Supplement Table S1. The presence of detected cyanometabolites (*m/z* of their $[M+H]^+$ ion) and cyanobacteria in the Curonian Lagoon during the study period. + – present of the compound or cyanobacteria. AER – aeruginosin, AEG – aeruginosamide, ANTX – anatoxin, AP – anabaenopeptin, CP – cyanopeptolin, MC – microcystin, Mg – microginin, NOD – nodularin, Osc – oscillamide. Stations: 1st – Nida, 2nd – Juodkrantė, 3rd – Dreverna, 4th – Ventė, 5th – Smiltynė. T.s. – this study.

Different colours indicate relative cyanobacteria taxon biomass from the total cyanobacteria biomass.

0-20%	20-50%	50-70%	70-100%

Station	Reference	[42]	[1]	[2]	[3]	[4]	[5]	[6]	[42]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	T.s.	T.s.	[20]	[14]	[15]	[16]	[17]	[18]	[41]	[16]	T.s.	T.s.	T.s.	T.s.	T.s.	T.s.	T.s.	[19]	[19]	T.s.	T.s.	T.s.	T.s.	[20]	T.s.	T.s.	T.s.	T.s.	[21]	T.s.	T.s.	T.s.	T.s.	T.s.	[22]	Total cyanobacteria biomass, mg L^{-1}	*Aphanizomenon*	*Dolichospermum*	*Microcystis*	*Planktothrix agardhii*	*Woronichinia*	Other cyanobacteria
	Metabolite, formula	MC-YR	Dha^7MC-HtyR	Asp^3MeSer^7MC-RR	MC-RR	MC-RY	Asp^3MC-RR	MC-LY	MC-LR	MC-LF	Asp^3MC-LR	NOD-R	ANTX-a	AEG-A	AP 915	AP G	AP 887	AP 861	OSC-Y	AP-F	AP-A	AP-B	AP-D	AP	AP	AP-J	AP 765	AP 751	AP 676 Lys-Ile-Hty-MeAla-Phe	AP 662 Phe-MeAla-Hty-r-x-Lys-Ile/Leu	AER 724 Cl-Pla-Leu-(Xyl) Choi-Agm	AER 126A	AER 126B	AER 622 Br-Hpla-(Tyr/Hph?)-Cho-Agm	AER 620	AER 617 Hpla-Gln?-Choi-Argal	AER 608 X-X-Choi-Argol	AER 298-A	AER 592 X-X-Choi-Argal	AER 589 X-x-Choi-Argal	AER 587 X-X-Choi-Argal	AER 567 X-X-Choi-Argal	CP	CP 978	CP 931	Mg 723 Ahda-Phe-Val-Hty-Pro	Mg 624 ClAhda-Tyr-MeLeu-Pro	Mg 613	Mg 591B								
	$H+M^+$ *m/z* / Date	1045	1045	1042	1038	1031	1024	1002	995	986	981	825	166	561	916	909	888	862	858	851	844	837	828	824	808	794	766	752	677	663	725	715	691	623	621	618	609	605	593	590	588	568	993	979	932	724	625	614	591										
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57
1	2013-08-11	+			+		+		+				+	+					+	+	+	+								+			+	+																6,08	+	+	+	+	+	+
1	2013-08-24	+			+		+		+				+	+					+	+	+	+							+			+	+																9,26	+	+	+	+	+	+
1	2013-09-09	+	+		+		+		+		+		+		+	+			+	+	+	+										+				+														10,98	+	+	+	+	+	+
1	2013-10-23	+			+		+		+		+			+					+	+	+	+										+				+														91,26	+	+	+	+	+	+
1	2014-07-16	+			+		+	+	+		+										+									+																				8,23	+	+	+	+	+	+
1	2014-07-23	+			+		+		+	+	+			+					+		+									+																				7,95	+	+	+	+	+	+
1	2014-07-29	+			+		+		+				+	+																													+								7,99	+	+	+	+	+	+
1	2014-08-04	+			+		+		+					+						+	+															+														12,00	+	+	+	+	+	+
1	2014-08-12	+			+		+		+		+		+	+							+									+						+					+								4,52	+	+	+	+	+	+
1	2014-08-26	+			+		+		+		+		+	+						+	+								+	+	+								+		+								4,53	+	+	+	+	+	+
1	2014-09-05	+			+		+		+					+							+													+							+	+								165,78	+	+	+	+	+	+
