

## Electronic Supplementary Materials

**Table S1.** List of the phytoplankton taxa and their occurrence at different depths (m) in the Lagoon on the Cape Zeleny, and in the surface water layer (0.5 m) of adjacent White Sea area on 30.01.2020. Typical species that contribute to the similarity of phytoplankton communities from different depths in the Lagoon are highlighted in bold.

Taxon (phylum, class, species/group of species)	30.01.2020					
	0.5	1.5	2.5	3.5	4.5	Sea
<b>BACILLARIOPHYTA</b>						
<b>BACILLARIOPHYCEAE</b>						
<i>Cocconeis scutellum</i> Ehrenberg 1838				+		
<i>Cylindrotheca closterium</i> (Ehrenberg) Reimann & J.C. Lewin 1964			+			+
<i>Fragilariopsis oceanica</i> (Cleve) Hasle 1965					+	+
<i>Fragilariopsis</i> sp.						
<i>Grammatophora arcuata</i> Ehrenberg 1853						+
<i>Gyrosigma/Pleurosigma</i> (120 µm)					+	
<i>Gyrosigma/Pleurosigma</i> (135 µm)					+	
<i>Licmophora</i> sp.2				+		
<i>Licmophora</i> sp.3		+				
<i>Licmophora</i> sp.5			+			
<i>Navicula directa</i> (W.Smith) Brébisson 1854						+
<b><i>Navicula transitans</i></b> Cleve 1883			+	+		
<i>Navicula</i> spp. (21-30 µm)				+		
<i>Nitzschia frigida</i> Grunow 1880						+
<b><i>Nitzschia</i> sp.1</b>			+	+		
<i>Nitzschia</i> sp.2			+			
<i>Tabularia tabulata</i> (C.Agardh) Snoeijs 1992				+	+	
<i>Ulnaria ulna</i> (Nitzsch) Compère 2001				+		
Unidentified pennate diatoms (11-14×1-3 µm)				+		
Unidentified pennate diatoms (≤20 µm)			+			
Unidentified pennate diatom (25×7 µm)				+		
Unidentified pennate diatom (26×7 µm)			+			
Unidentified pennate diatom (27×12 µm)			+			
Unidentified pennate diatom (30×5 µm)				+		
Unidentified pennate diatom (32×11 µm)				+		
Unidentified pennate diatom (44×6 µm)				+		
Unidentified pennate diatom (45×15 µm)	+					
Unidentified pennate diatom (48×8 µm)			+			
Unidentified pennate diatom (57×7 µm)			+			
Unidentified pennate diatom (177×6 µm)				+		
<b>COSCINODISCOPHYCEAE</b>						
<i>Aulacoseira</i> sp.			+			
<i>Melosira moniliformis</i> (Link) C.Agardh 1824						+
<b><i>Paralia sulcata</i></b> (Ehrenberg) Cleve 1873		+	+	+		+

MEDIOPHYCEAE						
<i>Chaetoceros debilis</i> Cleve 1894 spore	+					
<i>Chaetoceros</i> sp.4 spore				+		
<i>Thalassiosira</i> spp. (21-40 µm)			+			
<i>Thalassiosira</i> spp. (41-62 µm)				+		
MYOZOA						
DINOPHYCEAE						
<i>Amphidinium sphenoides</i> Wulff 1919				+		
<i>Amphidinium</i> sp.			+			
<i>Dinophysis acuminata</i> Claparède & Lachmann 1859						+
<i>Dinophysis</i> sp.				+		
<b><i>Gymnodinium wulffii</i></b> J.Schiller 1932			+	+	+	+
<b><i>Gymnodinium</i> spp. (11-15 µm)</b>	+			+		
<i>Gymnodinium</i> spp. (21-30 µm)					+	
<i>Gyrodinium spirale</i> (Bergh) Kofoid & Swezy 1921					+	
<i>Gyrodinium</i> cf. <i>fusiforme</i> Kofoid & Swezy 1921					+	
<i>Heterocapsa rotundata</i> (Lohmann) Gert Hansen 1995				+		
<i>Phalacroma rotundatum</i> (Claparède & Lachmann) Kofoid & J.R. Michener 1911						+
<i>Protoperidinium brevipes</i> (Paulsen) Balech 1974	+					+
<i>Protoperidinium pellucidum</i> Bergh 1881						+
Unidentified dinoflagellates (14-15 µm)				+		
CHLOROPHYTA						
CHLOROPHYCEAE						
<i>Chlamydomonas</i> sp.						+
PYRAMIMONADOPHYCEAE						
<i>Pterosperma cristatum</i> Schiller 1926	+					
CRYPTISTA						
KATABLEPHARIDOPHYCEAE						
<i>Leucocryptos marina</i> (Braarud) Butcher 1967				+		
Unidentified cryptomonad cells (10-20 µm)				+	+	
CYANOBACTERIA						
CYANOPHYCEAE						
<i>Anabaena</i> sp.5		+				
cf. <i>Cuspidothrix issatschenkoi</i> (Usachev) P.Rajaniemi, Komárek, R.Willame, P.Hrouzek, K.Kastovská, L.Hoffmann & K.Sivonen 2005		+				
<i>Aphanizomenon</i> sp.		+				
cf. <i>Limnithrix planctonica</i> (Woloszynska) Meffert 1988		+		+		
<i>Oscillatoria</i> sp. 3			+			
cf. <i>Planktolynghya limnetica</i> (Lemmermann) Komárková-Legnerová & Cronberg 1992		+				

<b>cf. <i>Planktothrix agardhii</i></b> (Gomont) Anagnostidis & Komárek 1988		+		+		
NOT IDENTIFIED COCCI AND FLAGELLATES (NCF)						
NCF 3-5 µm	+		+	+		
NCF 6-8 µm	+			+	+	
NCF 6-8 µm			+			+
NCF 6-8 µm	+		+	+		
NCF 9-14 µm				+		
NCF 9 µm				+		
NCF 10 µm	+	+	+	+		
NCF 12 µm				+		
NCF 13 µm			+			
Unidentified species with green oval cells 7×5 µm	+					
Unidentified species with green oval cells 8×6 µm	+		+	+		
Unidentified species with green oval cells 10×8 µm	+				+	
Unidentified species with green oval cells 11×9 µm			+			
Unidentified species with green oval cells 13×6 µm				+		
Unidentified species with green oval cells 13×8 µm				+		
Unidentified species with green oval cells 15×8 µm				+		
Unidentified species with green oval cells 15×9 µm				+		
Unidentified species with green oval cells 15×12 µm				+		+
Unidentified species with green oval cells 15×13 µm				+		
Unidentified species with green oval cells 16×10 µm				+		
Unidentified species with green oval cells 19×10 µm				+		

**Electronic Supplementary Materials. Table S2.** List of the phytoplankton taxa and their occurrence at different depths (m) in the Lagoon on the Cape, and in the surface water layer (0.5 m) of adjacent White Sea area on 08.06.2020. Typical species that contribute to the similarity of phytoplankton communities from different depths in the Lagoon are highlighted in bold.

Taxon (phylum, class, species/group of species)	08.06.2020					
	0.5	1.5	3.5	4.5	5.2	Sea
<b>BACILLARIOPHYTA</b>						
<b>BACILLARIOPHYCEAE</b>						
<i>Amphora cf. proteus</i> W.Gregory 1857					+	
<i>Cocconeis</i> sp.	+					
<b><i>Cylindrotheca closterium</i></b> (Ehrenberg) Reimann & J.C.Lewin 1964	+	+		+	+	+
<i>Fragilariopsis cylindrus</i> (Grunow ex Cleve) Helmcke & Krieger 1954	+					
<i>Fragilariopsis oceanica</i> (Cleve) Hasle 1965					+	
Gyrosigma/Pleurosigma (70 µm)					+	
<i>Licmophora</i> sp.2		+				
<i>Licmophora</i> sp.5		+				
<i>Nanofrustulum trainorii</i> (E.Morales) E.Morales 2019	+					
<i>Navicula</i> spp. (41-50 µm)	+					
<i>Nitzschia</i> sp.1	+					
<i>Pleurosigma angulatum</i> (J.T.Quekett) W.Smith 1852						+
<i>Rhabdonema minutum</i> Kützing 1844					+	
<i>Rhoicosphenia abbreviata</i> (C.Agardh) Lange-Bertalot 1980						+
<i>Synedra</i> sp. 1						+
<i>Thalassionema nitzschioides</i> (Grunow) Mereschkowsky 1902			+			+
<b>UNIDENTIFIED PENNATE DIATOMS (≤20 MM)</b>		+	+		+	
Unidentified pennate diatom (22×8×6 µm)	+					
Unidentified pennate diatom (26×13 µm)						+
Unidentified pennate diatom (26-27×5 µm)	+					
Unidentified pennate diatom (29-32×2.5-3×6 µm)	+					+
Unidentified pennate diatom (32×6.5 µm)						+
Unidentified pennate diatom (34×2.5 µm)						+
Unidentified pennate diatom (38×4 µm)						+
Unidentified pennate diatom (40×5 µm)					+	
Unidentified pennate diatom (61×10 µm)						+
<b>COSCINODISCOPHYCEAE</b>						
<i>Coscinodiscus curvatulus</i> Grunow 1978						+
<b><i>Melosira moniliformis</i></b> (Link) C.Agardh 1824	+	+	+	+		
<b><i>Melosira nummuloides</i></b> C.Agardh 1824		+	+		+	
<i>Melosira varians</i> C.Agardh 1827					+	
<b><i>Paralia sulcata</i></b> (Ehrenberg) Cleve 1873	+	+	+		+	

