

Stable carbon and nitrogen isotope composition in suspended particulate matter reflects seasonal dynamics of phytoplankton assemblages in the Gulf of Riga, Baltic Sea

Estuaries and Coasts

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Table S1. Loadings and variable contributions for abiotic, biotic and isotope ratio parameters.

Variables	Principal components (PCs)			Variable contributions (%)		
	PC1	PC2	PC3	PC1	PC2	PC3
Cluster I						
δ ¹⁵ N	0.290	0.351	-0.210	8.4	12.3	4.4
δ ¹³ C	-0.406	0.423	0.245	16.5	17.9	6.0
PO ₄	-0.023	-0.426	<u>0.598</u>	0.1	18.2	35.8
NO ₂₊₃	<u>0.463</u>	-0.326	0.224	21.4	10.6	5.0
NH ₄	0.256	-0.152	<u>-0.533</u>	6.5	2.3	28.4
temp	0.377	0.276	-0.017	14.2	7.6	0.0
sal	<u>-0.543</u>	-0.083	-0.271	29.5	0.7	7.3
Chl a	0.183	<u>0.551</u>	0.362	3.3	30.4	13.1
Cluster II						
δ ¹⁵ N	0.252	0.412	<u>-0.478</u>	6.3	17.0	22.9
δ ¹³ C	-0.403	-0.132	0.028	16.2	1.7	0.1

PO ₄	<u>0.527</u>	-0.071	-0.140	27.8	0.5	2.0
NO ₂₊₃	0.411	-0.424	-0.092	16.9	17.9	0.8
NH ₄	0.007	<u>-0.579</u>	0.139	0.0	33.5	1.9
temp	<u>-0.518</u>	-0.081	-0.102	26.8	0.7	1.0
sal	0.027	<u>0.536</u>	0.405	0.1	28.7	16.4
Chl a	-0.241	-0.009	<u>-0.741</u>	5.8	0.0	54.8
Cluster I						
Diat	0.221	<u>-0.534</u>	0.143	4.9	28.5	2.0
Dino	<u>-0.501</u>	-0.003	0.179	25.1	0.0	3.2
Cyano	<u>-0.495</u>	-0.241	-0.085	24.5	5.8	0.7
phy_other	-0.211	-0.169	0.366	4.4	2.9	13.4
Cili_16-33	-0.206	-0.337	<u>0.517</u>	4.3	11.4	26.7
Cili_33-65	-0.409	0.039	<u>-0.586</u>	16.7	0.2	34.3
δ ¹⁵ N	-0.155	<u>-0.572</u>	-0.377	2.4	32.7	14.2
δ ¹³ C	-0.421	0.430	0.232	17.7	18.5	5.4
Cluster II						
Diat	0.114	-0.388	<u>0.582</u>	1.3	15.1	33.9
Dino	<u>-0.470</u>	0.182	0.372	22.1	3.3	13.8
Cyano	-0.366	-0.434	-0.061	13.4	18.8	0.4
phy_other	<u>-0.450</u>	-0.401	0.033	20.3	16.1	0.1
Cili_16-33	-0.188	-0.151	-0.349	3.5	2.3	12.2
Cili_33-65	-0.207	<u>0.533</u>	<u>0.480</u>	4.3	28.4	23.0
δ ¹⁵ N	0.260	-0.397	0.403	6.8	15.8	16.2
δ ¹³ C	<u>-0.533</u>	0.047	-0.056	28.4	0.2	0.3