

## Supplementary Information

**Table S1.** Cyanotoxins content in aquatic invertebrates. Concentrations of microcystins are given in equivalents of MC-LR, and concentrations of saxitoxins are given in equivalents of STX. Concentrations represent the range for the different organs/tissues in <sup>(a)</sup>  $\mu\text{g g}^{-1}$  DW, <sup>(b)</sup>  $\text{ng individual}^{-1}$ , <sup>(c)</sup>  $\mu\text{g gC}^{-1}$  or <sup>(d)</sup>  $\text{pmol individual}^{-1}$ . Concentrations in  $\mu\text{g g}^{-1}$  WW were converted to  $\mu\text{g g}^{-1}$  DW multiplying by 10. MC = microcystins; NOD = nodularin; CYN = cylindrospermopsin; STX = saxitoxins; ANTX-a = anatoxin-a; BMAA =  $\beta$ -N-methylamino-L-alanine. I-EC = Ion-Exchange Chromatography; HPLC = High Performance Liquid Chromatography; LC-MS = Liquid Chromatography–Mass Spectrometry; ELISA = Enzyme Linked Immunosorbant Assay; PP2A = Phosphatase 2A Inhibition Assay; PP1 = Phosphatase 1 Inhibition Assay; MMPB = 3-metoxi-2methyl-4-phenylbutiric acid; EC-MS = Capillary Electrophoresis–Mass Spectrometry; GC-MS = Gas Chromatography–Mass Spectrometry; DW = dry weight; TEH = Total Extractable Hepatotoxins; ND = not detectable.

Group of organism/Taxa	Dominant cyanobacteria	Toxin	Analytical method	Concentration	Reference
<b>ZOOPLANKTON</b>					
Natural community	<i>Microcystis</i> spp.	MC-LR, -RR, -YR	I-EC	75.0–1387 <sup>(a)</sup>	Watanabe <i>et al.</i> (1992)[1]
Natural community	<i>M. aeruginosa</i>	MC-LR	HPLC/PP2A	ND–67.0 <sup>(a)</sup>	Kotak <i>et al.</i> (1996)[2]
<i>Daphnia magna</i> (Cladocera)— Lab experiment	<i>M. aeruginosa</i>	MC	ELISA	0.2–24.5 <sup>(a)</sup>	Thorstrup and Christoffersen (1999)[3]
<i>Daphnia magna</i> (Cladocera)— Field experiment	<i>M. aeruginosa</i>	MC	ELISA	0.3–15.5 <sup>(a)</sup>	
<i>D. parvula</i> (Cladocera)	<i>M. aeruginosa</i> , <i>Chroococcus minor</i>	MC	ELISA	ND–71.2 <sup>(b)</sup>	Mohamed (2001)[4]
Natural community	<i>M. aeruginosa</i>	MC	ELISA	0.3–16.4 <sup>(a)</sup>	Ferrão-Filho <i>et al.</i> (2002)[5]
<i>Eurytemora affinis</i> (Copepoda)	<i>Nodularia spumigena</i>	NOD	ELISA/PP1	0.031–0.101 <sup>(b)</sup>	Lehtiniemi <i>et al.</i> (2002)[6]
<i>Acartia bifilosa</i> (Copepoda)	<i>N. spumigena</i>	NOD	ELISA/PP1	0.011–0.013 <sup>(b)</sup>	Kozlowsky-Suzuki <i>et al.</i> (2003)[7]
<i>Eurytemora affinis</i> (Copepoda)	<i>N. spumigena</i>	NOD	ELISA/PP1	0.011–0.024 <sup>(b)</sup>	
<i>Acartia tonsa</i> (Copepoda)	<i>N. spumigena</i>	NOD	Radiolabeled NOD	0.37 <sup>(c)</sup>	Karjalainen <i>et al.</i> (2003)[8]
<i>Eurytemora affinis</i> (Copepoda)	<i>N. spumigena</i>	NOD	Radiolabeled NOD	0.60 <sup>(c)</sup>	
<i>Strobidium sulcatus</i> (Ciliata)	<i>N. spumigena</i>	NOD	Radiolabeled NOD	1.55 <sup>(c)</sup>	
<i>D. magna</i> (Cladocera)	<i>Cylindrospermopsis raciborskii</i>	CYN	HPLC	0.020–0.025 <sup>(b)</sup>	Nogueira <i>et al.</i> (2004)[9]
<i>D. magna</i> (Cladocera)	<i>Aphanizomenon issatschenkoi</i>	STXs	HPLC	0.07–0.38 <sup>(d)</sup>	Nogueira <i>et al.</i> (2004)[10]
Natural community	<i>M. aeruginosa</i> , <i>Planktothrix agardhii</i>	MC	LC-MS/HPLC/ELISA	ND–1226 <sup>(a)</sup>	Ibelings <i>et al.</i> (2005)[11]
Natural community	<i>M. aeruginosa</i>	MC	PP2A/HPLC	0.7–1.02 <sup>(a)</sup>	Lehman <i>et al.</i> (2005)[12]
Several species	<i>N. spumigena</i>	NOD	ELISA	ND–6.2 <sup>(a)</sup>	Karjalainen <i>et al.</i> (2006)[13]