MEDIOPHYCEAE						
<i>Attheya longicornis</i> R.M.Crawford & C.Gardner 1994	+		+	+		
<i>Chaetoceros crinitus</i> F.Schütt 1895	+					
<i>Chaetoceros invisibilis</i> R.M. Gogorev & I.V.Makarova 2003			+	+	+	
<b><i>Chaetoceros muelleri</i></b> Lemmermann 1898	+	+	+			+
<i>Chaetoceros perpusillus</i> Cleve 1897	+		+			+
<i>Chaetoceros simplex</i> Ostensfeld 1902						+
<i>Chaetoceros subtilis</i> Cleve 1896						+
<b><i>Cyclotella choctawhatcheeana</i></b> Prasad 1990	+	+	+			+
<b><i>Leptocylindrus minimus</i></b> Gran 1915			+	+	+	
<i>Odontella aurita</i> (Lyngbye) C.Agardh 1832		+			+	
<b><i>Skeletonema costatum</i></b> 'sensu lato'		+	+	+	+	+
cf. <i>Stephanodiscus hantzschii</i> Grunow 1880	+					
<i>Thalassiosira nordenskioeldii</i> Cleve 1873						+
MYOZOA						
DINOPHYCEAE						
<i>Alexandrium</i> cf. <i>minutum</i> Halim 1960		+				
<i>Amphidinium crassum</i> Lohmann 1908				+		
<i>Amylax triacantha</i> (Jørgensen) Sournia 1984			+	+		
<i>Dinophysis acuminata</i> Claparède & Lachmann 1859			+	+		
<i>Diplopsalis lenticula</i> Bergh 1881		+				
<b><i>Gymnodinium arcticum</i></b> Wulff 1919			+	+	+	+
<i>Gymnodinium</i> sp.		+	+			
<i>Gymnodinium</i> spp. (11-15 µm)				+	+	+
<i>Gymnodinium</i> spp. (16-20 µm)			+	+		
<i>Gymnodinium</i> spp. (21-30 µm)						+
<b><i>Gyrodinium spirale</i></b> (Bergh) Kofoed & Swezy 1921			+	+		
<i>Gyrodinium</i> cf. <i>pingue</i> (F.Schütt) Kofoed & Swezy 1921					+	
<i>Gyrodinium</i> sp.2					+	
<b><i>Heterocapsa rotundata</i></b> (Lohmann) Gert Hansen 1995	+	+	+	+	+	+
<i>Heterocapsa</i> sp.2						+
<i>Mesoporos perforatus</i> (Gran) Lillick 1937	+					
<i>Oblea rotunda</i> (Lebour) Balech ex Sournia 1964						+
<i>Phalacroma rotundatum</i> (Claparède & Lachmann) Kofoed & J.R.Michener 1911						+
<i>Prorocentrum balticum</i> (Lohmann) Loeblich III 1970						+
<i>Protoperidinium brevipes</i> (Paulsen) Balech 1974			+			+
<b><i>Protoperidinium pellucidum</i></b> Bergh 1881		+	+	+		
<i>Protoperidinium</i> spp. (32-42 µm)				+		+
<i>Scrippsiella acuminata</i> (Ehrenberg) Kretschmann, Elbrächter, Zinssmeister, S.Soehner, Kirsch, Kusber & Gottschling 2015	+					
Unidentified armored dinoflagellates (32-48 µm)						+
OCHROPHYTA						

CHRYSOPHYCEAE						
<i>Dinobryon balticum</i> (Schütt) Lemmermann 1901			+			
<b><i>Ollicola vangoorii</i></b> (W.Conrad) Vørs 1992	+	+	+	+		+
DICTYOCOPHYCEAE						
<b><i>Pseudopedinella pyriformis</i></b> N.Carter 1937	+	+	+	+	+	+
CERCOZOA						
THECOFILOSEA						
<b><i>Ebria tripartita</i></b> (Schumann) Lemmermann 1899	+	+		+		+
CHLOROPHYTA						
CHLORODENDROPHYCEAE						
<i>Tetraselmis cordiformis</i> (H.J.Carter) F.Stein 1878					+	+
Pyramimonadophyceae						
<b><i>Pyramimonas cf. diskoicola</i></b> Hardardóttir N.Lundholm, Moestrup & T.G.Nielsen 2014	+	+	+	+		+
<i>Pyramimonas</i> sp.3		+				
EUGLENOZOA						
EUGLENOPHYCEAE						
<i>Eutreptiella gymnastia</i> Throndsen 1969	+			+		+
<b>Unidentified euglenophycean species (13-20 µm)</b>		+	+	+		+
CRYPTISTA						
<b>Unidentified cryptomonad cells (10-20 µm)</b>	+	+	+	+	+	+
CYANOBACTERIA						
CYANOPHYCEAE						
<i>Merismopedia tenuissima</i> Lemmermann 1898			+			
<i>Oscillatoria limosa</i> C.Agardh ex Gomont 1892		+				
<i>Synechocystis aquatilis</i> Sauvageau 1892					+	
<i>Synechocystis salina</i> Wislouch 1924					+	
<i>Trichodesmium lacustre</i> Klebahn 1895					+	
NOT IDENTIFIED COCCI AND FLAGELLATES (NCF)						
NCF 3-5 µm	+	+	+	+	+	+
NCF 6-8 µm	+	+	+	+	+	+
NCF 10 µm	+	+	+	+	+	+
NCF 13 µm	+					

**Electronic Supplementary Materials. Table S3.** List of the phytoplankton taxa and their occurrence at different depths (m) in the Lagoon on the Cape, and in the surface water layer (0.5 m) of adjacent White Sea area on 18.06.2020. Typical species that contribute to the similarity of phytoplankton communities from different depths in the Lagoon are highlighted in bold.

Taxon (phylum, class, species/group of species)	18.06.2020						
	0.5	1.5	2.5	3.5	4.5	5.0	Sea
<b>BACILLARIOPHYTA</b>							
<b>BACILLARIOPHYCEAE</b>							
<i>Cylindrotheca closterium</i> (Ehrenberg) Reimann & J.C.Lewin 1964	+	+		+	+		+
<i>Fragilariopsis oceanica</i> (Cleve) Hasle 1965	+			+			
<i>Gyrosigma acuminatum</i> (Kützing) Rabenhorst 1853	+						
<i>Nanofrustulum trainorii</i> (E.Morales) E.Morales 2019	+						
<i>Navicula perminuta</i> Grunow 1880							+
<i>Navicula</i> sp.1		+					
<i>Synedra</i> sp. 2	+						
<i>Tabularia tabulata</i> (C.Agardh) Snoeijs 1992							+
<i>Thalassionema nitzschioides</i> (Grunow) Mereschowsky 1902							+
Unidentified pennate diatom (29×5 µm)	+						
Unidentified pennate diatom (32×1.6 µm)							+
<b>COSCINODISCOPHYCEAE</b>							
<i>Melosira moniliformis</i> (Link) C.Agardh 1824		+					
<i>Melosira nummuloides</i> C.Agardh 1824	+						
<b><i>Paralia sulcata</i></b> (Ehrenberg) Cleve 1873	+		+	+	+		+
<b>MEDIOPHYCEAE</b>							
<i>Attheya longicornis</i> R.M.Crawford & C.Gardner 1994				+			
<i>Chaetoceros constrictus</i> Gran 1897							+
<i>Chaetoceros diadema</i> (Ehrenberg) Gran 1897							+
<i>Chaetoceros eibenii</i> Grunow 1882							+
<i>Chaetoceros invisibilis</i> R.M. Gogorev & I.V.Makarova 2003						+	
<i>Chaetoceros laciniosus</i> F.Schütt 1895							+
<i>Chaetoceros muelleri</i> Lemmermann 1898							+
<i>Chaetoceros perpusillus</i> Cleve 1897	+						
<i>Chaetoceros subtilis</i> Cleve 1896	+						
<i>Chaetoceros</i> sp.1							+
<i>Chaetoceros</i> sp.2							+
<b><i>Cyclotella choctawhatcheeana</i></b> Prasad 1990	+	+	+	+	+	+	+
<i>Leptocylindrus minimus</i> Gran 1915							+
<i>Odontella aurita</i> (Lyngbye) C.Agardh 1832							+
<i>Skeletonema costatum</i> 'sensu lato'							+
cf. <i>Stephanodiscus hantzschii</i> Grunow 1880		+					
<b>MYOZOA</b>							