1	2014-09-17	+			+		+		+		+		+	+					+	+	+	+							+	+		+	+			+					+								69,06	+	+	+	+	+	+
1	2014-10-03	+	+		+		+		+		+		+	+					+	+	+	+							+	+		+	+																16,12	+	+	+	+	+	+
1	2014-10-15	+			+		+		+		+			+					+	+	+	+							+	+		+							+										97,51	+	+	+	+	+	+
1	2014-10-22	+			+		+		+		+		+	+					+	+	+	+							+	+		+			+				+										81,38	+	+	+	+	+	+
1	2014-11-12	+			+		+		+		+			+					+		+								+	+																			12,07	+		+	+	+	+
1	2015-10-09				+		+		+					+					+	+	+	+								+																			20,44	+		+	+	+	+
1	2015-10-28				+		+		+					+					+		+	+																													11,18	+		+	+	+	+
1	2015-12-10				+				+					+					+																																4,27	+		+	+	+	+
1	2015-12-29				+				+					+							+																															5,78	+		+	+	+	+
1	2016-01-18				+																																															0,20	+	+	+	+	+	+
1	2016-01-29				+																																															0,08	+	+	+	+	+	+
1	2016-02-17				+																																															0,39			+	+	+	+
1	2016-03-03				+									+							+																															3,44			+	+	+	+
1	2016-03-16				+				+													+																															0,52			+	+	+	+
1	2016-03-30				+																									+																							1,06		+	+	+	+	+
1	2016-04-15				+		+		+													+								+																							0,68		+	+	+	+	+
1	2016-05-06				+		+																																														3,38	+	+	+	+	+	+
1	2016-05-24	+			+		+							+					+		+	+								+																							5,86	+	+	+	+	+	+
1	2016-06-02	+			+		+		+					+					+		+	+								+																							3,35	+	+	+	+	+	+
1	2016-06-14	+			+				+					+					+		+									+																							10,23	+	+	+	+	+	+
1	2016-07-01				+				+					+					+												+																							11,98	+	+	+	+	+	+
1	2016-07-13	+			+				+					+					+		+									+																							8,81	+	+	+	+	+	+
1	2016-07-27	+			+				+					+					+												+																							6,89		+	+	+	+	+
1	2016-08-12	+			+		+		+		+		+	+					+	+	+	+								+																							6,02		+	+	+	+	+
1	2016-08-29	+			+		+		+				+	+					+	+	+	+								+																							13,26	+	+	+	+	+	+
1	2016-09-08	+			+		+		+				+	+					+	+																																5,40	+	+	+	+	+	+

1	2016-09-26	+			+		+	+	+		+	+					+	+		+								+												16,57	+	+	+	+	+	+
1	2016-10-11	+			+		+	+				+					+	+	+	+								+												13,20	+		+	+	+	+
1	2016-10-31	+			+		+	+	+			+					+	+	+	+								+												8,43	+	+	+	+	+	+
1	2016-12-29				+			+																															0,30	+		+	+	+	+
1	2017-02-15				+			+																															0,01			+	+		+
1	2017-03-14				+			+																															0,07			+	+	+	+
1	2017-06-16	+		+	+		+		+				+	+			+	+	+	+									+	+											4,68		+	+	+	+	+
1	2017-07-11	+			+		+	+	+			+					+	+	+	+									+											2,99	+	+	+	+	+	+
