**Appendix 1**

List of phytoplankton taxa identified during the study period and their occurrences in water and net samples.The symbols (†) and (\*) show the species that are new record for the SoM and the GHE, respectively.

|  |  |  |  |
| --- | --- | --- | --- |
| Taxa | Water samples | | Net samples |
| **Bacillariophyceae** |  |  | |
| *Achnanthes longipes* C.Agardh | **+** | **+** | |
| *Actinocyclus* sp. | **+** |  | |
| *Asterionellopsis glacialis* (Castracane) Round | **+** | **+** | |
| *Aulacoseira granulata* (Ehrenberg) Simonsen | **+** |  | |
| *Bacteriastrum* cf. *delicatulum* Cleve**\*** |  | **+** | |
| *Bacteriastrum hyalinum* Lauder |  | **+** | |
| *Cerataulina pelagica* (Cleve) Hendey | **+** | **+** | |
| *Chaetoceros aequatorialis* Yendo | **+** | **+** | |
| *Chaetoceros affinis* Lauder | **+** | **+** | |
| *Chaetoceros brevis* Schütt |  | **+** | |
| *Chaetoceros compressus* Lauder |  | **+** | |
| *Chaetoceros constrictus* Gran |  | **+** | |
| *Chaetoceros contortus* Schütt |  | **+** | |
| *Chaetoceros curvisetus* Cleve | **+** | **+** | |
| *Chaetoceros danicus* Cleve |  | **+** | |
| *Chaetoceros decipiens* Cleve | **+** | **+** | |
| *Chaetoceros diadema* (Ehrenberg) Gran | **+** | **+** | |
| *Chaetoceros* cf. *dichaeta* Ehrenberg**†\*** |  |  | |
| *Chaetoceros didymus* Ehrenberg | **+** | **+** | |
| *Chaetoceros lorenzianus* Grunow | **+** | **+** | |
| *Chaetoceros socialis* Lauder | **+** |  | |
| *Chaetoceros teres* Cleve | **+** |  | |
| *Chaetoceros tortissimus* Gran | **+** | **+** | |
| *Chaetoceros wighamii* Brightwell |  | **+** | |
| *Chaetoceros willei* Gran | **+** | **+** | |
| *Chaetoceros* sp. | **+** | **+** | |
| *Climacosphenia moniligera* Ehrenberg | **+** |  | |
| *Coscinodiscus radiatus* Ehrenberg | **+** | **+** | |
| *Coscinodiscus* sp. | **+** |  | |
| *Cylindrotheca closterium* (Ehrenberg) Reimann & J.C.Lewin | **+** | **+** | |
| *Dactyliosolen fragilissimus* (Bergon) Hasle | **+** | **+** | |
| *Detoluna pumila* (Castracane) Gran |  | **+** | |
| *Diploneis* sp. | **+** |  | |
| *Ditylum brightwellii* (T. West) Grunow in Van Heurck | **+** | **+** | |
| *Entomoneis* sp. | **+** | **+** | |
| *Eucampia zodiacus* Ehrenberg**\*** |  | **+** | |
| *Guinardia delicatula* (Cleve) Hasle | **+** | **+** | |
| *Guinardia flaccida* (Castracane) Peragallo | **+** | **+** | |
| *Guinardia striata* (Stolterfoth) Hasle | **+** |  | |
| *Guinardia* sp. | **+** |  | |
| *Gyrosigma* sp. |  | **+** | |
| *Hemiaulus hauckii* Grunow in Van Heurck | **+** | **+** | |
| *Lauderia annulata* Cleve | **+** | **+** | |
| *Leptocylindrus danicus* Cleve | **+** | **+** | |
| *Leptocylindrus minimus* Gran | **+** | **+** | |
| *Melosira moniliformis* (O. F. Müller) C. Agardh | **+** | **+** | |
| *Melosira nummuloides* C.Agardh | **+** | **+** | |
| *Meuniera* cf. *membranacea* (Cleve) P.C.Silva**\*** | **+** | **+** | |
| *Navicula* sp. | **+** | **+** | |
| *Nitzschia longissima* (Brébisson) Ralfs | **+** | **+** | |