DINOPHYCEAE							
<i>Akashiwo sanguinea</i> (K.Hirasaka) Gert Hansen & Moestrup 2000					+		
<i>Amylax triacantha</i> (Jørgensen) Sournia 1984							+
<b><i>Dinophysis acuminata</i></b> Claparède & Lachmann 1859			+	+	+		
<i>Dinophysis norvegica</i> Claparède & Lachmann 1859				+			+
<i>Dinophysis punctata</i> Jørgensen 1923			+	+			+
<i>Diplopsalis lenticula</i> Bergh 1881	+	+					
<i>Gonyaulax scrippsae</i> Kofoed 1911							+
<i>Gonyaulax spinifera</i> (Claparède & Lachmann) Diesing 1866	+	+					
<b><i>Gymnodinium arcticum</i></b> Wulff 1919	+		+	+	+	+	
<i>Gymnodinium</i> sp.	+						
<b><i>Gymnodinium</i> spp. (8-10 µm)</b>	+	+	+	+			
<b><i>Gymnodinium</i> spp. (11-15 µm)</b>	+	+	+	+			
<b><i>Gymnodinium</i> spp. (16-20 µm)</b>		+	+	+			+
<i>Gymnodinium</i> spp. (21-30 µm)				+			
<i>Gyrodinium spirale</i> (Bergh) Kofoed & Swezy 1921		+					
<i>Gyrodinium</i> sp. 1			+				
<i>Heterocapsa minima</i> A.J. Pomroy 1989	+						
<b><i>Heterocapsa rotundata</i></b> (Lohmann) Gert Hansen 1995	+	+		+			+
<b><i>Heterocapsa</i> sp.2</b>	+	+		+			
<b><i>Kryptoperidinium triquetrum</i></b> (Ehrenberg) Tillmann, Gottschling, Elbrächter, Kusber & Hoppenrath 2019	+	+		+			+
<i>Lepidodinium chlorophorum</i> (M.Elbrächter & E.Schnepf) Gert Hansen, Botes & Salas 2007					+		
<i>Oblea rotunda</i> (Lebour) Balech ex Sournia 1964							+
<i>Peridiniella</i> cf. <i>danica</i> (Paulsen) Okolodkov & J.D.Dodge 1995	+						
<i>Phalacroma rotundatum</i> (Claparède & Lachmann) Kofoed & J.R.Michener 1911							+
<i>Prorocentrum lima</i> (Ehrenberg) F.Stein 1878							+
<i>Protodinium</i> cf. <i>simplex</i> Lohmann 1908	+	+					
<i>Protoperidinium bipes</i> (Paulsen) Balech 1974							+
<i>Protoperidinium brevipes</i> (Paulsen) Balech 1974							+
<i>Protoperidinium pellucidum</i> Bergh 1881		+	+				
<i>Tripos arcticus</i> (Ehrenberg) F.Gómez 2021					+		
Unidentified armored dinoflagellates (32-48 µm)							+
OCHROPHYTA							
CHRY SOPHYCEAE							
<i>Dinobryon balticum</i> (Schütt) Lemmermann 1901				+	+		
<b><i>Ollicola vangoorii</i></b> (W.Conrad) Vørs 1992	+	+	+	+	+	+	+
DICTY OCHOPHYCEAE							
<i>Pseudopedinella pyriformis</i> N.Carter 1937	+			+			+
CERCOZOA							
THECOFILOSEA							



<i>Ebria tripartita</i> (Schumann) Lemmermann 1899	+	+	+	+	+		+
CHLOROPHYTA							
CHLOROPHYCEAE							
<i>Coelastrum microporum</i> Nägeli 1855	+						
CHLORODENDROPHYCEAE							
<i>Tetraselmis cordiformis</i> (H.J.Carter) F.Stein 1878	+	+				+	
PYRAMIMONADOPHYCEAE							
<i>Pterosperma cristatum</i> Schiller 1926			+	+	+		
<i>Pyramimonas</i> cf. <i>discoicola</i> Hardardóttir, N.Lundholm, Moestrup & T.G.Nielsen 2014	+	+	+	+	+		+
<i>Pyramimonas</i> sp.3		+					
EUGLENOZOA							
EUGLENOPHYCEAE							
Unidentified euglenophycean species (13-20 µm)					+		
Unidentified euglenophycean species (21-40 µm)	+	+					+
CRYPTISTA							
Unidentified cryptomonad cells (6-10 µm)			+		+		
<b>Unidentified cryptomonad cells (10-20 µm)</b>	+	+		+			+
CYANOBACTERIA							
CYANOPHYCEAE							
<i>Jaaginema subtilissimum</i> (Kützing ex Forti) Anagnostidis & Komárek 1988	+						
<i>Synechocystis salina</i> Wislouch 1924	+	+	+	+		+	
NOT IDENTIFIED COCCI AND FLAGELLATES (NCF)							
NCF 3-5 µm	+	+	+	+	+	+	+
NCF 6-8 µm	+	+	+	+			+
NCF 6-8 µm	+	+	+	+	+	+	+
NCF 10 µm	+	+	+	+			+
NCF 13 µm		+					
Unidentified species with green oval cells 13x8 µm							+
Bunch of unidentified green cells 3 µm					+		

**Electronic Supplementary Materials. Table S4.** List of the phytoplankton taxa and their occurrence at different depths (m) in the Lagoon on the Cape, and in the surface water layer (0.5 m) of adjacent White Sea area on 02.07.2020. Typical species that contribute to the similarity of phytoplankton communities from different depths in the Lagoon are highlighted in bold.

Taxon (phylum, class, species/group of species)	02.07.2020					
	0.5	1.5	3.5	4.5	5.0	Sea
<b>BACILLARIOPHYTA</b>						
<b>BACILLARIOPHYCEAE</b>						
<i>Cylindrotheca closterium</i> (Ehrenberg) Reimann & J.C.Lewin 1964	+	+				+
<i>Fragilariopsis</i> sp.						+
<i>Navicula</i> spp. (21-30 µm)				+		
<i>Navicula</i> spp. (31-40 µm)				+		
<i>Nitzschia longissima</i> (Brébisson ex Kützing) Grunow 1862						+
<i>Tabularia tabulata</i> (C.Agardh) Snoeijis 1992						+
<i>Thalassionema nitzschioides</i> (Grunow) Mereschkowsky 1902			+	+		+
Unidentified pennate diatoms (11-14×1-3 µm)	+	+		+		
Unidentified pennate diatom (34×1.6 µm)						+
Unidentified pennate diatom (45×1.6 µm)						+
<b>COSCINODISCOPHYCEAE</b>						
<i>Melosira moniliformis</i> (Link) C.Agardh 1824			+			
<i>Paralia sulcata</i> (Ehrenberg) Cleve 1873			+		+	
<b>MEDIOPHYCEAE</b>						
<i>Attheya longicornis</i> R.M.Crawford & C.Gardner 1994						+
<i>Chaetoceros constrictus</i> Gran 1897						+
<i>Chaetoceros curvisetus</i> Cleve 1889	+					
<i>Chaetoceros diadema</i> (Ehrenberg) Gran 1897						+
<i>Chaetoceros filiformis</i> Meunier 1910						+
<i>Chaetoceros muelleri</i> Lemmermann 1898						+
<i>Chaetoceros perpusillus</i> Cleve 1897	+	+				
<i>Chaetoceros rigidus</i> Ostefeld 1902						+
<i>Chaetoceros tenuissimus</i> Meunier 1913	+					
<b><i>Cyclotella choctawhatcheeana</i></b> Prasad 1990	+	+	+	+	+	+
<i>Leptocylindrus minimus</i> Gran 1915						+
<i>Skeletonema costatum</i> 'sensu lato'	+					+
<i>Thalassiosira</i> spp. (10-20 µm)						+
<b>MYOZOA</b>						
<b>DINOPHYCEAE</b>						
<i>Amphidinium crassum</i> Lohmann 1908						+
<i>Dinophysis acuminata</i> Claparède & Lachmann 1859		+		+		
<i>Dinophysis norvegica</i> Claparède & Lachmann 1859				+		+
<i>Dinophysis punctata</i> Jørgensen 1923				+		

<i>Diplopsalis lenticula</i> Bergh 1881		+				
<i>Gonyaulax spinifera</i> (Claparède & Lachmann) Diesing 1866		+				
<i>Gymnodinium arcticum</i> Wulff 1919						+
<i>Gymnodinium</i> sp.			+			
<i>Gymnodinium</i> spp. (8-10 µm)						+
<b><i>Gymnodinium</i> spp. (11-15 µm)</b>	+	+	+	+		+
<b><i>Gymnodinium</i> spp. (16-20 µm)</b>		+	+	+	+	+
<i>Gymnodinium</i> spp. (21-30 µm)						+
<i>Gyrodinium spirale</i> (Bergh) Kofoid & Swezy 1921						+
<i>Heterocapsa minima</i> A.J.Pomroy 1989	+					
<i>Heterocapsa rotundata</i> (Lohmann) Gert Hansen 1995	+	+	+	+		+
<i>Heterocapsa</i> sp.1			+			
<b><i>Kryptoperidinium triquetrum</i></b> (Ehrenberg) Tillmann, Gottschling, Elbrächter, Kusber & Hoppenrath 2019	+	+	+			+
<i>Peridiniella</i> cf. <i>danica</i> (Paulsen) Okolodkov & J.D.Dodge 1995						+
<i>Phalacroma rotundatum</i> (Claparède & Lachmann) Kofoid & J.R.Michener 1911		+				
<i>Protoperidinium conicum</i> (Gran) Balech 1974		+				+
<i>Protoperidinium pellucidum</i> Bergh 1881			+	+		+
<i>Tripos arcticus</i> (Ehrenberg) F.Gómez 2021				+		
<i>Tripos fusus</i> (Ehrenberg) F.Gómez 2013						+
OCHROPHYTA						
CHRYSOPHYCEAE						
<b><i>Ollicola vangoorii</i></b> (W.Conrad) Vørs 1992	+	+	+	+	+	+
DICTYOCOPHYCEAE						
<i>Pseudopedinella pyriformis</i> N.Carter 1937			+			
CERCOZOA						
THECOFILOSEA						
<b><i>Ebria tripartita</i></b> (Schumann) Lemmermann 1899	+	+	+	+		+
CHLOROPHYTA						
CHLOROPHYCEAE						
<i>Monoraphidium contortum</i> (Thuret) Komárková-Legnerová 1969						+
PYRAMIMONADOPHYCEAE						
<i>Pterosperma cristatum</i> Schiller 1926						+
<b><i>Pyramimonas</i> cf. <i>discoicola</i></b> Hardardóttir, N.Lundholm, Moestrup & T.G.Nielsen 2014	+	+	+	+		+
EUGLENOZOA						
EUGLENOPHYCEAE						
Unidentified euglenophycean species (13-20 µm)	+	+				
Unidentified euglenophycean species (21-40 µm)						+

HAPTOPHYTA						
COCCOLITHOPHYCEAE						
<i>Emiliana huxleyi</i> (Lohmann) W.W.Hay & H.P.Mohler 1944			+	+		+
CRYPTISTA						
KATABLEPHARIDOPHYCEAE						
<b>Unidentified cryptomonad cells (6-10 µm)</b>	+	+	+	+		+
<b>Unidentified cryptomonad cells (10-20 µm)</b>	+		+	+		+
CYANOBACTERIA						
CYANOPHYCEAE						
<i>Anabaena</i> sp.2						+
<i>Merismopedia tenuissima</i> Lemmermann 1898			+			
NCF 3-5 µm	+	+	+	+	+	+
NCF 6-8 µm	+	+	+	+	+	+
NCF 10 µm	+	+	+	+		+
Unidentified species with green oval cells 5×3 µm					+	+
Unidentified species with green oval cells 5-6×3-4 µm					+	
Unidentified species with green oval cells 13-14×10-13 µm	+	+	+			
Unidentified species with green oval cells 16×11 µm					+	
Bunch of unidentified green cells 3 µm				+		+

**Electronic Supplementary Materials. Table S5.** List of the phytoplankton taxa and their occurrence in the Lagoon on the Cape, and in the surface water layer of adjacent White Sea area on 20.07.2020. Typical species that contribute to the similarity of phytoplankton communities from different depths in the Lagoon are highlighted in bold.

