

**On-line Suppl. Tab. 1.** Schedule of sampling physico-chemical data, bacteria and diatoms in Lake Mrtvo More in 2016. T – temperature, S – salinity, NO<sub>3</sub><sup>-</sup> – nitrate, NO<sub>2</sub><sup>-</sup> – nitrite, NH<sub>4</sub><sup>+</sup> – ammonium, TIN – total inorganic nitrogen, PO<sub>4</sub><sup>3-</sup> – phosphate, SiO<sub>4</sub><sup>4-</sup> – silicate, Chl *a* – chlorophyll *a* concentrations, O<sub>2</sub>/O<sub>2</sub>' – oxygen saturation.

Season	Month	Date	Physico-chemical parameter									Bacteria samples	Diatom samples		
			T	S	NO <sub>3</sub> <sup>-</sup>	NO <sub>2</sub> <sup>-</sup>	NH <sub>4</sub> <sup>+</sup>	TIN	PO <sub>4</sub> <sup>3-</sup>	SiO <sub>4</sub> <sup>4-</sup>	Chl <i>a</i>			O <sub>2</sub> /O <sub>2</sub> '	
Spring	April	19-Apr-2016	1	1	1	1	1	1	1	1	1	1	.	.	
		26-Apr-2016	1	1	1	1	1	1	1	1	1	1	1	.	.
	May	4-May-2016	1	1	1	1	1	1	1	1	1	1	1	.	.
		10-May-2016	1	1	1	1	1	1	1	1	1	1	1	1	1
		20-May-2016	1	1	1	1	1	1	1	1	1	1	1	.	1
		25-May-2016	1	1	1	1	1	1	1	1	1	1	1	.	1
		31-May-2016	1	1	1	1	1	1	1	1	1	1	1	.	1
June	7-Jun-2016	1	1	1	1	1	1	1	1	1	1	1	1	1	
	18-Jun-2016	1	1	1	1	1	1	1	1	1	1	1	1	1	
	24-Jun-2016	1	1	1	1	1	1	1	1	1	1	1	1	1	
	29-Jun-2016	1	1	1	1	1	1	1	1	1	1	1	1	1	
July	7-Jul-2016	1	1	1	1	1	1	1	1	1	1	1	.	1	
	13-Jul-2016	1	1	1	1	1	1	1	1	1	1	1	1	1	
	20-Jul-2016	1	1	1	1	1	1	1	1	1	.	1	1	1	
	28-Jul-2016	1	1	1	1	1	1	1	1	1	1	1	1	1	
August	11-Aug-2016	1	1	1	1	1	1	1	1	1	1	1	1	1	
	17-Aug-2016	1	1	1	1	1	1	1	1	1	1	1	.	1	
	24-Aug-2016	1	1	1	1	1	1	1	1	1	1	1	1	1	
Autumn	September	2-Sep-2016	1	1	1	1	1	1	1	1	1	1	1	1	1
		6-Sep-2016	1	1	1	1	1	1	1	1	1	1	1	1	1
		14-Sep-2016	1	1	1	1	1	1	1	1	1	1	1	.	1
		21-Sep-2016	1	1	1	1	1	1	1	1	1	1	1	.	1
		27-Sep-2016	1	1	1	1	1	1	1	1	1	1	1	.	.
	October	3-Oct-2016	1	1	1	1	1	1	1	1	1	1	1	.	1
		12-Oct-2016	1	1	1	1	1	1	1	1	1	1	.	1	
Number of samples:			25	25	25	25	25	25	25	25	24	25	12	21	

**On-line Suppl. Tab. 2.** Results of ANOSIM test performed on physico-chemical data. Physico-chemical parameters varied significantly (ANOSIM, P < 0.05) among: seasons (spring, summer, autumn), months (April-October), between the significantly different clusters of samples for analysis physico-chemical parameters collected before the 18<sup>th</sup> June (Group 1) and afterwards (Group 2, and Group 3 containing only sample from 12<sup>th</sup> October), and between the significantly different clusters of diatom assemblages. Av.Abund. – average abundance.

