

Supplementary Materials for:

# Phytoplankton Diversity of a Natural Karst Lake Combining Morphological and Molecular Approaches

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**Table S1.** Physical and chemical parameters in the euphotic and aphotic zone samples on the sampling stations (V1 to V10, excluding station V8). O<sub>2</sub> – oxygen concentration, O<sub>2</sub> (%) – oxygen saturation, EC – electrical conductivity, T – temperature.

a) euphotic zone samples

Station	T(°C)	O <sub>2</sub> (mg L <sup>-1</sup> )	O <sub>2</sub> (%)	pH	EC (μS cm <sup>-1</sup> )
V1	22.7	10.99	127.8	7.95	559
V2	22.4	11.55	132.6	7.88	562
V3	23.1	10.42	122.2	8.01	549
V4	22.6	10.14	118.2	7.90	553
V5	22.9	11.12	80.1	8.20	549
V6	23.4	10.98	129.9	7.93	553
V7	22.9	12.28	147.5	7.95	534
V9	26.0	10.61	131.6	7.95	502
V10	26.4	10.13	125.7	7.94	495

b) aphotic zone samples

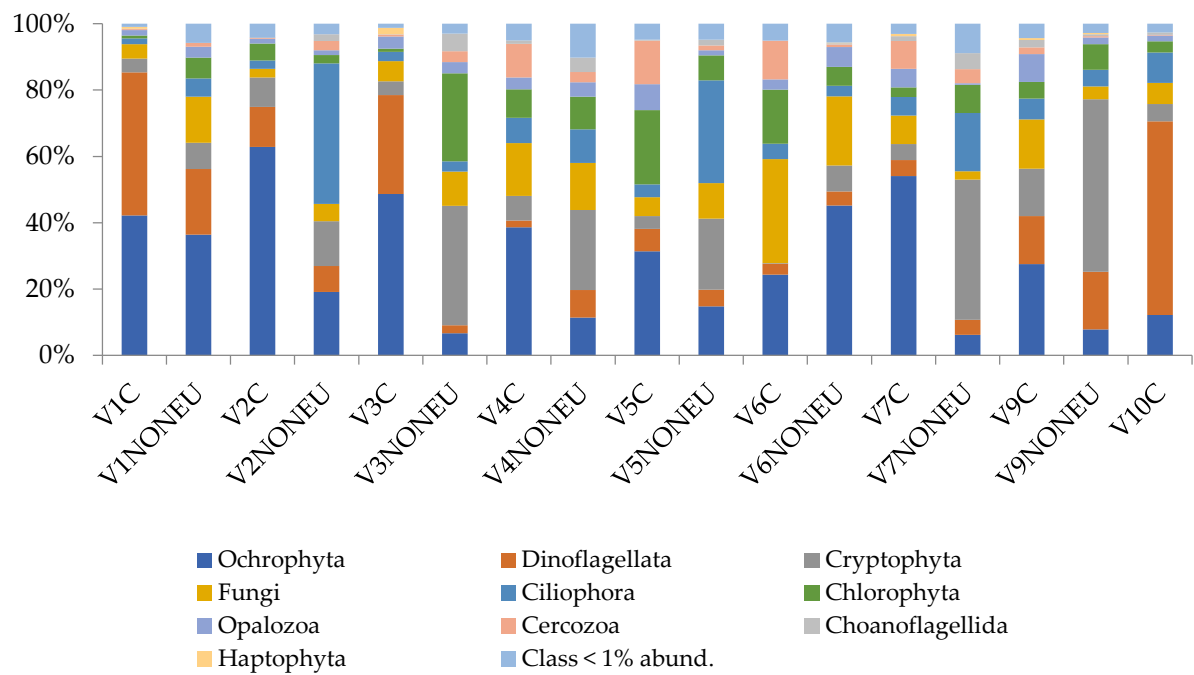
Station	T(°C)	O <sub>2</sub> (mg L <sup>-1</sup> )	O <sub>2</sub> (%)	pH	EC (μS cm <sup>-1</sup> )
V1	20.8	9.60	108.2	7.71	587
V2	18.4	5.89	62.7	7.62	579
V3	19.4	4.62	50.4	7.65	559
V4	18.3	5.38	57.1	7.05	553
V5	17.2	4.32	46.4	7.80	559
V6	19.2	6.18	67.5	7.54	568
V7	16.5	5.02	52.3	7.39	542
V9	20.3	2.91	27.4	7.43	517

**Table S2.** Chemical parameters measured in the laboratory for composite samples, sampling stations (V1 to V10, excluding station V8). NO<sub>3</sub><sup>-</sup> – nitrate, NO<sub>2</sub><sup>-</sup> – nitrite, NH<sub>4</sub><sup>+</sup> – ammonium, PO<sub>4</sub><sup>3-</sup>-P – ortophosphate, SiO<sub>2</sub> – total silica, TN – total nitrogen, TIC – total inorganic carbon, DIC – dissolved inorganic carbon, TOC – total organic carbon, DOC – dissolved organic carbon, HCO<sub>3</sub><sup>-</sup> – bicarbonates.