Taxon (phylum, class, species/group of species)	20.07.2020							
	0.5	1.5	2.5	3.5	4.5	5.1	5.4	Sea
BACILLARIOPHYTA								
BACILLARIOPHYCEAE								
<i>Achnanthes</i> sp.				+				
<i>Cocconeis costata</i> W.Gregory 1855		+						+
<b><i>Cylindrotheca closterium</i></b> (Ehrenberg) Reimann & J.C.Lewin 1964	+	+	+	+	+	+	+	+
<i>Diploneis</i> sp.								+
<i>Gyrosigma prolongatum</i> (W.Smith) J.W.Griffith & Henfrey 1856	+	+						
<i>Nanofrustulum trainorii</i> (E.Morales) E.Morales 2019						+		
<i>Navicula</i> spp. (21-30 µm)		+						
<i>Nitzschia longissima</i> (Brébisson ex Kützing) Grunow 1862		+						
<i>Pleurosigma formosum</i> W.Smith 1852								+
<i>Synedropsis hyperborea</i> (Grunow) G.R.Hasle, Medlin & E.E.Syvertsen 1994					+			
<i>Tabularia tabulata</i> (C.Agardh) Snoeijs 1992	+							
<b><i>Thalassionema nitzschioides</i></b> (Grunow) Mereschowsky 1902					+	+	+	+
<i>Ulnaria ulna</i> (Nitzsch) Compère 2001		+						
Unidentified pennate diatoms (11-14×1-3 µm)	+				+			+
Unidentified pennate diatoms (≤20 µm)	+					+		+
Unidentified pennate diatom (21-22×2.5-3 µm)					+	+		+
Unidentified pennate diatom (22-24×2 µm)				+	+			
Unidentified pennate diatom (24×3 µm)	+	+				+		
<b>Unidentified pennate diatom (26×1µm)</b>	+	+	+		+			
Unidentified pennate diatom (29-32×2.5-3×6 µm)		+	+		+	+		
Unidentified pennate diatom (32×6.5 µm)								+
Unidentified pennate diatom (34×2.5 µm)					+			
Unidentified pennate diatom (34×6×8 µm)								+
Unidentified pennate diatom (40×2 µm)		+		+	+			
Unidentified pennate diatom (42×8×5 µm)	+							
Unidentified pennate diatom (45×1.6 µm)					+	+		
Unidentified pennate diatom (46×5 µm)		+						
Unidentified pennate diatom (50×3 µm)					+			
Unidentified pennate diatom (53-56x2 µm)						+		

Unidentified pennate diatom (61×5 µm)		+						
COSCINODISCOPHYCEAE								
<i>Melosira arctica</i> Dickie 1852	+							+
<i>Melosira moniliformis</i> (Link) C.Agardh 1824		+						
MEDIOPHYCEAE								
<b><i>Cyclotella choctawhatcheeana</i></b> Prasad 1990	+	+	+	+	+	+	+	+
<i>Thalassiosira nordenskioeldii</i> Cleve 1873								+
MYOZOA								
DINOPHYCEAE								
<i>Akashiwo sanguinea</i> (K.Hirasaka) Gert Hansen & Moestrup 2000				+				
<i>Dinophysis acuminata</i> Claparède & Lachmann 1859						+		
<b><i>Diplopsalis lenticula</i></b> Bergh 1881	+	+	+	+		+		
<b><i>Gonyaulax spinifera</i></b> (Claparède & Lachmann) Diesing 1866	+	+	+	+	+	+		
<b><i>Gymnodinium</i> sp.</b>		+	+	+		+		
<i>Gymnodinium</i> spp. (8-10 µm)				+				+
<i>Gymnodinium</i> spp. (11-15 µm)	+	+	+	+		+		+
<b><i>Gymnodinium</i> spp. (16-20 µm)</b>	+	+	+			+		+
<i>Gymnodinium</i> spp. (21-30 µm)			+					
<i>Heterocapsa</i> cf. <i>lanceolata</i> Iwataki & Fukuyo 2002		+	+					+
<i>Heterocapsa minima</i> A.J.Pomroy 1989	+	+			+			
<i>Heterocapsa rotundata</i> (Lohmann) Gert Hansen 1995	+	+	+	+	+			+
<i>Kryptoperidinium triquetrum</i> (Ehrenberg) Tillmann, Gottschling, Elbrächter, Kusber & Hoppenrath 2019			+	+				+
<i>Kryptoperidinium triquetrum</i> (Ehrenberg) Tillmann, Gottschling, Elbrächter, Kusber & Hoppenrath 2019 spore								+
<i>Lebouridinium glaucum</i> (Lebour) F.Gómez, H.Takayam, D.Moreira & P.López-García 2016			+					
<i>Lepidodinium chlorophorum</i> (M.Elbrächter & E.Schnepf) Gert Hansen, Botes & Salas 2007								+
<i>Peridiniella</i> cf. <i>danica</i> (Paulsen) Okolodkov & J.D.Dodge 1995	+		+	+				+
<i>Protoperidinium bipes</i> (Paulsen) Balech 1974		+						
<i>Protoperidinium brevipes</i> (Paulsen) Balech 1974		+	+					
<i>Protoperidinium pellucidum</i> Bergh 1881				+	+			
<i>Protoperidinium</i> spp. (13-20 µm)		+						+
<i>Protoperidinium</i> spp. (21-22 µm)	+							
<i>Scrippsiella acuminata</i> (Ehrenberg) Kretschmann, Elbrächter, Zinssmeister, S.Soehner, Kirsch, Kusber & Gottschling 2015	+							+

<i>Tripos fusus</i> (Ehrenberg) F.Gómez 2013								+
Unidentified dinoflagellates (14-15 µm)			+		+			
OXYRRHINOPHYCEAE								
<i>Oxyrrhis marina</i> Dujardin 1841	+							
OCHROPHYTA								
CHRY SOPHYCEAE								
<i>Dinobryon faculiferum</i> Willén 1992		+	+	+				+
<i>Ollicola vangoorii</i> (W.Conrad) Vørs 1992	+	+	+	+	+	+		+
DICTYOCHOPHYCEAE								
<i>Octactis speculum</i> (Ehrenberg) F.H.Chang, J.M.Grieve & J.E.Sutherland 2017		+						
<i>Parapedinella reticulata</i> S.M.Pedersen & H.A.Thomsen 1986								+
<i>Pseudopedinella pyriformis</i> N.Carter 1937				+	+	+	+	
CERCOZOA								
IMBRICATEA								
<i>Paulinella ovalis</i> (A.Wulff) P.W.Johnson, P.E.Hargraves & J.M.Sieburth 1988		+		+	+	+	+	+
THECOFILOSEA								
<i>Ebria tripartita</i> (Schumann) Lemmermann 1899			+	+	+	+	+	+
CHLOROPHYTA								
PYRAMIMONADOPHYCEAE								
<i>Halosphaera</i> sp.		+						
<i>Pterosperma</i> sp. 2	+		+	+	+	+	+	+
<i>Pyramimonas</i> cf. <i>discoicola</i> Hardardóttir, N.Lundholm, Moestrup & T.G.Nielsen 2014	+	+	+	+	+	+		+
<i>Pyramimonas</i> sp.2	+		+					+
EUGLENOZOA								
EUGLENOPHYCEAE								
<i>Eutreptiella gymnastia</i> Throndsen 1969	+							+
<i>Eutreptiella</i> cf. <i>marina</i> da Cunha 1913	+							
Unidentified euglenophycean species (21-40 µm)		+						
HAPTOPHYTA								
COCCOLITHOPHYCEAE								
<i>Emiliania huxleyi</i> (Lohmann) W.W.Hay & H.P.Mohler 1944	+	+	+	+	+	+		+
CRYPTISTA								
KATABLEPHARIDOPHYCEAE								
Unidentified cryptomonad cells (6-10 µm)	+	+	+	+	+	+	+	+
Unidentified cryptomonad cells (10-20 µm)		+	+	+	+	+		+
CYANOBACTERIA								
CYANOPHYCEAE								

<i>Anabaena</i> sp.6								+
<i>Merismopedia tenuissima</i> Lemmermann 1898		+						
<i>Oscillatoria limosa</i> C.Agardh ex Gomont 1892		+						
<i>Oscillatoria</i> sp. 2		+						
<i>Oscillatoria</i> sp. 4		+						
NOT IDENTIFIED COCCI AND FLAGELLATES (NCF)								
NCF 3-5 µm	+	+	+	+	+	+	+	+
NCF 6-8 µm	+	+	+	+	+	+	+	+
NCF 10 µm	+			+	+			
NCF 11 µm	+	+	+	+	+			
NCF 12 µm								+
NCF 13 µm	+	+	+	+	+			
NCF 16 µm		+	+					
NCF 19 µm			+					
Unidentified species with green oval cells 5-6×3-4 µm				+	+	+	+	+
Unidentified species with green oval cells 8-11×6.5-8 µm		+	+	+	+		+	+



**Electronic Supplementary Materials. Table S6.** List of the phytoplankton taxa and their occurrence at different depths (m) in the Lagoon on the Cape, and in the surface water layer (0.5 m) of adjacent White Sea area on 18.08.2020. Typical species that contribute to the similarity of phytoplankton communities from different depths in the Lagoon are highlighted in bold.