Table S1. Cont.

<i>Eurytemora affinis</i> (Copepoda)	<i>N. spumigena</i>	NOD	ELISA/PP1	12.1–46.4 <sup>(a)</sup>	
Natural community	<i>Microcystis</i> sp.	MC	ELISA	5.0–25.0 <sup>(a)</sup>	Smith and Haney (2006)[14]
<i>D. pulicaria</i> (Cladocera)	<i>Planktothrix agardhii</i> , <i>P. rubescens</i>	MC	PP2A	74.0–1099 <sup>(a)</sup>	Oberhaus <i>et al.</i> (2007)[15]
Natural community	<i>Microcystis</i> sp., <i>C. raciborskii</i> , <i>Anabaena circinalis</i>	MC	ELISA	5.0–63.2 <sup>(a)</sup>	Rocha (2007)[16]
<i>Pleopsis polyphemoides</i> (Cladocera)	<i>N. spumigena</i>	NOD	ELISA	ND–23.6 <sup>(a)</sup>	Karjalainen <i>et al.</i> (2008)[17]
Natural community ( <i>E. affinis</i> and <i>Pseudodiaptomus forbesii</i> )	<i>Microcystis</i> sp.	MC	PP2A/HPLC	0.18–5.93 <sup>(a)</sup>	Lehman <i>et al.</i> (2008)[18]
Amphipod species	<i>Microcystis</i> sp.	MC	PP2A/HPLC	0.74–5.18 <sup>(a)</sup>	
Worms (unknown species)	<i>Microcystis</i> sp.	MC	PP2A/HPLC	12.0 <sup>(a)</sup>	
Jellyfish (unknown species)	<i>Microcystis</i> sp.	MC	PP2A/HPLC	2.2 <sup>(a)</sup>	
<i>Eurytemora affinis</i> (Copepoda)	<i>N. spumigena</i>	NOD	ELISA	0.04–0.76 <sup>(b)</sup>	Gorokhova and Engström-Öst (2009)[19]
<i>Eurytemora affinis</i> (Copepoda)	<i>N. spumigena</i>	NOD	HPLC-MS/LC-ESI-MS	0.0013–0.0143 <sup>(b)</sup>	Sopanen <i>et al.</i> (2009)[20]
Natural community	<i>Microcystis</i> sp.	MC	PP2A/HPLC	0.40–1.43 <sup>(a)</sup>	Lehman <i>et al.</i> (2010)[21]
Amphipod species	<i>Microcystis</i> sp.	MC	PP2A/HPLC	0.77 <sup>(a)</sup>	
<b>CRUSTACEANS</b>					
<i>Cherax quadricarinatus</i> (Decapoda)	<i>C. raciborskii</i>	CYN	HPLC	0.54–4.3 <sup>(a)</sup>	Saker and Eaglesham (1999)[22]
<i>Echinogammarus ischnus</i> (Amphipoda)—Field data	<i>M. aeruginosa</i>	MC	ELISA	0.2 <sup>(a)</sup>	Babcock-Jackson (2000)[23]
<i>Echinogammarus ischnus</i> (Amphipoda)—Lab experiment	<i>M. aeruginosa</i>	MC	ELISA	0.2–0.7 <sup>(a)</sup>	
<i>Procambarus clarkii</i> (Decapoda)	<i>M. aeruginosa</i>	MC	ELISA	0.4–2.9 <sup>(a)</sup>	Vasconcelos <i>et al.</i> (2001)[24]
<i>Mysis relicta</i> (Decapoda)	<i>N. spumigena</i>	NOD	ELISA/PP1	0.5–0.74 <sup>(a)</sup>	Engström-Öst <i>et al.</i> (2002)[25]
Crab—unidentified species (Decapoda)	Picoplanktonic cyanobacteria (unidentified)	MC	ELISA	ND–1.0 <sup>(a)</sup>	Magalhães <i>et al.</i> (2003)[26]
Shrimp—unidentified species (Decapoda)	Picoplanktonic cyanobacteria (unidentified)	MC	ELISA	ND–0.09 <sup>(a)</sup>	
<i>Palaemon modestus</i> (Decapoda)	<i>Microcystis</i> spp., <i>Anabaena</i> sp.	MC	LC-MS	ND–9.8 <sup>(a)</sup>	Chen and Xie (2005)[27]
<i>Procambarus clarkii</i> (Decapoda)	<i>Microcystis</i> spp., <i>Anabaena</i> sp.	MC	LC-MS	0.05–10.0 <sup>(a)</sup>	