Station/ mg L <sup>-1</sup>	NO <sub>3</sub> <sup>-</sup>	NO <sub>2</sub> <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	PO <sub>4</sub> <sup>3-</sup> -P	SiO <sub>2</sub>	TN	TIC	DIC	TOC	DOC	HCO <sub>3</sub> <sup>-</sup>
V1	< 0.1	< 0.001	< 0.01	< 0.01	4.0	< 1	11.84	11.38	2.25	2.37	163
V2	< 0.1	< 0.001	< 0.01	< 0.01	2.8	< 1	11.82	11.68	1.65	0.80	171
V3	< 0.1	< 0.001	< 0.01	< 0.01	2.6	< 1	11.48	10.32	1.55	1.11	173
V4	0.7	< 0.001	< 0.01	0.02	3.3	1	13.65	12.12	1.57	1.09	151
V5	0.3	< 0.001	< 0.01	< 0.01	2.5	1	12.52	11.38	1.67	1.17	164
V6	< 0.1	< 0.001	< 0.01	0.02	4.5	< 1	12.21	11.85	1.94	1.47	189
V7	< 0.1	< 0.001	< 0.01	< 0.01	3.5	< 1	13.98	13.83	2.39	1.50	212
V9	< 0.1	< 0.001	< 0.01	0.06	1.5	< 1	12.29	11.25	1.76	1.33	163
V10	< 0.1	< 0.001	< 0.01	< 0.01	3.0	< 1	12.15	11.08	1.74	1.18	161

**Table S3.** Relative variance explained and factor coordinates of the variables for the first two principal components (PC1 and PC2) of the Principal Component Analysis (PCA). O<sub>2</sub> – oxygen concentration, O<sub>2</sub> (%) – oxygen saturation, T – temperature, SD – Secchi depth, EC – electrical conductivity, NO<sub>3</sub><sup>-</sup> – nitrate, PO<sub>4</sub><sup>3-</sup>-P – ortophosphate, SiO<sub>2</sub> – total silica, TIC – total inorganic carbon, DIC – dissolved inorganic carbon, TOC – total organic carbon, DOC – dissolved organic carbon, HCO<sub>3</sub><sup>-</sup> – bicarbonates.

Variable	PC1	PC2
Variation (%)	31.5	27.5
Cumulative variation (%)	31.5	59
Eigenvalues	4.41	3.84
O <sub>2</sub>	0.015	-0.464
O <sub>2</sub> (%)	0.176	-0.44
T	0.433	-0.099
SD	0.193	0.202
pH	0.292	-0.234
EC	-0.338	0.091
NO <sub>3</sub> <sup>-</sup>	-0.108	0.369
PO <sub>4</sub> <sup>3-</sup> -P	0.203	0.142
SiO <sub>2</sub>	-0.318	-0.136
TIC	-0.3	0.147
DIC	-0.361	-0.069
TOC	-0.241	-0.368
DOC	-0.08	-0.325
HCO <sub>3</sub> <sup>-</sup>	-0.325	-0.185



**Figure S1.** Shares of all Eukaryota class groups on the sampling stations (V1 to V10, excluding station V8) in Lake Visovac during August 2018 according to analysis of V9-region of the SSU rRNA gene.

a) composite samples

[illegible]

