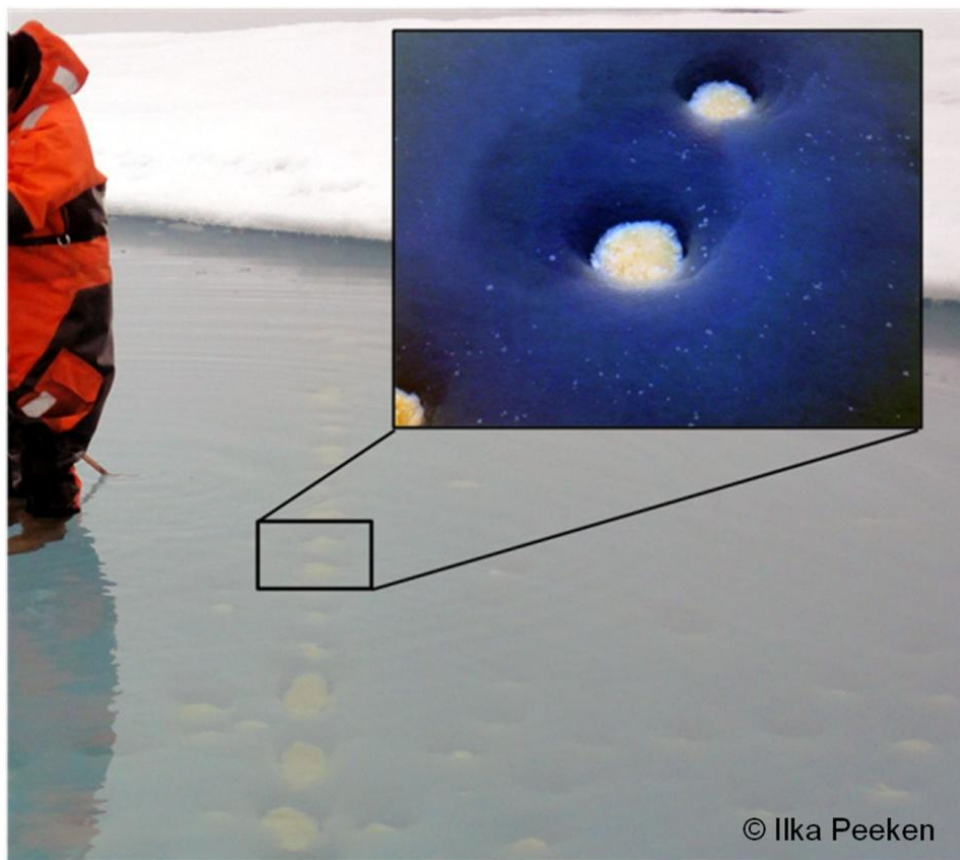
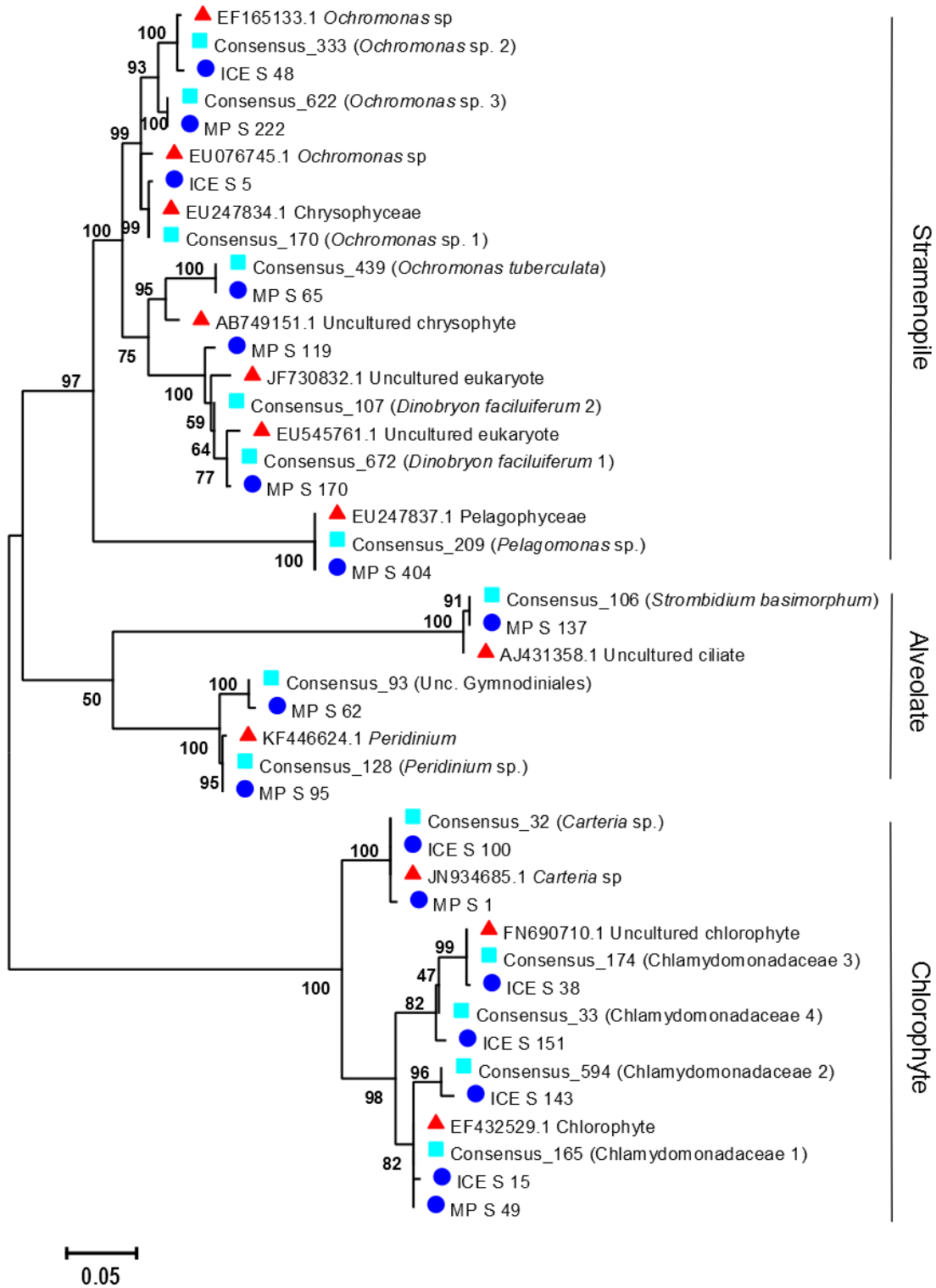