| *Nitzschia* sp. | **+** | **+** | |
| Taxa | Water samples | | Net samples |
| *Paralia sulcata* (Ehrenberg) Cleve |  | **+** | |
| *Pinnularia* sp. | **+** | **+** | |
| *Pleurosigma normanii* Ralfs in Pritchard | **+** | **+** | |
| *Pleurosigma* sp. | **+** | **+** | |
| *Porosira glacialis* (Grunow) Jörgensen**†\*** | **+** |  | |
| *Proboscia alata* (Brigtwell) Sundstrôm | **+** | **+** | |
| *Pseudo-nitzschia* spp. | **+** | **+** | |
| *Pseudosolenia calcar-avis* (Schultze) Sundstrôm | **+** | **+** | |
| *Rhizosolenia hebetata* Bailey | **+** | **+** | |
| *Rhizosolenia setigera* Brightwell | **+** | **+** | |
| *Skeletonema* spp. | **+** | **+** | |
| *Stellarima stellaris* (Roper) G.R. Hasle & P.A.Sims | **+** |  | |
| *Striatella unipunctata* (Lyngbye) Agardh | **+** |  | |
| *Thalassionema frauenfeldii* (Grunow) Tempère & Peragallo |  | **+** | |
| *Thalassionema nitzschioides* (Grunow) Mereschkowsky | **+** | **+** | |
| *Thalassiosira anguste-lineata* (A. Schmidt) G. Fryxell & Hasle |  | **+** | |
| *Thalassiosira decipiens*(Grunow) E.G.Jørgensen |  | **+** | |
| *Thalassiosira gravida* Cleve | **+** | **+** | |
| *Thalassiosira nordenskioeldii* Cleve |  | **+** | |
| *Thalassiosira* sp. |  | **+** | |
| **Dinophyceae** |  |  | |
| *Akashiwo sanguinea* (K.Hirasaka) G.Hansen & Ø.Moestrup |  | **+** | |
| *Alexandrium* cf. *tamarense* (Lebour) Balech**\*** |  | **+** | |
| *Archaeperidinium minutum* (Kofoid) E.G.Jørgensen |  | **+** | |
| *Dinophysis acuminata* Claparède & Lachmann | **+** | **+** | |
| *Dinophysis acuta* Ehrenberg | **+** | **+** | |
| *Dinophysis caudata* Saville-Kent | **+** | **+** | |
| *Dinophysis fortii* Pavillard |  | **+** | |
| *Dinophysis* *infundibulum* J. Schiller**†\*** | **+** | **+** | |
| *Dinophysis* sp. |  | **+** | |
| *Diplopsalis lenticula* Bergh | **+** | **+** | |
| *Dissodinium* sp. |  | **+** | |
| *Gonyaulax polygramma* F.Stein**\*** |  | **+** | |
| *Gonyaulax* *scrippsae* Kofoid**\*** |  | **+** | |
| *Gonyaulax spinifera* Murray & Whitting |  | **+** | |
| *Gonyaulax* sp. |  | **+** | |
| *Gymnodinium* sp. | **+** |  | |
| *Gyrodinium spirale* (Bergh) Kofoid & Swezy | **+** | **+** | |
| *Gyrodinium* sp. | **+** |  | |
| *Heterocapsa triquetra* (Ehrenberg) Stein | **+** | **+** | |
| *Lebouridinium* cf. *glaucum* (Lebour) F.Gómez, H.Takayam, D. Moreira & P.López-García**†\*** | **+** |  | |
| *Lingulodinium polyedra* (Stein) Dodge | **+** | **+** | |
| *Noctiluca scintillans* (Macartney) Kofoid & Swezy | **+** | **+** | |
| *Oblea* *rotunda* (Lebour) Balech ex Sournia**†\*** |  | **+** | |
| *Oblea* sp. | **+** | **+** | |
| *Oxytoxum scolopax* Stein | **+** | **+** | |
| *Phalacroma rotundatum* (Claparéde & Lachmann) Kofoid and Michener |  | **+** | |
| *Podolampas palmipes* Stein |  | **+** | |
| *Polykrikos* cf. *schwartzii* Bütschli\* | **+** |  | |
| *Preperidinium* cf. *meunieri* (Pavillard) Elbrächter**†\*** |  | **+** | |
| *Prorocentrum compressum* (Bailey) Abé | **+** | **+** | |
| *Prorocentrum cordatum* (Ostenfeld) Dodge | **+** |  | |