Taxon (phylum, class, species/group of species)	18.08.2020							
	0.5	1.5	2.5	3.5	4.5	5.0	5.4	Sea
<b>BACILLARIOPHYTA</b>								
<b>BACILLARIOPHYCEAE</b>								
<b><i>Cylindrotheca closterium</i></b> (Ehrenberg) Reimann & J.C.Lewin 1964	+	+	+	+	+	+	+	+
<i>Licmophora</i> sp.2		+						
<i>Navicula</i> spp. (31-40 µm)		+						
<i>Tabellaria</i> sp.								+
<i>Tabularia tabulata</i> (C.Agardh) Snoeijjs 1992	+	+						
<i>Thalassionema nitzschioides</i> (Grunow) Mereschowsky 1902			+		+			+
<b>Unidentified pennate diatoms (11-14×1-3 µm)</b>	+	+	+	+	+	+	+	
Unidentified pennate diatom (34×6×8 µm)								+
<b>COSCINODISCOPHYCEAE</b>								
<i>Melosira moniliformis</i> (Link) C.Agardh 1824		+						
<i>Paralia sulcata</i> (Ehrenberg) Cleve 1873			+		+			
<b>MEDIOPHYCEAE</b>								
<i>Attheya longicornis</i> R.M.Crawford & C.Gardner 1994		+						
<i>Attheya septentrionalis</i> (Østrup) R.M.Crawford 1994			+					
<i>Chaetoceros constrictus</i> Gran 1897		+						
<i>Chaetoceros filiformis</i> Meunier 1910	+		+					
<b><i>Chaetoceros rigidus</i></b> Ostenfeld 1902	+	+	+	+	+			+
<i>Chaetoceros simplex</i> Ostenfeld 1902	+	+						
<i>Chaetoceros tenuissimus</i> Meunier 1913	+	+	+					
<b><i>Cyclotella choctawhatcheeana</i></b> Prasad 1990	+	+	+	+	+	+	+	+
<i>Ditylum brightwellii</i> (T.West) Grunow 1885								+
<b><i>Leptocylindrus minimus</i></b> Gran 1915	+	+	+	+			+	
<i>Skeletonema costatum</i> 'sensu lato'	+	+	+					
<i>Thalassiosira</i> spp. (10-20 µm)		+	+					+
<i>Thalassiosira</i> spp. (21-40 µm)							+	+
<b>MYOZOA</b>								
<b>DINOPHYCEAE</b>								
<i>Akashiwo sanguinea</i> (K.Hirasaka) Gert Hansen & Moestrup 2000	+							
<i>Amphidinium crassum</i> Lohmann 1908		+					+	
<i>Dinophysis acuminata</i> Claparède & Lachmann 1859			+	+				
<b><i>Dinophysis norvegica</i></b> Claparède & Lachmann 1859				+	+	+		

<i>Dinophysis punctata</i> Jørgensen 1923	+		+					
<i>Diplopsalis lenticula</i> Bergh 1881			+	+				
<i>Gonyaulax scrippsae</i> Kofoed 1911					+			
<i>Gonyaulax spinifera</i> (Claparède & Lachmann) Diesing 1866				+				
<i>Gymnodinium arcticum</i> Wulff 1919			+					
<i>Gymnodinium</i> sp.					+			
<i>Gymnodinium</i> spp. (8-10 µm)			+					
<b><i>Gymnodinium</i> spp. (11-15 µm)</b>	+	+		+	+	+	+	+
<b><i>Gymnodinium</i> spp. (16-20 µm)</b>	+		+		+		+	
<i>Gymnodinium</i> spp. (21-30 µm)	+			+		+		
<i>Gyrodinium</i> spp. (21-32 µm)		+						
<i>Heterocapsa</i> cf. <i>lanceolata</i> Iwataki & Fukuyo 2002						+		+
<i>Heterocapsa minima</i> A.J.Pomroy 1989			+	+				
<b><i>Heterocapsa rotundata</i></b> (Lohmann) Gert Hansen 1995	+	+	+	+	+			+
<i>Heterocapsa</i> sp.2	+		+					
<b><i>Kryptoperidinium triquetrum</i></b> (Ehrenberg) Tillmann, Gottschling, Elbrächter, Kusber & Hoppenrath 2019	+	+	+	+	+	+		+
<b><i>Kryptoperidinium triquetrum</i></b> (Ehrenberg) Tillmann, Gottschling, Elbrächter, Kusber & Hoppenrath 2019 spore	+	+	+	+	+	+		+
<i>Micracanthodinium claytonii</i> (R.W.Holmes) J.D.Dodge 1982							+	
<b><i>Peridiniella</i> cf. <i>danica</i></b> (Paulsen) Okolodkov & J.D.Dodge 1995	+	+	+	+		+	+	
<i>Protoperidinium bipes</i> (Paulsen) Balech 1974					+	+		
<i>Protoperidinium brevipes</i> (Paulsen) Balech 1974					+			
<i>Protoperidinium</i> spp. (13-20 µm)					+	+		
<i>Protoperidinium</i> spp. (21-22 µm)					+			
<i>Scrippsiella acuminata</i> (Ehrenberg) Kretschmann, Elbrächter, Zinssmeister, S.Soehner, Kirsch, Kusber & Gottschling 2015	+		+	+				+
<i>Scrippsiella</i> cf. <i>spinifera</i> G.Honsell & M.Cabrini 1991				+				
<i>Sourniaea diacantha</i> (Meunier) H.Gu., K.N.Mertens, Zhun Li & H.H.Shin 2020			+					
<i>Tripos arcticus</i> (Ehrenberg) F.Gómez 2021	+							
<i>Tripos fusus</i> (Ehrenberg) F.Gómez 2013	+							+
Unidentified armored dinoflagellates (32-48 µm)			+					
OXYRRHINOPHYCEAE								
<i>Oxyrrhis marina</i> Dujardin 1841							+	+
OCHROPHYTA								
CHRYSTOPHYCEAE								
<b><i>Dinobryon balticum</i></b> (Schütt) Lemmermann 1901	+	+	+	+	+			

<i>Dinobryon faculiferum</i> Willén 1992	+	+						
<b><i>Ollicola vangoorii</i></b> (W.Conrad) Vørs 1992	+	+	+	+	+	+		+
DICTYOCOPHYCEAE								
<i>Apedinella radians</i> (Lohmann) P.H.Campbell 1973	+	+						
CERCOZOA								
IMBRICATEA								
<i>Paulinella ovalis</i> (A.Wulff) P.W.Johnson, P.E.Hargraves & J.M.Sieburth 1988					+	+	+	+
THECOFILOSEA								
<b><i>Ebria tripartita</i></b> (Schumann) Lemmermann 1899				+	+	+	+	
CHLOROPHYTA								
CHLOROPHYCEAE								
<i>Monoraphidium contortum</i> (Thuret) Komárková- Legnerová 1969						+		
CHLORODENDROPHYCEAE								
<i>Tetraselmis tetrathele</i> (West) Butcher 1959							+	
PYRAMIMONADOPHYCEAE								
<i>Pterosperma cristatum</i> Schiller 1926			+					
<i>Pterosperma</i> sp. 1	+			+				+
<b><i>Pyramimonas cf. diskoicola</i></b> Hardardóttir, N.Lundholm, Moestrup & T.G.Nielsen 2014	+	+	+	+	+	+	+	+
<i>Pyramimonas</i> sp.1			+					+
<b><i>Pyramimonas</i> sp.2</b>	+	+	+					
<i>Pyramimonas</i> sp.3				+				
TREBOUXIOPHYCEAE								
<i>Koliella spiculiformis</i> (Vischer) Hindák 1963							+	+
EUGLENOZOA								
EUGLENOPHYCEAE								
Unidentified euglenophycean species (13-20 µm)								+
Unidentified euglenophycean species (21-40 µm)		+						+
Unidentified euglenophycean species (41-60 µm)	+							+
HAPTOPHYTA								
COCCOLITHOPHYCEAE								
<i>Emiliania huxleyi</i> (Lohmann) W.W.Hay & H.P.Mohler 1944	+	+						
CRYPTISTA								
<b>Unidentified cryptomonad cells (6-10 µm)</b>	+	+	+	+	+	+		+
<b>Unidentified cryptomonad cells (10-20 µm)</b>	+	+	+	+	+	+		+
CYANOBACTERIA								
CYANOPHYCEAE								
<i>Anabaena</i> sp.1			+					+
<i>Anabaena</i> sp.3	+							

<i>Microcystis aeruginosa</i> (Kützing) Kützing 1846								+
<i>Oscillatoria</i> sp. 1								+
<i>Synechocystis salina</i> Wislouch 1924								+
NOT IDENTIFIED COCCI AND FLAGELLATES (NCF)								
NCF 3-5 µm	+	+	+	+	+	+	+	+
NCF 6-8 µm	+	+	+	+	+	+	+	+
NCF 10 µm	+	+	+		+	+		+
NCF 11 µm				+				
NCF 13 µm				+				
Unidentified species with green oval cells 5×3 µm	+		+					+
Unidentified species with green oval cells 5-6×3-4 µm			+	+	+	+	+	+
Unidentified species with green oval cells 8×5 µm							+	
Unidentified species with green oval cells 8×6 µm	+							
Unidentified species with green oval cells 10×6 µm							+	
Unidentified species with green oval cells 11×8 µm							+	
Unidentified species with green oval cells 11×10 µm							+	

**Electronic Supplementary Materials. Table S7.** List of the phytoplankton taxa and their occurrence at different depths (m) in the Lagoon on the Cape, and in the surface water layer (0.5 m) of adjacent White Sea area on 07.09.2020. Typical species that contribute to the similarity of phytoplankton communities from different depths in the Lagoon are highlighted in bold.

