

The following supplement accompanies the article

***Myrionecta rubra* population genetic diversity and its cryptophyte chloroplast specificity in recurrent red tides in the Columbia River estuary**

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Supplement. Additional data

Table S1. List of accession numbers of all chloroplast 16S rRNA gene and 18S rRNA gene sequences obtained during this study that have been submitted to GenBank. Sample numbers refer to sampling locations given in Fig. 1

Sample	<i>Myrionecta rubra</i>	Cryptophyte	Diatom	Dinoflagellate	Other protists
Unicellular microbial 18S rRNA gene					
#1	HQ226449 - HQ226596	HQ226597 - HQ226600			
#2	HQ226601 - HQ226706	HQ226707 - HQ226718	HQ226719 - HQ226722		
#3	HQ226723 - HQ226830	HQ226831 - HQ226834	HQ226835 - HQ226844	HQ226845 - HQ226852	HQ226853 - HQ226858
#4	HQ226859 - HQ226870		HQ226871 - HQ226933	HQ226934 - HQ226945	
#5	HQ226946 - HQ227064	HQ227065 - HQ227070			
#6	HQ227071 - HQ227278	HQ227279 - HQ227284	HQ227285 - HQ227288		
#7	HQ227289 - HQ227472	HQ227473 - HQ227476			
#8	HQ227477 - HQ227702	HQ227703 - HQ227710	HQ227711 - HQ227712		HQ227713 - HQ227714
#9	HQ227715 - HQ227760	HQ227761 - HQ227762	HQ227763 - HQ227798	HQ227799 - HQ227813	HQ227814 - HQ227836
Chloroplast 16S rRNA gene					
#1	HQ226122 - HQ226136	HQ226137 - HQ226149			
#2		HQ226153 - HQ226225	HQ226150 - HQ226152		
#3		HQ226237 - HQ226245	HQ226229 - HQ226236		HQ226226 - HQ226228
#4		HQ226257	HQ226246 - HQ226257		HQ226259 - HQ226260
#5		HQ226263 - HQ226285	HQ226261 - HQ226262		
#6		HQ226294 - HQ226299	HQ226286 - HQ226293		
#7		HQ226317 - HQ226346	HQ226300 - HQ226316		
#8		HQ226361 - HQ226413	HQ226347 - HQ226360		
#9		HQ226447	HQ226414 - HQ226446		HQ226448

Table S2. List of accession numbers of all RuBisCO gene, PSII D2 gene and *Myrionecta rubra* partial '18S-28S' rRNA gene sequences obtained during this study that have been submitted to GenBank

Sample	<i>Myrionecta rubra</i>	Cryptophyte
<i>M. rubra</i> partial '18S-28S' rRNA gene		
variant A	HQ227837 - HQ227850	
variant B	HQ227851 - HQ227954	
variant C	HQ227955 - HQ227969	
variant D	HQ227970 - HQ227987	
variant E	HQ227988 - HQ227990	
SC-PCR <i>M. rubra</i> partial '18S-28S' rRNA gene		
Coast Spring 2010 - variant A	HQ227991	
Ilwaco harbor Sep09 - variant B	HQ227992 - HQ227993	
Coast Spring 2010 - variant C	HQ227994	
Ribulose-1,5-bisphosphate carboxylase oxygenase gene (<i>rbcL</i>)		
estuary main channel Aug07 (#7)		HQ228004 - HQ228005
estuary main channel Oct08 (#8)		HQ228006 - HQ228008
Willapa Bay 23Jun09		HQ228009
Ilwaco harbor 21Jul09		HQ228010
Chinook harbor 06Aug09		HQ228011
Photosystem II D2 protein gene (<i>psbA</i>)		
estuary main channel Aug07 (#7)		HQ227995 - HQ227996
estuary main channel Oct08 (#8)		HQ227997 - HQ227998
estuary main channel Sep09 (#10)		HQ227999
Willapa Bay 23Jun09		HQ228000
Ilwaco harbor 21Jul09		HQ228001 - HQ228003

Table S3. Number of unicellular 18S rRNA gene and chloroplast 16S rRNA gene sequences obtained for samples 1-9 that were used for calculating the percentages presented on Fig. 3. * Sixty-five 18S rRNA gene sequences affiliated to copepods were also retrieved for this sample and omitted for further analysis. Sampling locations are given in Fig. 1

		1	2	3	4*	5	6	7	8	9
18S rDNA clones	<i>Myrionecta rubra</i>	74	53	54	6	66	104	92	113	23
	Diatom	0	2	5	25	0	2	0	1	18
	Dinoflagellate	0	0	4	6	0	0	0	0	7
	Cryptophyte	2	6	2	0	3	3	2	4	1
	Other protists	0	0	3	0	0	0	0	1	12
16S rDNA chloroplast clones	Diatom	15	3	8	12	2	8	17	14	33
	Dinoflagellate	0	0	0	1	0	0	0	0	1
	Cryptophyte	13	73	9	1	23	6	30	53	1
	Other protists	0	0	3	1	0	0	0	0	0