Table S1. Cont.

<i>Macrobrachium nipponensis</i> (Decapoda)	<i>Microcystis</i> spp., <i>Anabaena</i> sp.	MC	LC-MS	ND–12.4 <sup>(a)</sup>	
<i>Panaeus monodon</i> (Decapoda)	<i>Oscillatoria</i> sp., <i>Pseudoanabaena</i> sp., <i>Microcystis</i> spp., <i>Aphanocapsa</i> sp., <i>Romeria</i> sp.	MC/NOD (TEH)	LC-MS	0.006–0.08 <sup>(a)</sup>	Kankaanpää <i>et al.</i> (2005)[28]
<i>Neomysis integer</i> (Decapoda)	<i>N. spumigena</i>	NOD	Radiolabeled NOD	0.77 <sup>(a)</sup>	Karjalainen <i>et al.</i> (2005)[29]
<i>Gammarus zaddachi</i> (Amphipoda)	<i>N. spumigena</i>	NOD	ELISA	ND–0.002 <sup>(c)</sup>	Korpinen <i>et al.</i> (2006)[30]
<i>Chasmagnathus granulatus</i> (Decapoda)	<i>M. aeruginosa</i>	MC	ELISA	0.02–0.32 <sup>(a)</sup>	Dewes <i>et al.</i> (2006)[31]
<i>Neohelice granulata</i> (Decapoda)	<i>Microcystis</i> sp.	MC	ELISA	0.3–0.34 <sup>(a)</sup>	Dewes <i>et al.</i> (2007)[32]
<i>Macrobrachium nipponensis</i> (Decapoda)	<i>Microcystis</i> spp.	MC	ELISA/LC-MS	ND–0.76 <sup>(a)</sup>	Song <i>et al.</i> (2007)[33]
<i>Macrobrachium nipponensis</i> (Decapoda)	<i>M. aeruginosa</i>	MC-LR, -LR-GSH, -LR-Cys	LC-MS	up to 4.9 <sup>(a)</sup>	Zhang <i>et al.</i> (2009)[34]
<i>Panaeus duorarum</i> (Decapoda)	Undetermined cyanobacterial blooms	BMAA	HPLC-LC/MS/MS	55–3042	Brand <i>et al.</i> (2010)[35]
<i>Callinectes sapidus</i> (Decapoda)	Undetermined cyanobacterial blooms	BMAA	HPLC-LC/MS/MS	ND–6976	
<i>Callinectes sapidus</i> (Decapoda)	<i>Microcystis</i> sp., <i>Anabaena</i> spp.	MC	ELISA	ND–8.20 <sup>(a)</sup>	Garcia <i>et al.</i> (2010)[36]
<b>MOLLUSKS</b>					
<i>Ellipio campanatus</i> , <i>Corbicula fluminea</i> (Bivalvia)	<i>Aphanizomenon flos-aquae</i>	STXs	HPLC	0.4–0.6 <sup>(a)</sup>	Sasner <i>et al.</i> (1984)[37]
<i>Anodonta cygnea</i> (Bivalvia)	<i>Oscillatoria agardhii</i>	MC	HPLC	70–130 <sup>(a)</sup>	Eriksson <i>et al.</i> (1989)[38]
<i>Anodonta cygnea</i> (Bivalvia)	<i>Oscillatoria agardhii</i>	MC	HPLC	30.0 <sup>(a)</sup>	Lindholm <i>et al.</i> (1989)[39]
Mussel—unidentified species (Bivalvia)	Unspecified	MC	CE-MS	6.0 <sup>(a)</sup>	Chen <i>et al.</i> (1993)[40]
<i>Alanthyrta condola</i> (Bivalvia)	<i>Anabaena circinalis</i>	STXs	HPLC	0.8–6.2 <sup>(a)</sup>	Negri and Jones (1995)[41]
<i>Mytilus galloprovincialis</i> (Bivalvia)	<i>M. aeruginosa</i>	MC	HPLC	1.0–10.5 <sup>(a)</sup>	Vasconcelos (1995)[42]
<i>Helisoma trivolvis</i> (Gastropoda)	<i>M. aeruginosa</i> , <i>A. flos-aquae</i> ,	MC	HPLC	ND–11.0 <sup>(a)</sup>	Kotak <i>et al.</i> (1996)[2]
<i>Lymnaea stagnalis</i> (Gastropoda)	<i>Gomphosphaeria</i> sp.	MC	HPLC	ND–96.0 <sup>(a)</sup>	
<i>Physa gyrina</i> (Gastropoda)	<i>Anabaena flos-aquae</i>	MC	HPLC	ND–121 <sup>(a)</sup>	
<i>Anodonta grandis simpsoniana</i> (Bivalvia)	<i>M. aeruginosa</i> , <i>Anabaena</i> spp., <i>Aphanizomenon flos-aquae</i>	MC	PP2A	0.02–1.35 <sup>(a)</sup>	Prepas <i>et al.</i> (1997)[43]
<i>Unio douglasiae</i> (Bivalvia)	<i>M. aeruginosa</i>	MC	HPLC-MS	12.0–27.0 <sup>(a)</sup>	Watanabe <i>et al.</i> (1997)[44]
<i>Anodonta woodiana</i> (Bivalvia)	<i>M. aeruginosa</i>	MC	HPLC-MS	2.1 <sup>(a)</sup>	