Supplementary file for: Kilias E.S., Peeken I. & Metfies K. 2014. Insight into protist diversity in Arctic sea ice and melt-pond aggregate obtained by pyrosequencing. *Polar Research* 33. Correspondence: E.S. Kilias, Alfred Wegener Institute for Polar and Marine Research, Am Handelshafen 12, DE-27570 Bremerhaven, Germany. E-mail: estelle.kilias@awi.de.



Supplementary Fig. S1. Aggregates accumulating at the bottom of the melt pond. Insert shows an enlarged image of the sampled aggregates.



Supplementary Fig. S2. Phylogenetic tree of the abundant biosphere, computed on the basis of the V4 region for the consensus (square), original (circle) and BLAST search sequences (triangle). The optimal nucleotide substitution model was identified by MODELGENERATOR, while the phylogenetic tree was constructed in MEGA (GTR+I+G).

Supplementary Table S1. Taxonomic annotation (BLAST search; National Center for Biotechnology Information) of consensus and original sequences, showing identical identifications with similar qualities for both sequence types. Phylotype ID of the abundant biosphere ( $\geq 1\%$ ) was used from a detailed ARB-based annotation. Consensus sequences were obtained from a sequence clustering on a similarity threshold of 97% (DNASar). Original sequences were abundant contributors to the sequence clusters (operational taxonomic unit).

Phylotype ID	consensus sequence			original sequence		
	Query cover	Identity	Accession number	Query cover	Identity	Accession number
Unc. <sup>a</sup> Gymnodiniales	98	99	KC488417.1	100	99	KC488417.1
<i>Peridinium</i> sp.	100	99	KF446624.1	100	99	KF446624.1
<i>Strombidium basimorphum</i>	99	100	AJ431358.1	100	99	AJ431358.1
<i>Carteria</i> sp.	98	100	JN934685.1	100	99	JN934685.1
Chlamydomonadaceae 1	98	99	EF432529.1	99	99	EF432529.1
Chlamydomonadaceae 2	99	98	EF432529.1	99	98	EF432529.1
Chlamydomonadaceae 3	98	99	FN690710.1	100	99	FN690710.1
Chlamydomonadaceae 4	99	98	FN690710.1	99	97	FN690710.1
<i>Dinobryon faciliiferum</i> 1	97	99	EU545761.1	98	99	EU545761.1
<i>Dinobryon faciliiferum</i> 2	100	98	JF730832.1	100	97	JF730832.1
<i>Ochromonas tuberulata</i>	98	96	AB4749151.1	99	96	AB4749151.1
<i>Ochromonas</i> sp. 1	98	100	EU247834.1	100	99	EU247834.1
<i>Ochromonas</i> sp. 2	99	99	EF165133.1	100	99	EF165133.1
<i>Ochromonas</i> sp. 3	100	98	EU076745.1	99	92	EU076745.1
<i>Pelagomonas</i> sp.	100	100	EU247837.1	99	99	EU247837.1

<sup>a</sup> Uncultured.