Taxa/Station	V1	V2	V3	V4	V5	V6	V7	V9	V10
<i>Dictyosphaerium subsolitarium</i> Van Goor	0	0	0	0	0.002	0	0	0	0
<i>Golenkinia radiata</i> Chodat	0	0	0	0.01	0	0.02	0	0	0
<i>Monoraphidium arcuatum</i> (Korshikov) Hindák	0	0	0	0	0	0	0	< 0.001	0
<i>Monoraphidium dybowskii</i> (Woloszynska) Hindák & Komárková Legnerová	0.002	0.001	0.01	< 0.001	0.004	0.001	0.001	0.001	0.002
<i>Monoraphidium minutum</i> (Nägeli) Komárková-legnerová	< 0.001	< 0.001	0.001	< 0.001	0.001	< 0.001	< 0.001	< 0.001	0
<i>Oocystis parva</i> West & G.S.West	0.001	0.001	0	0.001	0.003	0.001	0	< 0.001	< 0.001
<i>Planktosphaeria gelatinosa</i> G.M.Smith	0	0	0	0.001	0.002	0	0	0.001	0.001
<i>Radiococcus planktonicus</i> J.W.G.Lund	0	0	0.005	0	0	0	0	0.001	0.004
<i>Scenedesmus obtusus</i> Meyen	0	0	0	0	0	0	0	0	0.001
<i>Scenedesmus planctonicus</i> (Korshikov) Fott	0	0	0	0.003	0	0	0	0	0.001
<i>Scenedesmus quadricauda</i> (Turpin) Brébisson	0	0	0	0	0	0	0	0	0.004
<i>Sphaerocystis Schroeteri</i> Chodat	0	0	0	0	0	0	0	0	0.001
<i>Tetraëdron minimum</i> (A.Braun) Hansgirg	0	0	0	0	0	0	0	0.001	0.002
<i>Tetraselmis cordiformis</i> (N.Carter) Stein	0.35	0.23	0.08	0.04	0.23	0.02	0.01	0.02	0.01
<i>Tetrastrum triangulare</i> (Chodat) Komárek	0	0	0	0	0	0	0	< 0.001	< 0.001
<i>Ceratium hirundinella</i> (O.F.Müller) Dujardin	0.91	0.41	0.05	0.36	0.01	0.18	0.01	0.36	0.001
<i>Parvodinium inconspicuum</i> (Lemmermann) Carty	0.06	0.01	0.20	0.01	0.05	0.01	0.03	0.04	0.04
<i>Cosmarium</i> sp.	0	0	0.01	0	0	0	0	0	0
<i>Elakatothrix gelatinosa</i> Wille	< 0.001	< 0.001	0.002	< 0.001	0.001	< 0.001	0.002	0.001	< 0.001
<i>Gonatozygon</i> sp.	0	0	0	0	0	0	0	0	0
<i>Staurostrum tetracerum</i> Ralfs ex Ralfs	0	0	0	0	0	0	0	0	0
<i>Anabaena</i> sp.	0	0	0	0	0	0	0	0	< 0.001
<i>Anathece smithii</i> (Komárková-Legnerová & Cronberg) Komárek, Kastovsky & Jezberová	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
<i>Merismopedia tenuissima</i> Lemmermann	0	0	0	0	0	0	0	0	0
<i>Pseudanabaena</i> sp.	0	< 0.001	0	0	0	0	0	0	< 0.001