Table S1. Cont.

<i>Mytilus edulis</i> —Lab experiment (Bivalvia)	<i>M. aeruginosa</i>	MC	Limieux-GC-MS	3369 <sup>(a)</sup>	Williams <i>et al.</i> (1997)[45]
<i>Mytilus edulis</i> —Lab experiment (Bivalvia)	<i>M. aeruginosa</i>	MC	PP2A	2.0 <sup>(a)</sup>	
<i>Mytilus edulis</i> —Field sample (Bivalvia)	<i>M. aeruginosa</i>	MC	Limieux-GC-MS	ND–634 <sup>(a)</sup>	
<i>Mytilus edulis</i> —Field sample (Bivalvia)	<i>M. aeruginosa</i>	MC	PP2A	0.17–0.22 <sup>(a)</sup>	
<i>Mytilus galloprovincialis</i> (Bivalvia)	<i>M. aeruginosa</i>	MC	HPLC-MS	2.0–16.0 <sup>(a)</sup>	Amorim and Vasconcelos (1999)[46]
<i>Helisoma trivolvis</i> (Gastropoda)	<i>Microcystis</i> spp.	MC	HPLC	ND–40 <sup>(a)</sup>	Zurawell <i>et al.</i> (1999)[47]
<i>Lymnaea stagnalis</i> (Gastropoda)	<i>Microcystis</i> spp.	MC	HPLC	ND–140 <sup>(a)</sup>	
<i>Physa gyrina</i> (Gastropoda)	<i>Microcystis</i> spp.	MC	HPLC	ND–129 <sup>(a)</sup>	
<i>Dreissena polymorpha</i> (Bivalvia)— Field data	<i>M. aeruginosa</i>	MC	ELISA	0.213 <sup>(a)</sup>	Babcock-Jackson (2000)[23]
<i>Dreissena polymorpha</i> (Bivalvia)— Lab experiment	<i>M. aeruginosa</i>	MC	ELISA	up to 0.203 <sup>(a)</sup>	
<i>Mytilus edulis</i> (Bivalvia)	<i>Aphanizomenon</i> sp., <i>N. spumigena</i> , <i>Anabaena</i> sp.	NOD/MC	ELISA	ND–2.15 <sup>(a)</sup>	Sipiä <i>et al.</i> (2001)[48]
<i>Mytilus edulis</i> (Bivalvia)	<i>Aphanizomenon flos-aquae</i> , <i>N. spumigena</i>	NOD/MC	ELISA/ MALDI-TOF-MS	0.040–1.49 <sup>(a)</sup>	Sipiä <i>et al.</i> (2002)[49]
<i>Macoma balthica</i> (Bivalvia)	<i>Aphanizomenon flos-aquae</i> , <i>N. spumigena</i>	NOD/MC	ELISA	0.10–0.13 <sup>(a)</sup>	
<i>Anodonta woodiana</i> (Bivalvia)	<i>Microcystis</i> spp.	MC	HPLC	ND–12.6 <sup>(a)</sup>	Yokoyama and Park (2002)[50]
<i>Cristaria plicata</i> (Bivalvia)	<i>Microcystis</i> spp.	MC	HPLC	ND–297 <sup>(a)</sup>	
<i>Unio douglasiae</i> (Bivalvia)	<i>Microcystis</i> spp.	MC	HPLC	ND–420 <sup>(a)</sup>	
