}}, \text{desorbable P, Fe}_{\text{Asc+Dith}} \text{ and EI})$

Table 2. Summary of the first two canonical discriminant functions used in the analyses, Wilks' Lambda

Discriminant analysis	Test of Function(s)	Wilks' Lambda	Chi-square	df	Sig.
EPC ₀ ¹	1 through 2	0.029	51.106	8	0.000
	2	0.678	5.634	3	0.131
EPC ₀ ²	1 through 2	0.049	43.634	8	0.000
	2	0.885	1.779	3	0.620
k _{EPC0} ³	1 through 2	0.080	36.690	8	0.000
	2	0.645	6.365	3	0.095
k _{EPC0} ⁴	1 through 2	0.089	36.399	6	0.000
	2	0.622	7.125	2	0.028
k ₁₅ ⁵	1 through 2	0.106	33.609	6	0.000
	2	0.615	7.298	2	0.026
k ₁₅ ⁶	1 through 2	0.097	33.868	8	0.000
	2	0.669	5.831	3	0.120

¹ predictor variable combination $\Sigma(\text{desorbable P, Al}_{\Sigma\text{Ext}}, \text{exposure index (EI), Si-P}_0)$

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Table 3. Summary of canonical discriminant functions, standardized canonical discriminant function coefficients (P_{des} = desorbable P, F1 = discriminant function 1, F2 = discriminant function 2).

EPC ₀ ¹			EPC ₀ ²			k _{EPC0} ³		
Predictor	F1	F2	Predictor	F1	F2	Predictor	F1	F2
P _{des}	1.544	-0.165	P _{des}	1.398	-0.113	P _{des}	1.603	0.412
Al _{ΣExt}	-0.702	0.763	C:N	-0.655	1.175	Al _{Oxal}	-1.254	0.549
EI	0.604	0.917	EI	0.312	2.841	Si-P ₀	0.938	0.068
Si-P ₀	-0.434	-0.820	depth	0.173	-1.370	EI	0.218	-0.287

k _{EPC0} ⁴			k ₁₅ ⁵			k ₁₅ ⁶		
Predictor	F1	F2	Predictor	F1	F2	Predictor	F1	F2
Al _{ΣExt}	-1.601	0.380	Al _{ΣExt}	-1.491	0.281	Al _{Oxal}	-1.700	0.598
P _{des}	1.383	0.324	P _{des}	1.290	0.371	P _{des}	1.523	0.476
TP	0.680	0.518	TP	0.579	0.596	Fe _{Asc+Dith}	1.139	-0.368
-	-	-	-	-	-	EI	0.569	-0.380

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