b) euphotic zone samples

Taxa/Station	V1	V2	V3	V4	V5	V6	V7	V9	V10
<i>Aulacoseira granulata</i> (Ehrenberg) Simonsen	0	0	0	0	0	0	0	0	< 0.001
<i>Cocconeis placentula</i> Ehrenberg	0	0	0	0	0	0	0	0	0
<i>Diatoma vulgaris</i> Bory	0	0	0	0	0	0	0	0	0
<i>Gomphonema</i> sp.	0	0	0	0.001	0	0	0	0	0
<i>Navicula lanceolata</i> Ehrenberg	0	0	0	0	0	0	0	0	0.004
<i>Pantocsekiella ocellata</i> (Pantocsek) K.T.Kiss & E.Ács	0.05	0.09	0.46	0.37	0.63	0.61	0.26	0.06	0.04
<i>Skeletonema potamos</i> (C.I.Weber) Hasle	0.005	0.01	0.01	0.004	0.01	0.02	0.05	0.01	0.01
<i>Ulnaria acus</i> (Kützing) Aboal	0	0	0	0	0.002	0	0	0	0
<i>Bitrichia chodatii</i> (Reverdin) Chodat	0.001	0.003	0.02	0.01	0.03	0.03	0.003	0.002	0
<i>Chromulina pigra</i> Skuja	0.001	0	0.002	0.003	0.002	0.003	< 0.001	< 0.001	0.001
<i>Dinobryon bavaricum</i> Imhof	0	< 0.001	0.003	0.001	0.003	0.04	0.001	0.001	0.001
<i>Dinobryon crenulatum</i> West & G.S.West	0	< 0.001	0.01	0.001	0.003	0.003	0.001	< 0.001	0
<i>Dinobryon divergens</i> O.E.Imhof	0.01	0.02	0.04	0.03	0.10	0.10	0.03	0.05	0.04
<i>Ochromonas danica</i> E.G.Pringsheim	0	0	0.01	< 0.001	0.02	0	0	0	0
<i>Synura</i> sp.	0	0	0	0	0	0	0	0	0
<i>Cryptomonas</i> sp.	0.06	0.13	0.25	0.21	0.44	0.45	0.12	0.10	0.11
<i>Plagioselmis nannoplanctica</i> (Skuja) G.Novarino, I.A.N.Lucas & Morrall	0.01	0.03	0.06	0.07	0.16	0.23	0.05	0.04	0.05
<i>Phacus</i> sp.	0	0	0	0	0	0	0	0.001	0
<i>Actinastrum hantzschii</i> Lagerheim	0	0	0	0	0	0	0	0	0
<i>Ankyra lanceolata</i> (Korshikov) Fott	< 0.001	< 0.001	< 0.001	0.001	0.005	0.003	0	0	< 0.001
<i>Ankistrodesmus spiralis</i> (W.B.Turner) Lemmermann	0	0	0	< 0.001	0	0	0	0	< 0.001
<i>Chlamydomonas</i> sp.	0.09	0.06	0.02	0.06	0.09	0.04	0.05	0.01	0.03
<i>Coelastrum astroideum</i> De Notaris	0	0	0	0	0	0	0	0	0.002
<i>Coelastrum microporum</i> Nägeli	0	0.001	0	0	0	0	0.001	0	0
<i>Crucigenia fenestrata</i> (Schmidle) Schmidle	0	0	0	0.001	0	0	0	0	0
<i>Dictyosphaerium</i> sp.	0	0	0	0	0	0	< 0.001	< 0.001	0
<i>Dictyosphaerium subsolitarium</i> Van Goor	0	0	0	0	0.001	0	0	< 0.001	0
<i>Golenkinia radiata</i> Chodat	0	0	0	0	0	0	0	0	0
<i>Monoraphidium arcuatum</i> (Korshikov) Hindák	0	0	0	< 0.001	0	0	0	< 0.001	0

Taxa/Station	V1	V2	V3	V4	V5	V6	V7	V9	V10
<i>Monoraphidium dybowskii</i> (Woloszynska) Hindák & Komárková Legnerová	< 0.001	0.002	0.01	0.002	0.01	0.01	0.001	0.001	0.002
<i>Monoraphidium minutum</i> (Nägeli) Komárková-legnerová	< 0.001	< 0.001	0.0003	< 0.001	0.002	0.002	< 0.001	< 0.001	< 0.001
<i>Oocystis parva</i> West & G.S.West	0.001	< 0.001	0	0.001	0.001	0.001	< 0.001	0.001	0.001
<i>Planktosphaeria gelatinosa</i> G.M.Smith	0	0	0	< 0.001	0.002	0.002	0.003	0.01	< 0.001
<i>Radiococcus planktonicus</i> J.W.G.Lund	< 0.001	0	0	0	0	0	< 0.001	< 0.001	0.002
<i>Scenedesmus obtusus</i> Meyen	0	0	0	0	0	0	0	< 0.001	< 0.001
<i>Scenedesmus planctonicus</i> (Korshikov) Fott	0	0	0	0	0	0	0	< 0.001	< 0.001
<i>Scenedesmus quadricauda</i> (Turpin) Brébisson	0	0	0	0	0	0	0	0.001	0.01
<i>Sphaerocystis Schroeteri</i> Chodat	0	0	0	0	0	0	0	0.01	0.003
<i>Tetraëdron minimum</i> (A.Braun) Hansgirg	0	0	0	0	0	0	0	0.002	0.002
<i>Tetraselmis cordiformis</i> (N.Carter) Stein	0.04	0.27	0.31	0.28	0.36	0.28	0.02	0.02	0
<i>Tetrastrum triangulare</i> (Chodat) Komárek	0	< 0.001	< 0.001	0	< 0.001	< 0.001	< 0.001	< 0.001	0.001
<i>Ceratium hirundinella</i> (O.F.Müller) Dujardin	0.18	0.59	0.52	0.15	0.27	1.29	0.52	0.17	0.08
<i>Parvodinium inconspicuum</i> (Lemmermann) Carty	0.02	0.02	0.06	0.03	0.09	0.09	0.07	0.13	0.11
<i>Cosmarium</i> sp.	0	0	0	0	0	0	0	0	0.004
<i>Elakatothrix gelatinosa</i> Wille	0.001	0.001	0.001	0.002	0.001	0.005	0.001	0.001	0.002
<i>Gonatozygon</i> sp.	0	0	0	0	0	0	0	0	0.001
<i>Staurastrum tetracerum</i> Ralfs ex Ralfs	0	0	0	0	0	0	0	0	0.02
<i>Anabaena</i> sp.	0	0	0	0	0	0	0	0	0.001
<i>Anathece smithii</i> (Komárková-Legnerová & Cronberg) Komárek, Kastovsky & Jezberová	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
<i>Merismopedia tenuissima</i> Lemmermann	0	0	0	0	0	0	0	0	0
<i>Pseudanabaena</i> sp.	< 0.001	0	0	0	0	0	0	0	0.001

