

Phytoplankton class determination by microscopic and HPLC-CHEMTAX analyses in the southern Baltic Sea

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Appendix 1. (A) Mean input ratios of pigments from Mackey et al. (1996) (Matrices 1, 2) and Schlüter et al. 2000 (Matrices 3, 4), and maximal input ratios of Mackey et al. (1996), Schlüter et al. (2000) and Henriksen et al. (2002) (Matrix 5) for the selected phytoplankton groups. (B) Output ratios of Matrices 1–5 (after 10 runs)

(A) Input ratios	Marker pigments										
	Peri	But	Fuco	Allo	Ddx	Zea	chl <i>b</i>	chl <i>c</i> ₁ + <i>c</i> ₂	Caro	Dtx	chl <i>a</i>
Matrix 1											
Dinoflagellates	0.532	0	0	0	0.121	0	0				1
Diatoms	0	0	0.460	0	0.24	0	0				1
Cryptophytes	0	0	0	0.23	0	0	0				1
Chrysophytes	0	0.467	0.560	0	0.28	0	0				1
Euglenophytes	0	0	0	0	0.23	0	0.41				1
Chlorophytes	0	0	0	0	0	0.059	0.285				1
Cyanophytes	0	0	0	0	0	0.11	0				1
Matrix 2											
Dinoflagellates	0.532	0	0	0	0.121	0	0	0.285	0.004	0.101	1
Diatoms	0	0	0.460	0	0.24	0	0	0.092	0.030	0.135	1
Cryptophytes	0	0	0	0.23	0	0	0	0.126	0.011	0	1
Chrysophytes	0	0.467	0.560	0	0.28	0	0	0.064	0.016	0.049	1
Euglenophytes	0	0	0	0	0.23	0	0.41	0	0.007	0.027	1
Chlorophytes	0	0	0	0	0	0.059	0.285	0	0.780	0	1
Cyanophytes	0	0	0	0	0	0.11	0	0	0.030	0	1
Matrix 3											
Dinoflagellates	0.547	0	0	0	0.247	0	0				1
Diatoms	0	0	0.810	0	0.318	0	0				1
Cryptophytes	0	0	0	0.354	0	0	0				1
Chrysophytes	0	0.467	0.56	0	0.28	0	0				1
Euglenophytes	0	0	0	0	0.205	0	0.239				1
Chlorophytes	0	0	0	0	0	0.031	0.283				1
Cyanophytes	0	0	0	0	0	1.337	0				1
Matrix 4											
Dinoflagellates	0.547	0	0	0	0.247	0	0	0.229	0.089	0.033	1
Diatoms	0	0	0.810	0	0.318	0	0	0.301	0.063	0.078	1
Cryptophytes	0	0	0	0.354	0	0	0	0.160	0.047	0	1
Chrysophytes	0	0.467	0.560	0	0.28	0	0	0.064	0.016	0.049	1
Euglenophytes	0	0	0	0	0.205	0	0.239	0	0.026	0	1
Chlorophytes	0	0	0	0	0	0.031	0.283	0	0.051	0	1
Cyanophytes	0	0	0	0	0	1.337	0	0	0.471	0	1
Matrix 5											
Dinoflagellates	1.063	0	0	0	0.401	0	0				1
Diatoms	0	0	1.218	0	0.784	0	0				1
Cryptophytes	0	0	0	4.003	0	0	0				1
Chrysophytes	0	1.563	0.974	0	0.857	0	0				1
Euglenophytes	0	0	0	0	0.249	0	0.410				1
Chlorophytes	0	0	0	0	0	0.118	0.569				1
Cyanophytes	0	0	0	0	0	1.603	0				1

Appendix 1 (continued)

(B) Output ratios	Marker pigments										
	Peri	But	Fuco	Allo	Ddx	Zea	chl <i>b</i>	chl <i>c</i> ₁ + <i>c</i> ₂	Caro	Dtx	chl <i>a</i>
Matrix 1											
Dinoflagellates	0.424	0	0	0	0.181	0	0				1
Diatoms	0	0	0.465	0	0.059	0	0				1
Cryptophytes	0	0	0	0.258	0	0	0				1
Chrysophytes	0	0.465	0.560	0	0.279	0	0				1
Euglenophytes	0	0	0	0	7.945	0	9.838				1
Chlorophytes	0	0	0	0	0	0.057	0.458				1
Cyanophytes	0	0	0	0	0	0.77	0				1
Matrix 2											
Dinoflagellates	0.464	0	0	0	0.192	0	0	0.185	0.004	0.014	1
Diatoms	0	0	0.525	0	0.103	0	0	0.081	0.027	0.015	1
Cryptophytes	0	0	0	0.237	0	0	0	0.041	0.011	0	1
Chrysophytes	0	0.467	0.560	0	0.28	0	0	0.064	0.015	0.049	1
Euglenophytes	0	0	0	0	0.126	0	0.593	0	0.007	0.031	1
Chlorophytes	0	0	0	0	0	0.059	0.285	0	0.779	0	1
Cyanophytes	0	0	0	0	0	0.407	0	0	0.068	0	1
Matrix 3											
Dinoflagellates	0.470	0	0	0	0.017	0	0				1
Diatoms	0	0	0.494	0	0.021	0	0				1
Cryptophytes	0	0	0	0.252	0	0	0				1
Chrysophytes	0	0.468	0.561	0	0.042	0	0				1
Euglenophytes	0	0	0	0	0.662	0	0.092				1
Chlorophytes	0	0	0	0	0	0.051	0.472				1
Cyanophytes	0	0	0	0	0	1.735	0				1
Matrix 4											
Dinoflagellates	0.447	0	0	0	0.174	0	0	0.176	0.020	0.016	1
Diatoms	0	0	0.517	0	0.108	0	0	0.099	0.022	0.020	1
Cryptophytes	0	0	0	0.258	0	0	0	0.040	0.014	0	1
Chrysophytes	0	0.467	0.560	0	0.28	0	0	0.064	0.015	0.049	1
Euglenophytes	0	0	0	0	0.204	0	0.238	0	0.026	0	1
Chlorophytes	0	0	0	0	0	0.032	0.461	0	0.039	0	1
Cyanophytes	0	0	0	0	0	1.336	0	0	0.193	0	1
Matrix 5											
Dinoflagellates	0.454	0	0	0	0.198	0	0				1
Diatoms	0	0	0.446	0	0.083	0	0				1
Cryptophytes	0	0	0	4	0	0	0				1
Chrysophytes	0	1.565	0.972	0	1.212	0	0				1
Euglenophytes	0	0	0	0	0.024	0	0.921				1
Chlorophytes	0	0	0	0	0	0.007	0.024				1
Cyanophytes	0	0	0	0	0	1.604	0				1