1	2017-07-19	+			+		+	+				+	+						+	+							+	+												2,86	+		+	+	+	+
1	2017-08-08	+			+			+				+							+																					3,48	+	+	+	+	+	+
1	2017-09-05	+			+		+	+	+						+		+		+	+							+			+	+						+					4,65	+	+	+	+	+	+
2	2013-08-11	+			+		+	+	+		+						+	+	+	+	+								+												6,46	+	+	+	+	+	+
2	2013-08-17	+	+	+	+		+	+			+	+		+			+	+	+	+				+			+	+	+										+	7,69	+	+	+	+	+	+
2	2013-08-24	+			+		+	+	+		+			+			+	+	+	+							+		+	+											4,88	+	+	+	+	+	+
2	2013-10-23	+			+		+	+	+								+	+	+	+									+											+	30,61	+	+	+	+	+	+
2	2014-07-16	+			+		+	+								+										+													0,73			+	+		+
2	2014-07-23	+			+		+	+								+		+									+												9,41	+	+	+	+	+	+
2	2014-07-29	+			+		+	+	+		+	+					+												+										5,35	+	+	+	+		+
2	2014-08-06	+			+		+	+	+		+						+		+									+												0,98	+	+	+	+		+
2	2014-08-12	+			+		+	+				+	+					+		+								+							+	+							3,53	+	+	+	+		+
2	2014-08-27	+			+		+	+								+																							0,73	+	+	+	+	+	+
2	2014-09-05	+			+		+		+	+		+					+	+	+	+							+		+		+	+		+	+						34,20	+	+	+	+	+	+
2	2014-09-19	+		+	+	+	+	+	+		+	+					+	+	+	+						+	+		+	+		+	+	+	+						5,09	+	+	+	+	+	+
2	2014-10-03	+			+	+	+	+	+	+	+	+					+	+	+	+						+	+	+	+	+	+				+						35,06	+	+	+	+		+
2	2014-10-17	+			+		+	+	+	+		+		+			+	+	+	+					+					+			+		+						5,19	+		+	+	+	+
2	2014-10-24	+			+		+	+	+			+		+			+	+	+	+							+	+	+			+					+			8,66	+		+	+		+
2	2014-11-12	+			+		+			+									+									+					+								16,35	+		+	+		+
3	2013-08-12	+			+		+	+				+							+	+																				1,10	+	+	+	+	+	+
3	2013-08-19				+		+	+																															0,67	+	+	+	+	+	+
3	2013-08-24				+		+	+													+																				0,38	+	+	+	+	+	+
3	2013-09-07	+			+		+	+	+		+						+	+	+	+						+			+	+										+	6,64	+	+	+	+	+	+
3	2013-10-24				+		+	+																															0,28	+		+	+	+	+
3	2014-07-14				+			+											+																						0,03				+		+
3	2014-07-22				+																																		0,20	+	+	+	+		+
3	2014-07-28				+			+																															0,42			+	+	+	+
3	2014-08-05				+			+																															0,58			+	+	+	+
3	2014-08-26	+			+		+	+	+	+	+						+		+	+								+		+						+			0,80	+	+	+	+	+	+
3	2014-09-07	+			+		+		+		+			+			+	+		+										+	+	+			+					10,50	+	+	+	+		+
3	2014-09-17	+			+		+	+	+		+	+					+		+								+	+	+										+	1,71	+	+	+	+	+	+
3	2014-09-30	+			+	+	+	+	+		+			+			+	+		+						+	+		+	+										+	0,22	+		+	+	+	+
3	2014-10-22	+			+		+	+					+				+	+		+			+					+	+	+					+					+	1,43	+		+	+	+	+
4	2013-08-13	+	+		+			+									+																							8,67	+	+	+		+	+
4	2013-08-19	+			+			+									+										+												10,22	+	+	+			+
4	2013-08-24	+			+		+	+				+							+	+	+								+												3,92	+	+	+	+	+	+
4	2013-09-07	+			+		+	+	+		+			+			+	+	+	+							+		+										+	9,84	+	+	+	+	+	+