c) aphotic zone samples

Taxa/Station	V1	V2	V3	V4	V5	V6	V7	V9
<i>Aulacoseira granulata</i> (Ehrenberg) Simonsen	0	0	0	0	0	0	0	0
<i>Cocconeis placentula</i> Ehrenberg	0	0	0	0.001	0	0	0	0



[illegible]

Taxa/Station	V1	V2	V3	V4	V5	V6	V7	V9
<i>Oocystis parva</i> West & G.S.West	< 0.001	< 0.001	< 0.001	0	0.001	< 0.001	< 0.001	< 0.001
<i>Planktosphaeria gelatinosa</i> G.M.Smith	0	0	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
<i>Radiococcus planktonicus</i> J.W.G.Lund	0	0	0	0	0	0	< 0.001	< 0.001
<i>Scenedesmus obtusus</i> Meyen	0	0	0	0	0	0	0	< 0.001
<i>Scenedesmus planctonicus</i> (Korshikov) Fott	0	0	0	0	0	0	0	0
<i>Scenedesmus quadricauda</i> (Turpin) Brébisson	0	0	0	0	0	0	0	0
<i>Sphaerocystis Schroeteri</i> Chodat	0	0	0	0	0	0	0	0
<i>Tetraëdron minimum</i> (A.Braun) Hansgirg	0	0	0	0	0	0	0	< 0.001
<i>Tetraselmis cordiformis</i> (N.Carter) Stein	0.04	0.06	0.05	0.03	0.08	0.16	0.01	0.02
<i>Tetrastrum triangulare</i> (Chodat) Komárek	0	< 0.001	< 0.001	0	< 0.001	< 0.001	< 0.001	< 0.001
<i>Ceratium hirundinella</i> (O.F.Müller) Dujardin	0.18	0.05	0.06	0.18	0.21	0.27	0.11	0.001
<i>Parvodinium inconspicuum</i> (Lemmermann) Carty	0.02	0.004	0.005	0.01	0.01	0.04	0.004	0.002
<i>Cosmarium</i> sp.	0	0	0.004	0	0	0	0	0
<i>Elakatothrix gelatinosa</i> Wille	< 0.001	0	< 0.001	0	< 0.001	0.002	< 0.001	0
<i>Gonatozygon</i> sp.	0	0	0	0	0	0	0	0
<i>Staurostrum tetracerum</i> Ralfs ex Ralfs	0	0	0	0	0	0	0	0
<i>Anabaena</i> sp.	0	0	0	0	0	0	0	0
<i>Anathece smithii</i> (Komárková-Legnerová & Cronberg) Komárek, Kastovsky & Jezberová	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
<i>Merismopedia tenuissima</i> Lemmermann	0	0	0	0	0	0	< 0.001	0
<i>Pseudanabaena</i> sp.	0	0	0	0	0	0	< 0.001	< 0.001

**Table S5.** Assigned taxonomic amplicon sequencing variants for phytoplankton community on the sampling stations (V1 to V10, excluding station V8) in Lake Visovac during August 2018. C - composite samples, NONEU - aphotic zone samples.