	Season	Month	Environmental Simprof Groups 1 & 2 & 3	Av. Abund. Simprof Groups 1 & 2 & 3	Av. Abund. Simprof Subgroups 1A & 1B & 2A & 2B & 3
P	0.001	0.001	0.001	0.001	> 0.05
Global R	0.545	0.466	0.891	0.386	0.381

**On-line Suppl. Tab. 3.** Results of ANOSIM test performed on diatom species (S) and growth form (GF) relative abundance data. Diatom assemblages differed significantly (ANOSIM,  $P < 0.05$ ) among months, between the significantly different clusters of diatom samples collected up to the middle of July (Group 1) and afterwards (Group 2, and Group 3 containing only sample from 12<sup>th</sup> October), and between the significantly different sub-clusters of diatom samples.

	Season		Month		Simprof Groups 1 & 2 & 3		Simprof Subgroups 1A & 1B & 2A & 2B & 3	
	S	GF	S	GF	S	GF	S	GF
P	> 0.05	> 0.05	0.001	0.001	0.001	0.001	0.001	0.001
Global R	0.268	0.274	0.650	0.591	0.903	0.668	0.968	0.774

**On-line Suppl. Tab. 4.** List of diatoms taxa and their percentage contribution to total diatom community composition (taxa with relative abundances  $\geq 3.5\%$ , RA, are only shown) on artificial substrat (glass) in Lake Mrtvo More in 2016. TRIX index was computed in order to identify the trophic level of the research area. Groups and sub-groups were established upon the CLUSTER analysis with similarity profiles (SIMPROF) performed to determine significant levels of similarity between diatom samples. Only relative abundances > 25% are framed with black rectangle.

Taxa / Date	TRIX																					
	Oligotrophic				Mesotrophic				Extreme Eutrophic	Eutrophic		Mesotrophic	Eutrophic	Extreme Eutrophic	Eutrophic	Mesotrophic	Oligotrophic					
	1				2				3		1A		1B	2A		2B	3					
	May			June			July			August		September		October								
	10-May	20-May	25-May	31-May	07-Jun	18-Jun	24-Jun	29-Jun	07-Jul	13-Jul	20-Jul	28-Jul	11-Aug	17-Aug	24-Aug	02-Sep	06-Sep	14-Sep	21-Sep	03-Oct	12-Oct	
<i>Achnanthes kuwaitensis</i>															11.14		8.75					
<i>Amphora</i> sp.	10.00								3.50													
<i>Cocconeis costata</i>	6.75			3.50							7.25			6.00	4.73	8.50	10.00	6.25	6.75	4.09		
<i>Cocconeis dirupta</i> var. <i>flexella</i>	22.50	14.75	20.75	19.75	5.50	29.85	51.00	37.25	65.00	28.89	47.00	27.50	24.00	15.50	11.88	23.75	15.50	10.00	8.25	6.27		
<i>Cocconeis dirupta</i>																						4.02
<i>Cocconeis pseudomarginata</i>																			3.75			7.47
<i>Cocconeis scutellum</i> var. <i>scutellum</i>	53.25	73.00	73.00	70.75	89.25	47.26	39.00	55.50	7.25	17.09	14.75	10.00	4.25	7.00		6.00	9.75			4.09		
<i>Cocconeis woodii</i>											4.50											