Taxon (phylum, class, species/group of species)	07.09.2021						
	0.5	1.5	2.5	3.5	4.5	5.1	Sea
BACILLARIOPHYTA							
BACILLARIOPHYCEAE							
<b><i>Cylindrotheca closterium</i></b> (Ehrenberg) Reimann & J.C.Lewin 1964	+	+	+	+	+	+	+
<i>Fragilariopsis cylindrus</i> (Grunow ex Cleve) Helmcke & Krieger 1954							+
<i>Gyrosigma wansbeckii</i> (Donkin) Cleve 1894			+				
<i>Licmophora</i> sp.1							+
<i>Navicula</i> spp. (21-30 µm)				+			+
<i>Nitzschia longissima</i> (Brébisson ex Kützing) Grunow 1862		+	+				
<i>Rhoicosphenia abbreviata</i> (C.Agardh) Lange-Bertalot 1980	+						
<i>Tabularia tabulata</i> (C.Agardh) Snoeijis 1992			+				+
<i>Thalassionema nitzschioides</i> (Grunow) Mereschowsky 1902		+	+				+
<i>Ulnaria delicatissima</i> var. angustissima (Grunow) Aboal & P.C.Silva 2004		+					
Unidentified pennate diatoms (11-14×1-3 µm)					+	+	
Unidentified pennate diatom (24×5 µm)				+			
Unidentified pennate diatom (30×13×13 µm)			+				
Unidentified pennate diatom (40×10 µm)			+				
Unidentified pennate diatom (42×8×5 µm)			+				
Unidentified pennate diatom (50×3 µm)							+
COSCINODISCOPHYCEAE							
<i>Paralia sulcata</i> (Ehrenberg) Cleve 1873			+				
MEDIOPHYCEAE							
<i>Ardissonaea</i> cf. <i>fulgens</i> (Greville) Kanjer, Kusber & Van de Vijver 2021				+			
<i>Attheya septentrionalis</i> (Østrup) R.M.Crawford 1994		+					
<i>Chaetoceros filiformis</i> Meunier 1910	+						
<i>Chaetoceros muelleri</i> Lemmermann 1898			+				
<b><i>Chaetoceros rigidus</i></b> Ostenfeld 1902	+	+	+	+			+
<i>Chaetoceros simplex</i> Ostenfeld 1902	+	+	+				
<b><i>Chaetoceros tenuissimus</i></b> Meunier 1913	+	+	+	+			
<b><i>Cyclotella choctawhatcheeana</i></b> Prasad 1990	+	+	+	+	+	+	+
<i>Ditylum brightwellii</i> (T.West) Grunow 1885			+				

<i>Leptocylindrus minimus</i> Gran 1915	+	+	+	+			
<i>Skeletonema costatum</i> 'sensu lato'		+	+				
<b>Unidentified centric diatom (6×3.5 µm)</b>	+	+	+	+			
MYOZOA							
DINOPHYCEAE							
<i>Amphidinium crassum</i> Lohmann 1908				+			
<i>Amphidinium longum</i> Lohmann 1908				+			
<i>Dinophysis acuminata</i> Claparède & Lachmann 1859					+		
<b><i>Dinophysis norvegica</i></b> Claparède & Lachmann 1859		+	+		+		+
<i>Dinophysis punctata</i> Jørgensen 1923							+
<i>Diplopsalis lenticula</i> Bergh 1881		+	+	+			
<i>Gonyaulax scrippsae</i> Kofoed 1911			+	+			
<i>Gonyaulax spinifera</i> (Claparède & Lachmann) Diesing 1866		+	+	+			
<b><i>Gymnodinium arcticum</i></b> Wulff 1919			+		+	+	
<b><i>Gymnodinium</i> sp.</b>	+	+	+	+	+	+	+
<i>Gymnodinium</i> spp. (8-10 µm)					+		
<b><i>Gymnodinium</i> spp. (11-15 µm)</b>	+	+	+	+	+	+	+
<i>Gymnodinium</i> spp. (16-20 µm)	+	+	+				
<i>Gymnodinium</i> spp. (21-30 µm)	+				+		
<i>Gyrodinium</i> cf. <i>fusiforme</i> Kofoed & Swezy 1921					+		
<i>Gyrodinium</i> spp. (21-32 µm)		+					
<i>Gyrodinium</i> spp. (34-42 µm)		+					
<b><i>Heterocapsa</i> cf. <i>lanceolata</i></b> Iwataki & Fukuyo 2002	+	+	+	+	+		
<i>Heterocapsa minima</i> A.J.Pomroy 1989	+			+			
<b><i>Heterocapsa rotundata</i></b> (Lohmann) Gert Hansen 1995	+	+	+	+	+		+
<i>Heterocapsa</i> sp.2		+		+			
<i>Heterocapsa</i> sp.3		+					
<b><i>Kryptoperidinium triquetrum</i></b> (Ehrenberg) Tillmann, Gottschling, Elbrächter, Kusber & Hoppenrath 2019		+	+	+	+		+
<b><i>Kryptoperidinium triquetrum</i></b> (Ehrenberg) Tillmann, Gottschling, Elbrächter, Kusber & Hoppenrath 2019 spore	+	+	+	+	+	+	
<i>Lepidodinium chlorophorum</i> (M.Elbrächter & E.Schnepf) Gert Hansen, Botes & Salas 2007	+						
<b><i>Micracanthodinium claytonii</i></b> (R.W.Holmes) J.D.Dodge 1982				+	+	+	+
<b><i>Peridiniella</i> cf. <i>danica</i></b> (Paulsen) Okolodkov & J.D.Dodge 1995		+	+	+	+		
<i>Protodinium</i> cf. <i>simplex</i> Lohmann 1908				+			
<b><i>Protopteridinium bipes</i></b> (Paulsen) Balech 1974		+	+	+	+		
<i>Protopteridinium</i> spp. (13-20 µm)			+		+		
<i>Protopteridinium</i> spp. (21-22 µm)				+			
<i>Scrippsiella acuminata</i> (Ehrenberg) Kretschmann, Elbrächter, Zinssmeister, S.Soehner, Kirsch, Kusber		+					+

& Gottschling 2015							
<i>Sourniaea diacantha</i> (Meunier) H.Gu., K.N.Mertens, Zhun Li & H.H.Shin 2020			+				
OXYRRHINOPHYCEAE							
<i>Oxyrrhis marina</i> Dujardin 1841/ <i>Lebouridinium glaucum</i> (Lebour) F.Gómez, H.Takayam, D.Moreira & P.López-García 2016	+	+			+	+	+
OCHROPHYTA							
CHRY SOPHYCEAE							
<i>Dinobryon balticum</i> (Schütt) Lemmermann 1901	+	+					
<i>Kephyrion boreale</i> Skuja 1956		+	+		+		
<i>Ollicola vangoorii</i> (W.Conrad) Vørs 1992	+	+	+	+			+
DICTY OCHOPHYCEAE							
<i>Pseudopedinella pyriformis</i> N.Carter 1937		+	+	+	+		+
CERCOZOA							
IMBRICATEA							
<i>Paulinella ovalis</i> (A.Wulff) P.W.Johnson, P.E.Hargraves & J.M.Sieburth 1988	+	+	+	+	+	+	+
THECOFILOSEA							
<i>Ebria tripartita</i> (Schumann) Lemmermann 1899			+	+	+	+	
Chlorophyta							
CHLOROPHYTA							
CHLORODENDROPHYCEAE							
<i>Tetraselmis tetrathele</i> (West) Butcher 1959	+						
PYRAMIMONADOPHYCEAE							
<i>Pterosperma</i> sp. 1	+	+		+	+		
<i>Pterosperma</i> sp. 2	+		+				
<i>Pyramimonas</i> cf. <i>discoicola</i> Hardardóttir, N.Lundholm, Moestrup & T.G.Nielsen 2014	+	+	+	+	+		+
<i>Pyramimonas</i> sp.1	+	+	+				
<i>Pyramimonas</i> sp.2	+	+	+				
TREBOUXIOPHYCEAE							
<i>Koliella spiculiformis</i> (Vischer) Hindák 1963						+	
EUGLENOZOA							
EUGLENOPHYCEAE							
Unidentified euglenophycean species (21-40 µm)	+		+				
CRYPTISTA							
KATABLEPHARIDOPHYCEAE							
Unidentified cryptomonad cells (6-10 µm)	+	+	+	+	+	+	+
Unidentified cryptomonad cells (10-20 µm)		+	+	+	+		+
CYANOBACTERIA							
CYANOPHYCEAE							
<i>Anabaena</i> sp.1		+		+			

<i>Oscillatoria</i> sp. 2				+			
NOT IDENTIFIED COCCI AND FLAGELLATES (NCF)							
NCF 3-5 µm	+	+	+	+	+	+	+
NCF 6-8 µm	+	+	+	+	+	+	+
NCF 10 µm	+	+	+		+		+
NCF 11 µm				+			
NCF 16 µm					+		
NCF 19 µm					+		
Unidentified species with green oval cells 5×3 µm			+	+			+
Unidentified species with green oval cells 5-6×3-4 µm		+	+		+	+	+
Unidentified species with green oval cells 8×5 µm			+				
Unidentified species with green oval cells 10×6 µm					+		
Unidentified species with green oval cells 10×8 µm					+		
Unidentified species with green oval cells 13×6 µm					+		
Unidentified species with green oval cells 13-14×10-13 µm					+		
Unidentified species with green oval cells 14×6 µm					+		
Unidentified species with green oval cells 14×8 µm					+		
Unidentified species with green oval cells 16×8 µm					+		



**Electronic Supplementary Materials. Table S8.** List of the phytoplankton taxa and their occurrence at different depths (m) in the Lagoon on the Cape, and in the surface water layer (0.5 m) of adjacent White Sea area on 12.09.2020. Typical species that contribute to the similarity of phytoplankton communities from different depths in the Lagoon are highlighted in bold.