4	2013-10-24				+			+																															0,04	+	+	+	+		+
4	2014-07-14	+			+		+																																	0,01	+	+	+	+		+
4	2014-07-22				+			+	+																														0,03	+					+
4	2014-07-28	+			+		+	+	+																														0,75	+	+	+	+	+	+
4	2014-08-04	+			+			+				+																													5,98		+	+	+	+	+
4	2014-08-12	+			+			+																		+								+					3,26	+	+	+			+
4	2014-08-31	+			+		+	+		+	+	+						+	+								+	+							+					6,85	+		+	+		+
4	2014-09-07	+			+		+	+				+															+														1,90	+			+	+	+
4	2014-09-15	+			+		+	+				+					+	+									+	+	+					+			+				2,23	+	+	+	+	+	+
4	2014-10-02	+			+		+	+					+					+		+								+	+	+			+		+	+					20,76	+		+	+		+
4	2014-10-14	+	+		+			+				+																+											+	0,09			+	+	+	+
4	2014-10-22	+			+			+				+					+		+									+						+			+		+	+	0,72	+		+	+	+	+
4	2014-11-12	+			+			+															+					+												0,07	+	+	+	+	+	+
5	2015-10-09				+		+					+					+	+	+	+							+	+												13,71	+	+	+	+	+	+
5	2015-10-28																																							0,34	+			+	+	+
5	2015-12-10																																							0,12	+			+	+	+
5	2015-12-29												+																												5,62	+			+	+	+
5	2016-01-18																																							0,10	+		+	+	+	+
5	2016-01-29																																							0,05				+	+	+

5	2016-02-17																								0,17			+	+	+	+
5	2016-03-03																								0,65	+		+	+	+	+
5	2016-03-16																								0,22				+	+	+
5	2016-03-30																								0,14		+	+	+	+	+
5	2016-04-15	+											+												0,23		+		+	+	+
5	2016-05-06	+	+								+														1,55	+	+		+	+	+
5	2016-05-24	+	+		+			+			+	+	+	+		+									4,86	+	+		+	+	+
5	2016-06-02	+	+					+			+		+			+									4,30			+	+	+	+
5	2016-06-14	+	+	+				+			+	+	+	+		+									5,99	+	+	+	+	+	+
5	2016-07-01	+						+					+												2,89	+	+	+	+	+	+
5	2016-07-13	+		+		+		+					+												2,72	+	+	+	+	+	+
5	2016-07-27	+				+		+																	2,19	+	+	+	+	+	+
5	2016-08-12	+				+	+	+																	1,50	+	+	+	+	+	+
5	2016-08-29	+	+	+	+	+	+	+			+	+													6,30	+	+	+	+	+	+
5	2016-09-08	+	+				+	+			+	+	+												15,33	+	+	+	+	+	+
5	2016-09-26	+	+		+		+	+			+	+	+	+			+								14,90	+	+	+	+	+	+
5	2016-10-11	+	+	+	+		+	+				+	+	+		+									8,97	+	+	+	+	+	+
5	2016-10-31	+						+																	0,45	+	+	+	+	+	+
5	2016-12-29	+		+				+																	0,15	+			+	+	+
5	2017-02-15	+	+	+																					0,05				+		+
5	2017-03-14	+		+																					0,02				+	+	+
5	2017-06-16	+	+		+			+			+		+	+											0,52	+			+	+	+
5	2017-07-11	+	+		+						+	+	+	+		+					+				5,12	+	+	+	+	+	+
5	2017-07-19	+	+	+	+					+	+	+	+	+			+						+	+	1,09	+	+	+	+	+	+
5	2017-08-08	+		+							+			+											0,41	+	+	+	+	+	+
5	2017-09-05	+	+	+	+			+	+	+	+		+	+	+	+	+	+	+	+					4,67	+	+	+	+	+	+

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