On-line Suppl. Tab. 4. Continued

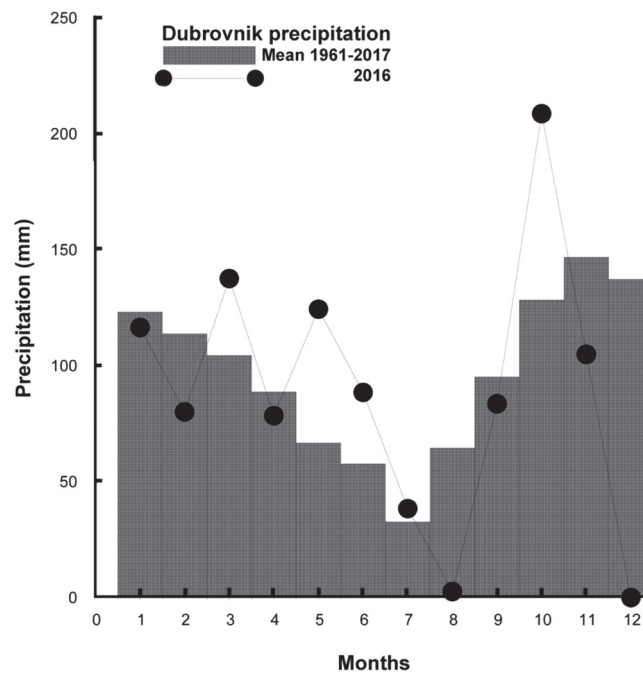
TRIX	Oligotrophic						Mesotrophic		Extreme Eutrophic	Eutrophic		Mesotrophic	Eutrophic		Extreme Eutrophic	Eutrophic	Mesotrophic	Oligotrophic
Group	1						2											3
Subgroup	1A				1B		2A						2B					
Month	May		June		July		August		September		October							
<i>Diploneis crabro</i>															6.50			
<i>Fragilaria</i> sp.2															13.75	6.50		
<i>Halamphora coffeiformis</i>		3.50								3.75		7.93	13.50		3.75			
<i>Halamphora hyalina</i>									9.50	11.25	14.36		6.50					
<i>Halamphora subangularis</i>														3.50		5.72		
<i>Licmophora flabellata</i>						13.50	8.29					3.75				12.26		
<i>Licmophora paradoxa</i>											7.50	3.75	3.50	3.50	16.89	43.67		
<i>Mastogloia cuneata</i>				5.47														
<i>Navicula directa</i>								3.75										
<i>Navicula flagellifera</i>							4.50								6.00			
<i>Navicula salinicola</i>	3.50							5.25	13.25	6.94			10.00	13.25	3.81			
<i>Navicula</i> sp.1										7.67								
<i>Nitzschia compressa</i> var. <i>compressa</i>																	4.02	
<i>Nitzschia frustulum</i>						5.03												