Taxon (phylum, class, species/group of species)	12.09.2020						
	0.5	1.5	2.5	3.5	4.5	5.1	Sea
BACILLARIOPHYTA							
BACILLARIOPHYCEAE							
<b><i>Cylindrotheca closterium</i></b> (Ehrenberg) Reimann & J.C.Lewin 1964	+	+	+	+		+	
<i>Navicula</i> spp. (21-30 µm)	+					+	
<i>Navicula</i> spp. (31-40 µm)				+			
<i>Ulnaria ulna</i> (Nitzsch) Compère 2001	+						
Unidentified pennate diatoms (11-14×1-3 µm)		+			+	+	
Unidentified pennate diatom (32×6.5 µm)							+
COSCINODISCOPHYCEAE							
<i>Paralia sulcata</i> (Ehrenberg) Cleve 1873				+			
MEDIOPHYCEAE							
<b><i>Cyclotella choctawhatcheeana</i></b> Prasad 1990	+	+		+	+	+	+
<i>Cyclotella</i> sp.			+	+	+	+	+
MYOZOA							
DINOPHYCEAE							
<b><i>Dinophysis acuminata</i></b> Claparède & Lachmann 1859			+	+	+		
<b><i>Dinophysis norvegica</i></b> Claparède & Lachmann 1859		+	+	+			+
<b><i>Diplopsalis lenticula</i></b> Bergh 1881		+	+	+			
<b><i>Gonyaulax spinifera</i></b> (Claparède & Lachmann) Diesing 1866		+	+	+	+		
<i>Gymnodinium arcticum</i> Wulff 1919						+	
<b><i>Gymnodinium</i> sp.</b>			+	+	+	+	
<i>Gymnodinium</i> spp. (8-10 µm)	+			+	+		
<b><i>Gymnodinium</i> spp. (11-15 µm)</b>	+	+	+	+	+	+	
<b><i>Gymnodinium</i> spp. (16-20 µm)</b>		+	+	+		+	
<i>Gymnodinium</i> spp. (21-30 µm)				+			
<i>Gyrodinium spirale</i> (Bergh) Kofoid & Swezy 1921				+			
<i>Gyrodinium</i> sp.3	+						
<i>Heterocapsa</i> cf. <i>lanceolata</i> Iwataki & Fukuyo 2002			+	+			
<i>Heterocapsa minima</i> A.J.Pomroy 1989		+	+	+			
<b><i>Heterocapsa rotundata</i></b> (Lohmann) Gert Hansen 1995	+	+	+	+	+		+
<i>Heterocapsa</i> sp.2	+						
<b><i>Kryptoperidinium triquetrum</i></b> (Ehrenberg) Tillmann, Gottschling, Elbrächter, Kusber & Hoppenrath 2019	+	+	+	+	+	+	

<b><i>Kryptoperidinium triquetrum</i></b> (Ehrenberg) Tillmann, Gottschling, Elbrächter, Kusber & Hoppenrath 2019 spore	+	+	+	+			
<i>Lebouridinium glaucum</i> (Lebour) F.Gómez, H.Takayam, D.Moreira & P.López-García 2016						+	
<b><i>Micracanthodinium claytonii</i></b> (R.W.Holmes) J.D.Dodge 1982		+	+	+	+	+	
<i>Oblea rotunda</i> (Lebour) Balech ex Sournia 1964							
<b><i>Peridiniella cf. danica</i></b> (Paulsen) Okolodkov & J.D.Dodge 1995	+	+	+	+	+	+	
<i>Phalacroma rotundatum</i> (Claparède & Lachmann) Kofoid & J.R.Michener 1911							+
<b><i>Protooperidinium bipes</i></b> (Paulsen) Balech 1974	+	+	+	+	+		
<i>Protooperidinium okamurae</i> Balech 1974		+					
<i>Protooperidinium pyriforme</i> (Paulsen) Balech	+						
<i>Protooperidinium</i> spp. (13-20 µm)		+					
<i>Scrippsiella acuminata</i> (Ehrenberg) Kretschmann, Elbrächter, Zinssmeister, S.Soehner, Kirsch, Kusber & Gottschling 2015			+	+			
<i>Sourniaea diacantha</i> (Meunier) H.Gu., K.N.Mertens, Zhun Li & H.H.Shin 2020			+	+			
<i>Triplos fusus</i> (Ehrenberg) F.Gómez 2013		+	+				+
OXYRRHINOPHYCEAE							
<i>Oxyrrhis marina</i> Dujardin 1841						+	
OCHROPHYTA							
CHRYSOPHYCEAE							
<i>Dinobryon faculiferum</i> Willén 1992		+	+				
<b><i>Ollicola vangoorii</i></b> (W.Conrad) Vørs 1992	+	+	+	+	+		
DICTYOCOPHYCEAE							
<b><i>Pseudopedinella pyriformis</i></b> N.Carter 1937	+	+	+	+			+
CERCOZOA							
IMBRICATEA							
<i>Paulinella ovalis</i> (A.Wulff) P.W.Johnson, P.E.Hargraves & J.M.Sieburth 1988	+			+	+	+	+
Thecofilosea							
<b><i>Ebria tripartita</i></b> (Schumann) Lemmermann 1899	+	+	+	+			
CHLOROPHYTA							
CHLORODENDROPHYCEAE							
<i>Tetraselmis tetrathele</i> (West) Butcher 1959						+	
PYRAMIMONADOPHYCEAE							
<i>Pterosperma cristatum</i> Schiller 1926					+		
<i>Pterosperma</i> sp. 1			+	+		+	
<i>Pterosperma</i> sp. 2		+				+	

<i>Pyramimonas cf. diskoicola</i> Hardardóttir, N.Lundholm, Moestrup & T.G.Nielsen 2014	+	+	+	+	+		+
TREBOUXIOPHYCEAE							
<i>Koliella spiculiformis</i> (Vischer) Hindák 1963						+	
EUGLENOZOA							
EUGLENOPHYCEAE							
<i>Eutreptiella gymnastia</i> Throndsen 1969	+						
Unidentified euglenophycean species (21-40 µm)							+
HAPTOPHYTA							
COCCOLITHOPHYCEAE							
<i>Emiliania huxleyi</i> (Lohmann) W.W.Hay & H.P.Mohler 1944		+					
CRYPTISTA							
KATABLEPHARIDOPHYCEAE							
<b>Unidentified cryptomonad cells (6-10 µm)</b>	+	+	+	+	+		+
<b>Unidentified cryptomonad cells (10-20 µm)</b>	+	+	+	+	+		+
CYANOBACTERIA							
CYANOPHYCEAE							
<i>Anabaena</i> sp.1						+	
<i>Merismopedia tenuissima</i> Lemmermann 1898						+	
<i>Oscillatoria</i> sp. 5	+						
<i>Spirulina</i> sp.				+			
<b>NOT IDENTIFIED COCCI AND FLAGELLATES (NCF)</b>							
NCF 3-5 µm	+	+	+	+	+	+	+
NCF 6-8 µm	+	+	+	+	+	+	+
NCF 9-14 µm							+
NCF 10 µm	+	+		+			
NCF 11 µm			+	+			
NCF 13 µm			+				
NCF 16 µm		+	+				
Unidentified species with green oval cells 5-6×3-4 µm	+	+	+	+		+	+
Unidentified species with green oval cells 10×6 µm	+						
Unidentified species with green oval cells 14×8 µm						+	

**Electronic Supplementary Materials. Table S9.** List of the phytoplankton taxa and their occurrence at different depths (m) in the Lagoon on the Cape Zeleny, and in the surface water layer (0.5 m) of adjacent White Sea area on 01.10.2020. Typical species that contribute to the similarity of phytoplankton communities from different depths in the Lagoon are highlighted in bold.

Taxon (phylum, class, species/group of species)	01.10.2020						
	0.5	1.5	2.5	3.5	4.5	4.9	Sea
BACILLARIOPHYTA							
BACILLARIOPHYCEAE							
<i>Amphora</i> sp.							+
<i>Cylindrotheca closterium</i> (Ehrenberg) Reimann & J.C.Lewin 1964		+		+		+	
<i>Licmophora</i> sp.4					+		
<i>Navicula directa</i> (W.Smith) Brébisson 1854					+		
<i>Nitzschia</i> sp.3							+
<b><i>Thalassionema nitzschioides</i></b> (Grunow) Mereschkowsky 1902		+	+	+			
Unidentified pennate diatoms (11-14×1-3 µm)		+			+		
Unidentified pennate diatoms (≤20 µm)						+	+
Unidentified pennate diatom (21-22×2.5-3 µm)	+			+			
Unidentified pennate diatom (22-24×2 µm)					+		
Unidentified pennate diatom (24×5 µm)		+					
Unidentified pennate diatom (26×3 µm)				+			
Unidentified pennate diatom (29-32×2.5-3×6 µm)							+
Unidentified pennate diatom (35×3 µm)					+		
Unidentified pennate diatom (99×8×7 µm)							+
Unidentified pennate diatom (136×11×11 µm)							+
COSCINODISCOPHYCEAE							
<i>Paralia sulcata</i> (Ehrenberg) Cleve 1873							+
MEDIOPHYCEAE							
<i>Chaetoceros tenuissimus</i> Meunier 1913		+	+				
<b><i>Cyclotella choctawhatcheeana</i></b> Prasad 1990	+	+	+	+	+	+	+
cf. <i>Stephanodiscus hantzschii</i> Grunow 1880					+		+
<i>Thalassiosira</i> spp. (41-62 µm)							+
MYOZOA							
DINOPHYCEAE							
<i>Dinophysis norvegica</i> Claparède & Lachmann 1859		+					
<b><i>Gymnodinium</i> spp. (11-15 µm)</b>				+	+	+	+
<i>Gymnodinium</i> spp. (16-20 µm)					+		
<i>Gymnodinium</i> spp. (21-30 µm)							+
<i>Gyrodinium</i> spp. (21-32 µm)	+						
<b><i>Heterocapsa rotundata</i></b> (Lohmann) Gert Hansen 1995	+	+	+	+			