Amplicon sequencing variants (ASVs)	V1 C	V1 NO NE U	V2 C	V2 NO NE U	V3 C	V3 NO NE U	V4 C	V4 NO NE U	V5 C	V5 NO NE U	V6 C	V6 NO NE U	V7 C	V7 NO NE U	V9 C	V9 NO NE U	V10 C
Eukaryota;Alveolata;Dinoflagellata;Dinophyceae;Gymnodiniales;Gymnodiniaceae;__;__;__	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
Eukaryota;Alveolata;Dinoflagellata;Dinophyceae;Gymnodiniales;Gymnodiniaceae;X;Levanderina;Levanderina_fissa;	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Eukaryota;Alveolata;Dinoflagellata;Dinophyceae;Peridinales;Kryptoperidiniaceae;Durinskia;Durinskia_dybowskii;	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Eukaryota;Alveolata;Dinoflagellata;Dinophyceae;Peridinales;Peridiniaceae;Peridinium;Peridinium_bipes;	0	0	0	0	0	10	0	0	0	0	0	0	0	0	0	0	15.95
Eukaryota;Alveolata;Dinoflagellata;Dinophyceae;Peridinales;Peridiniaceae;Peridinium;Peridinium_willei;	0	20	18	0	7	0	0	0	0	0	0	0	0	0	0	0	4
Eukaryota;Alveolata;Dinoflagellata;Dinophyceae;Peridinales;Peridiniaceae;Peridinium;__;__	0	0	0	0	0	0	0	0	0	0	0	0	21	0	2.2	1.1	161
Eukaryota;Alveolata;Dinoflagellata;Dinophyceae;Peridinales;Peridiniopsidaceae;Parvodinium;Parvodinium_inconspicuum;	53	24	12	0	167	0	0	0	0	0	0	182	0	0	33	13	23
Eukaryota;Alveolata;Dinoflagellata;Dinophyceae;Peridinales;Thoracosphaeraceae;Theleodinium;Theleodinium_calcisporum;	0	0	0	0	0	0	0	0	0	0	0	0	66	0	0	0	0
Eukaryota;Alveolata;Dinoflagellata;Dinophyceae;Peridinales;Thoracosphaeraceae;__;__;__	0	0	0	0	0	0	0	0	0	15	0	0	0	0	0	0	23
Eukaryota;Alveolata;Dinoflagellata;Dinophyceae;Peridinales;__;__;__;__	0	0	0	0	0	0	0	137	0	0	0	0	0	0	0	99	63
Eukaryota;Alveolata;Dinoflagellata;Dinophyceae;Suessiales;Suessiaceae;Biecheleria;Biecheleria_brevisulcata;	1.2 04	552	278	64	1.2 43	28	455	286	246	26	51	138	334	0	366	146	524
Eukaryota;Alveolata;Dinoflagellata;Dinophyceae;__;__;__;__	5.5 63	1.5 07	1.0 26	86	11. 660	65	280	163	200	239	13	205	915	72	517	167	585
Eukaryota;Alveolata;Dinoflagellata;Oxyrrhea;Oxyrrhinales;Oxyrrhinaceae;Oxyrrhis;Oxyrrhis_sp.;	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Eukaryota;Alveolata;Dinoflagellata;__;__;__;__;__	21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	23
Eukaryota;Alveolata;Perkinsea;Perkinsida;Perkinsida_X;Parvilucifera-group;Parvilucifera-group_X;Parvilucifera-group_X_sp.;	0	0	0	0	0	62	0	0	0	70	0	0	0	0	0	0	0
Eukaryota;Alveolata;Perkinsea;Perkinsida;Perkinsida_X;Perkinsida_XX;Perkinsida_XXX;Perkinsida_XXX_sp.;	0	0	0	0	0	0	0	0	0	0	0	0	10	0	0	0	0
Eukaryota;Archaeplastida;Chlorophyta;Chlorodendrophyceae;Chlorodendrales;Chlorodendraceae;Tetraselmis;Tetraselmis_cordiformis;	21	473	418	39	71	653	249	74	293	47	95	267	153	22	11	15	45
Eukaryota;Archaeplastida;Chlorophyta;Chlorodendrophyceae;Chlorodendrales;Chlorodendraceae;__;__;__	0	30	22	0	0	0	0	0	0	0	0	28	7	0	0	0	0