On-line Suppl. Tab. 4. Continued

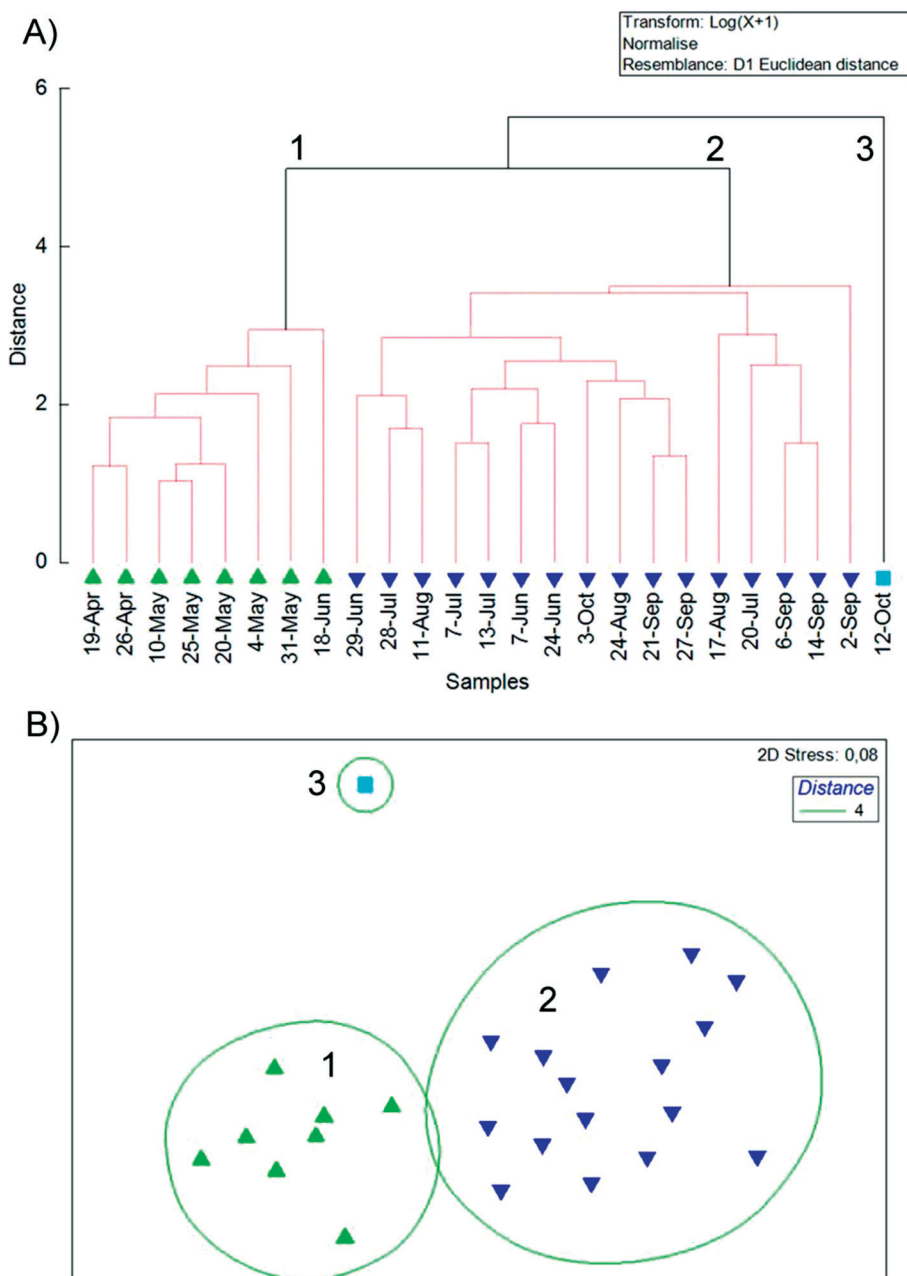
TRIX	Oligotrophic						Mesotrophic			Extreme Eutrophic	Eutrophic		Mesotrophic	Eutrophic		Extreme Eutrophic	Eutrophic	Mesotrophic	Oligotrophic	
	1									2									3	
	1A						1B			2A						2B				
	May			June			July			August			September			October				
<i>Nitzschia laevis</i>																				
<i>Nitzschia sp.2</i>					3.73															
<i>Opephora mutabilis</i>												4.00	4.00	7.67	6.00	10.00	6.25	5.50	22.34	
<i>Pinnularia quadratarea</i> var. <i>cuneata</i>																		5.00		
<i>Pinnularia sp.</i>																		6.50		
<i>Placoneis flabellate</i>																	3.50			
<i>Psammodictyon rudum</i>									8.29			6.25								
<i>Rhabdonema adriaticum</i>												5.50	7.00							
<i>Seminavis sp.</i>																		3.75		
<i>Striatella unipunctata</i>																			5.18	
<i>Trachyneis aspera</i>																				19.00
<i>Tryblionella coarctata</i>												5.50	4.28							



**On-line Suppl. Fig. 1.** A – Lake Mrtvo More on 7<sup>th</sup> July 2016, red dot indicates the sampling site position, B – plate with microscopic slides submerged in Lake Mrtvo More at the depth of 1 m on 19<sup>th</sup> of April 2016, C-E – hauling up the plate with microscopic slides so one glass could be removed for diatom analyses (C, D – 7<sup>th</sup> June 2016, E – 14<sup>th</sup> September 2016).



**On-line Suppl. Fig. 2.** The average monthly precipitation (mm) in Dubrovnik for the period 1961-2017 and during 2016 (data for Dubrovnik meteorological station, Croatian Meteorological and Hydrological Service).



**On-line Suppl. Fig. 3.** Cluster analysis (A) and non-metric multidimensional scaling (NMDS) ordination (B) based on the data of physico-chemical parameters (temperature, salinity, TIN,  $PO_4^{3-}$ ,  $SiO_4^{4-}$ , chlorophyll *a* concentrations, oxygen saturation,  $NO_3^-$ ,  $NO_2^-$ ,  $NH_4^+$ ) in 25 sampling dates (Lake Mrtvo More, the island of Lokrum, April-October 2016). Euclidean distance as a similarity measure was used. N = 25.