<b><i>Kryptoperidinium triquetrum</i></b> (Ehrenberg) Tillmann, Gottschling, Elbrächter, Kusber & Hoppenrath 2019	+	+	+	+	+		+
<i>Peridiniella</i> cf. <i>danica</i> (Paulsen) Okolodkov & J.D.Dodge 1995					+		
OXYRRHINOPHYCEAE							
<i>Oxyrrhis marina</i> Dujardin 1841						+	+
OCHROPHYTA							
CHRY SOPHYCEAE							
<i>Ollicola vangoorii</i> (W.Conrad) Vørs 1992	+	+		+			
CERCOZOA							
IMBRICATEA							
<b><i>Paulinella ovalis</i></b> (A.Wulff) P.W.Johnson, P.E.Hargraves & J.M.Sieburth 1988	+	+	+	+	+		+
CHLOROPHYTA							
PYRAMIMONADOPHYCEAE							
<i>Pterosperma</i> sp. 1	+						
<i>Pterosperma</i> sp. 2					+		
<b><i>Pyramimonas</i> cf. <i>discoicola</i></b> Hardardóttir, N.Lundholm, Moestrup & T.G.Nielsen 2014	+	+	+				
<i>Pyramimonas</i> sp.2							+
TREBOUXIOPHYCEAE							
<i>Koliella spiculiformis</i> (Vischer) Hindák 1963					+	+	
EUGLENOZOA							
EUGLENOPHYCEAE							
<i>Trachelomonas</i> sp.						+	
HAPTOPHYTA							
COCCOLITHOPHYCEAE							
<i>Emiliana huxleyi</i> (Lohmann) W.W.Hay & H.P.Mohler 1944			+				
CRYPTISTA							
KATABLEPHARIDOPHYCEAE							
<i>Leucocryptos marina</i> (Braarud) Butcher 1967			+	+			
<b>Unidentified cryptomonad cells (6-10 µm)</b>	+	+	+	+	+		+
<b>Unidentified cryptomonad cells (10-20 µm)</b>	+	+	+	+	+		+
CYANOBACTERIA							
CYANOPHYCEAE							
<i>Synechocystis salina</i> Wislouch 1924						+	
NOT IDENTIFIED COCCI AND FLAGELLATES (NCF)							
NCF 3-5 µm	+	+	+	+	+	+	+
NCF 6-8 µm	+	+	+	+	+	+	+
NCF 10 µm			+	+			
NCF 11 µm							+

Unidentified species with green cells 5-7×1.6 μm			+	+			
Unidentified species with green cells 5×3 μm				+			
Unidentified species with green oval cells 5-6×3-4 μm	+	+	+				
Unidentified species with green oval cells 8×6 μm	+						
Unidentified species with green oval cells 11×6 μm						+	

**Electronic Supplementary Materials. Table S10.** List of the phytoplankton taxa with their occurrences in the Lagoon on the Cape Zeleny at different depths (m), and in the surface water layer (0.5 m) of adjacent White Sea area on 01.10.2020. Typical species that contribute to the similarity of phytoplankton communities from different depths in the Lagoon are highlighted in bold.

Taxon (phylum, class, species/group of species)	01.11.2020					
	0.5	1.5	2.5	3.5	4.1	Sea
<b>BACILLARIOPHYTA</b>						
<b>BACILLARIOPHYCEAE</b>						
<i>Cocconeis costata</i> W.Gregory 1855	+	+				+
<i>Cocconeis stauroneiformis</i> H.Okuno 1957			+			
<i>Cylindrotheca closterium</i> (Ehrenberg) Reimann & J.C.Lewin 1964	+		+			
<i>Gyrosigma attenuatum</i> (Kützing) Rabenhorst 1853						+
<i>Gyrosigma fasciola</i> (Ehrenberg) J.W.Griffith & Henfrey 1856						+
<i>Gyrosigma macrum</i> (W.Smith) J.W.Griffith & Henfrey 1856		+				
<i>Navicula directa</i> (W.Smith) Brébisson 1854						+
<i>Navicula</i> sp.2	+					
<i>Navicula</i> spp. (21-30 µm)	+					
<i>Navicula</i> spp. (41-50 µm)				+		
<i>Rhabdonema minutum</i> Kützing 1844						+
<i>Rhoicosphenia abbreviata</i> (C.Agardh) Lange-Bertalot 1980				+		
<b><i>Tabularia tabulata</i></b> (C.Agardh) Snoeijis 1992	+	+	+	+		
<i>Thalassionema nitzschioides</i> (Grunow) Mereschowsky 1902	+			+		+
Unidentified pennate diatoms (11-14×1-3 µm)				+		
Unidentified pennate diatoms (≤20 µm)			+			
Unidentified pennate diatom (19×10 µm)						+
Unidentified pennate diatom (21×3.5 µm)						+
Unidentified pennate diatom (24×8×5 µm)	+					
Unidentified pennate diatom (37×4 µm)	+					
Unidentified pennate diatom (40×3 µm)	+					
Unidentified pennate diatom (40×5 µm)	+					
Unidentified pennate diatom (48×5 µm)						+
Unidentified pennate diatom (69×4 µm)	+					
<b>COSCINODISCOPHYCEAE</b>						
<b><i>Melosira arctica</i> Dickie 1852</b>	+		+	+		
<i>Melosira moniliformis</i> (Link) C.Agardh 1824		+				
<i>Melosira</i> sp.	+					
<b><i>Paralia sulcata</i></b> (Ehrenberg) Cleve 1873		+	+	+		+
<i>Podosira stelligera</i> (Bailey) A.Mann 1907						+

MEDIOPHYCEAE						
<i>Cyclotella choctawhatcheeana</i> Prasad 1990	+		+	+	+	+
<i>Odontella aurita</i> (Lyngbye) C.Agardh 1832			+	+		+
cf. <i>Stephanodiscus hantzschii</i> Grunow 1880			+			
<i>Thalassiosira</i> spp. (10-20 µm)						+
MYOZOA						
DINOPHYCEAE						
<i>Amphidinium crassum</i> Lohmann 1908					+	
<i>Gymnodinium</i> spp. (8-10 µm)				+	+	
<b><i>Gymnodinium</i> spp. (11-15 µm)</b>		+	+	+	+	+
<b><i>Gymnodinium</i> spp. (16-20 µm)</b>				+	+	+
<b><i>Gymnodinium</i> spp. (21-30 µm)</b>		+		+		
<i>Heterocapsa</i> cf. <i>lanceolata</i> Iwataki & Fukuyo 2002		+			+	
<i>Kryptoperidinium triquetrum</i> (Ehrenberg) Tillmann, Gottschling, Elbrächter, Kusber & Hoppenrath 2019	+	+				+
<i>Micracanthodinium claytonii</i> (R.W.Holmes) J.D.Dodge 1982					+	+
<b><i>Peridiniella</i> cf. <i>danica</i></b> (Paulsen) Okolodkov & J.D.Dodge 1995		+	+	+	+	
<i>Protoperidinium brevipes</i> (Paulsen) Balech 1974			+			
CERCOZOA						
IMBRICATEA						
<i>Paulinella ovalis</i> (A.Wulff) P.W.Johnson, P.E.Hargraves & J.M.Sieburth 1988	+	+				+
THECOFILOSEA						
<b><i>Ebria tripartita</i></b> (Schumann) Lemmermann 1899	+	+				
CHLOROPHYTA						
CHLOROPHYCEAE						
<b><i>Monoraphidium contortum</i></b> (Thuret) Komárková-Legnerová 1969	+	+	+	+	+	+
PYRAMIMONADOPHYCEAE						
<i>Pterosperma cristatum</i> Schiller 1926				+		
<i>Pterosperma</i> sp. 1	+				+	+
TREBOUXIOPHYCEAE						
<i>Koliella spiculiformis</i> (Vischer) Hindák 1963					+	
CHAROPHYTA						
ZYGNEMATOPHYCEAE						
<i>Mougeotia</i> sp.		+				
EUGLENOZOA						
EUGLENOPHYCEAE						
Unidentified euglenophycean species (13-20 µm)						+
HAPTOPHYTA						



COCCOLITHOPHYCEAE						
<i>Emiliana huxleyi</i> (Lohmann) W.W.Hay & H.P.Mohler 1944						+
CRYPTISTA						
KATABLEPHARIDOPHYCEAE						
<i>Leucocryptos marina</i> (Braarud) Butcher 1967						+
<b>Unidentified cryptomonad cells (6-10 µm)</b>			+	+	+	+
<b>Unidentified cryptomonad cells (10-20 µm)</b>		+		+	+	+
CYANOBACTERIA						
CYANOPHYCEAE						
<i>Anabaena</i> sp.4				+		
<i>Jaaginema subtilissimum</i> (Kützing ex Forti) Anagnostidis & Komárek 1988	+			+		
<i>Oscillatoria princeps</i> Vaucher ex Gomont 1892						+
<i>Spirulina</i> sp.					+	
NOT IDENTIFIED COCCI AND FLAGELLATES (NCF)						
NCF 3-5 µm	+	+	+	+	+	+
NCF 6-8 µm	+	+	+	+	+	+
NCF 10 µm	+	+			+	+
NCF 11 µm			+			
Unidentified species with green cells 5-7×1.6 µm	+					
Unidentified species with green oval cells 14×8 µm						+