Amplicon sequencing variants (ASVs)	V1 C	V1 NO NE U	V2 C	V2 NO NE U	V3 C	V3 NO NE U	V4 C	V4 NO NE U	V5 C	V5 NO NE U	V6 C	V6 NO NE U	V7 C	V7 NO NE U	V9 C	V9 NO NE U	V10 C
_;																	
Eukaryota;Excavata;Discoba;Euglenida;Euglenophyceae;_;;_;	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Eukaryota;Excavata;Discoba;Euglenida;Petalomonadida;Eupetalomonads_X;Eu petalomonads_XX;Eupetalomonads_XX_sp.;	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0
Eukaryota;Excavata;Discoba;Euglenida;Petalomonadida;Scytomonadidae;Petalomonas;Petalomonas_sphagnophila;	0	0	0	0	0	0	6	3	0	0	0	0	0	0	0	0	6
Eukaryota;Excavata;Discoba;Euglenida;Petalomonadida;_;;_;	0	0	0	0	0	0	16	0	0	0	0	0	0	0	0	0	0
Eukaryota;Excavata;Discoba;Euglenida;_;;_;	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0
Eukaryota;Hacrobia;Cryptophyta;Cryptophyceae;Cryptomonadales;Cryptomonadales_X;Cryptomonas;Cryptomonas_curvata;	70	157	118	24	100	97	271	157	60	125	0	112	161	107	386	316	366
Eukaryota;Hacrobia;Cryptophyta;Cryptophyceae;Cryptomonadales;Cryptomonadales_X;Cryptomonas;Cryptomonas_marssonii;	245	263	566	42	478	1.0 13	499	162	58	264	0	288	255	302	1.7 84	1.8 36	844
Eukaryota;Hacrobia;Cryptophyta;Cryptophyceae;Cryptomonadales;Cryptomonadales_X;Cryptomonas;Cryptomonas_obovoidea;	0	0	0	0	0	0	0	0	0	0	0	0	0	0	58	107	57
Eukaryota;Hacrobia;Cryptophyta;Cryptophyceae;Cryptomonadales;Cryptomonadales_X;Cryptomonas;_;	0	0	0	0	0	0	0	0	0	0	0	0	73	0	114	2.2 09	28
Eukaryota;Hacrobia;Cryptophyta;Cryptophyceae;Cryptomonadales;Cryptomonadales_X;Plagioselmis;Plagioselmis_nannoplanctica;	16	51	64	0	249	0	962	726	28	325	0	89	174	0	101	18	48
Eukaryota;Hacrobia;Cryptophyta;Cryptophyceae;Cryptomonadales;Cryptomonadales_X;_;;_;	251	206	199	127	313	45	483	297	37	297	0	64	8	0	97	0	54
Eukaryota;Hacrobia;Cryptophyta;Cryptophyceae;Cryptophyceae_X;Basal_Cryptophyceae-1;Basal_Cryptophyceae-1_X;Basal_Cryptophyceae-1_X_sp.;	47	154	0	59	611	18	393	267	38	166	0	248	455	0	391	0	66
Eukaryota;Hacrobia;Cryptophyta;Cryptophyceae;Pyrenomonadales;Pyrenomonadaceae;Rhodomonas;Rhodomonas_sp.;	22	15	23	9	77	331	152	107	27	28	5	168	201	256	89	86	0
Eukaryota;Hacrobia;Cryptophyta;Cryptophyceae;_;;_;	0	0	0	0	0	0	0	0	0	0	0	0	0	0	88	0	92
Eukaryota;Hacrobia;Haptophyta;Prymnesiophyceae;Prymnesiales;Chrysochromulinaceae;Chrysochromulina;_;	96	0	5	0	846	0	46	0	0	0	0	19	188	0	128	34	16
Eukaryota;Hacrobia;Katablepharidophyta;Katablepharidaceae;Katablepharidales;Katablepharidales_X;Katablepharidales_XX;Katablepharidales_XX_sp.;	79	209	236	29	107	0	917	365	171	51	87	214	167	0	197	0	44
Eukaryota;Hacrobia;Telonemia;Telonemia_X;Telonemia_XX;Telonemia-Group-1;Telonemia-Group-1_X;Telonemia-Group-1_X_sp.;	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0
Eukaryota;Opisthokonta;Choanoflagellida;Choanoflagellata;Craspedida;Monosigidae_Group_M;Salpingoeca_M;Salpingoeca_urceolata;	2	0	0	0	20	0	18	12	0	0	0	17	15	6	80	7	26
Eukaryota;Opisthokonta;Choanoflagellida;Choanoflagellata;Craspedida;Salpingoecidae_Group_C1;Salpingoeca_C1;Salpingoeca_fusiformis;	0	0	0	40	10	209	294	299	14	95	0	26	220	69	29	34	8
Eukaryota;Opisthokonta;Choanoflagellida;Choanoflagellida_X;Choanoflagellida	0	0	0	0	0	0	0	0	0	0	0	0	147	0	0	0	0