| *Prorocentrum micans* Ehrenberg | **+** | **+** | |
| *Prorocentrum scutellum* Schröder | **+** | **+** | |
| *Protoceratium reticulatum* (Claparède & Lachmann) Bütschli |  | **+** | |
| Taxa | Water samples | | Net samples |
| *Protoperidinium bipes* (Paulsen) Balech | **+** | **+** | |
| *Protoperidinium brevipes* (Paulsen) Balech | **+** | **+** | |
| *Protoperidinium brochii* (KofoidandSwezy) Balech |  | **+** | |
| *Protoperidinium cerasus* (Paulsen) Balech |  | **+** | |
| *Protoperidinium claudicans* (Paulsen) Balech |  | **+** | |
| *Protoperidinium conicoides* (Paulsen) Balech |  | **+** | |
| *Protoperidinium conicum* (Gran) Balech |  | **+** | |
| *Protoperidinium* cf. *curvipes* (Ostenfeld) Balech**\*** | **+** | **+** | |
| *Protoperidinium depressum* (Bailey) Balechc |  | **+** | |
| *Protoperidinium* *diabolum* (Cleve) Balech**\*** | **+** | **+** | |
| *Protoperidinium divergens* (Ehrenberg) Balech | **+** | **+** | |
| *Protoperidinium grande* (Kofoid) Balech |  | **+** | |
| *Protoperidiniumo oblongum* (Aurivillius) Parke & Dodge | **+** | **+** | |
| *Protoperidinium pallidum* (Ostenfeld) Balech |  | **+** | |
| *Protoperidinium pellucidum* Bergh | **+** | **+** | |
| *Protoperidinium pentaganum* (Gran) Balech |  | **+** | |
| *Protoperidinium punctulatum* (Paulsen) Balech |  | **+** | |
| *Protoperidinium pyriforme* (Paulsen) Balech | **+** | **+** | |
| *Protoperidinium steinii* (Jörgensen) Balech | **+** | **+** | |
| *Protoperidinium* sp. | **+** | **+** | |
| *Pyrocystis* cf. *lunula* (Schütt) Schütt**†\*** |  | **+** | |
| *Scrippsiella acuminata* (Ehrenberg) Kretschmann, Elbrächter, Zinssmeister, S.Soehner, Kirsch, Kusber & Gottschling | **+** | **+** | |
| *Spatulodinium* sp. |  | **+** | |
| *Tripos furca* (Ehrenberg) F.Gómez | **+** | **+** | |
| *Tripos fusus* (Ehrenberg) F.Gómez | **+** | **+** | |
| *Tripos horridus* (Cleve) F.Gómez | **+** | **+** | |
| *Tripos lineatus* (Ehrenberg) F.Gómez | **+** | **+** | |
| *Tripos muelleri* Bory | **+** | **+** | |
| *Tripos* sp. |  | **+** | |
| **Cryptophyceae** |  |  | |
| *Teleaulax* cf. *amphioxeia* (W.Conrad) D.R.A.Hill**†\*** | **+** |  | |
| **Raphidophyceae** |  |  | |
| *Heterosigma akashiwo* (Y.Hada) Y.Hada ex Y.Hara & M.Chihara | **+** |  | |
| **Chrysophyceae** |  |  | |
| *Dinobryon* sp. |  | **+** | |
| *Ochromonas* sp. |  | **+** | |
| **Dictyochophyceae** |  |  | |
| *Apedinella* sp. | **+** |  | |
| *Dictyocha fibula* Ehrenberg | **+** | **+** | |
| *Dictyocha speculum* Ehrenberg | **+** | **+** | |
| *Octactis octonaria* (Ehrenberg) Hovasse | **+** | **+** | |
| **Euglenophyceae**  *Euglena acusformis* J. Schiller |  | **+** | |
| *Eutreptia* sp. | **+** |  | |
| *Eutreptiella marina* da Cunha | **+** | **+** | |
| **Prasinophyceae** |  |  | |
| *Pyramimonas grossii* Parke | **+** |  | |
| **Chlorophyceae** |  |  | |
| *Desmodesmus* sp. (Freshwater algae) | **+** |  | |
| *Pediastrum boryanum* (Turpin) Meneghini (Freshwater algae) | **+** |  | |