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Eukaryota;Stramenopiles;Ochrophyta;Chrysophyceae;Chrysophyceae_X;Chryso phyceae_Clade-E;Chrysophyceae_Clade-E_X;Chrysophyceae_Clade-E_X_sp.;	0	0	0	0	9	22	0	0	0	360	0	0	0	0	0	0	0
Eukaryota;Stramenopiles;Ochrophyta;Chrysophyceae;Chrysophyceae_X;Chryso phyceae_Clade-E;__;__	44	23	21	0	338	0	335	0	33	0	0	89	46	0	0	0	0
Eukaryota;Stramenopiles;Ochrophyta;Chrysophyceae;Chrysophyceae_X;Chryso phyceae_Clade-F;Paraphysomonas;__;__	0	15	0	0	13	0	0	0	0	0	0	0	0	0	0	0	0
Eukaryota;Stramenopiles;Ochrophyta;Chrysophyceae;Chrysophyceae_X;__;__; __;__	120	113	620	0	1.3 09	98	2.8 35	160	139	83	25	748	1.5 47	0	2.1 43	190	1.625
Eukaryota;Stramenopiles;Ochrophyta;Dictyochophyceae;Dictyochophyceae_X;P edinellales;Pseudopedinella;Pseudopedinella_elastica;	70	12	45	7	660	0	984	131	6	0	0	246	832	0	477	15	209
Eukaryota;Stramenopiles;Ochrophyta;Dictyochophyceae;Dictyochophyceae_X;P edinellales;__;__	0	0	0	0	5	0	95	0	0	0	0	0	42	0	0	0	0
Eukaryota;Stramenopiles;Ochrophyta;Eustigmatophyceae;Eustigmatophyceae_ X;Eustigmatophyceae_XX;Monodus;Monodus_subterranea;	0	0	0	0	0	0	0	0	16	0	0	0	0	0	0	0	0
Eukaryota;Stramenopiles;Ochrophyta;Synurophyceae;Synurales;Synurales_X;M allomonas;Mallomonas_akrokomos;	0	0	0	0	72	0	0	0	0	0	0	0	0	0	0	0	0
Eukaryota;Stramenopiles;Ochrophyta;Synurophyceae;Synurales;Synurales_X;M allomonas;Mallomonas_annulata;	20	0	0	0	27	0	0	0	0	0	0	0	0	0	0	0	0
Eukaryota;Stramenopiles;Ochrophyta;Synurophyceae;Synurales;Synurales_X;M allomonas;__;__	26	22	11	0	249	0	61	0	0	0	0	13	190	0	64	0	0
Eukaryota;Stramenopiles;Ochrophyta;Synurophyceae;Synurales;Synurales_X;Sy nura;Synura_curtispina;	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13
Eukaryota;Stramenopiles;Ochrophyta;Synurophyceae;Synurales;Synurales_X;Sy nurales_XX;Synurales_XX_sp.;	0	0	0	17	28	0	50	118	0	0	0	0	18	0	16	0	0
Eukaryota;Stramenopiles;Ochrophyta;Synurophyceae;Synurales;Synurales_X;__ ;__;__	24	0	17	0	63	0	87	0	0	0	0	27	72	0	36	0	19
Eukaryota;Stramenopiles;Ochrophyta;Xanthophyceae;Xanthophyceae_X;Xantho phyceae_XX;Tribonema;__;__	0	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0
Eukaryota;Stramenopiles;Ochrophyta;__;__;__;__;__	130	285	249	67	1.0 58	38	5.5 02	254	329	234	71	797	8.9 28	61	1.6 06	203	344
Eukaryota;Stramenopiles;Opalozoa;Bicoecea;Bicoecales;Bicoecaceae;Bicoecaceae _X;Bicoecaceae_X_sp.;	0	0	0	0	0	0	0	0	0	0	0	0	0	0	413	53	199
Eukaryota;Stramenopiles;Opalozoa;Bicoecea;Bicoecales;Bicoecaceae;Bicosoeca;Bi cosoeca_petiolata;	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	27
Eukaryota;Stramenopiles;Opalozoa;Bicoecea;Pseudodendromonadales;Pseudod endromonadales_X;Adriamonas;Adriamonas_peritocrescens;	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0
Eukaryota;Stramenopiles;Opalozoa;Bicoecea;Pseudodendromonadales;Pseudod	0	0	0	0	0	31	0	0	0	0	0	0	0	7	0	0	0

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endromonadales_X;Paramonas;Paramonas_globosa; Eukaryota;Stramenopiles;Opalozoa;Bicoecia;Pseudodendromonadales;Pseudodendromonadales_X;Pseudodendromonadales_XX;Pseudodendromonadales_XX_sp.;	93	31	53	0	768	6	69	0	23	0	0	312	848	0	913	71	22
Eukaryota;Stramenopiles;Opalozoa;Bicoecia;__:_:_:_:_	0	0	0	0	10	26	8	0	0	0	0	0	5	0	0	13	0