<i>Macoma balthica</i> (Bivalvia)	<i>N. spumigena</i>	TEH/NOD-like compound	ELISA/HPLC/ MALDI-TOF-MS	0.16–30.3 <sup>(a)</sup>	Lehtonen <i>et al.</i> (2003)[51]
<i>Sinotaia histrica</i> —Field sample (Gastropoda)	<i>M. aeruginosa</i> , <i>Anabaena spiroides</i>	MC	HPLC	ND–19.5 <sup>(a)</sup>	Ozawa <i>et al.</i> (2003)[52]
<i>S. histrica</i> —Lab experiment (Gastropoda)	<i>M. aeruginosa</i>	MC	HPLC	ND–436 <sup>(a)</sup>	
<i>Unio douglasiae</i> (Bivalvia)—15 °C	<i>Microcystis ichthyoblade</i>	MC	HPLC	ND–200 <sup>(a)</sup>	Yokoyama and Park (2003)[53]
<i>Unio douglasiae</i> (Bivalvia)—25 °C	<i>Microcystis ichthyoblade</i>	MC	HPLC	0–630 <sup>(a)</sup>	
<i>Dreissena polymorpha</i> (Bivalvia)	<i>M. aeruginosa</i>	MC	LC-MS/MMPB	9.1–16.3 <sup>(a)</sup>	Dionisio-Pires <i>et al.</i> (2004)[54]
<i>Pinctada máxima</i> (Bivalvia)	<i>Trichodesmium erythraeum</i>	STX	HPLC	0.73 <sup>(a)</sup>	Negri <i>et al.</i> (2004)[55]

Table S1. Cont.

<i>Anodonta cygnea</i> (Bivalvia)	<i>A. issatschenkoi</i>	STXs	HPLC	0.26 <sup>(a)</sup>	Pereira <i>et al.</i> (2004)[56]
<i>Anodonta cygnea</i> (Bivalvia)	<i>C. raciborskii</i>	CYN	HPLC	2.9–61.5 <sup>(a)</sup>	Saker <i>et al.</i> (2004)[57]
<i>Anodonta woodiana</i> (Bivalvia)	<i>Microcystis</i> spp.	MC-LR,-RR,-YR	LC-MS/HPLC	0.007–7.88 <sup>(a)</sup>	Chen and Xie (2005)[58]
<i>Hyriopsis cumingii</i> (Bivalvia)	<i>Microcystis</i> spp.	MC-LR,-RR,-YR	LC-MS/HPLC	0.015–20.65 <sup>(a)</sup>	
<i>Cristaria plicata</i> (Bivalvia)	<i>Microcystis</i> spp.	MC-LR,-RR,-YR	LC-MS/HPLC	0.017–38.48 <sup>(a)</sup>	
<i>Lamprotula leai</i> (Bivalvia)	<i>Microcystis</i> spp.	MC-LR,-RR,-YR	LC-MS/HPLC	0.004–13.23 <sup>(a)</sup>	
<i>Bellamyia aeruginosa</i> (Gastropoda)	<i>Microcystis</i> spp., <i>Anabaena</i> sp.	MC	LC-MS	ND–7.42 <sup>(a)</sup>	Chen <i>et al.</i> (2005)[59]
<i>L. stagnalis</i> —Juvenile (Gastropoda)	---	MC-LR	ELISA	0.068 <sup>(a)</sup>	Gérard <i>et al.</i> (2005)[60]
<i>L. stagnalis</i> —Adult (Gastropoda)	---	MC-LR	ELISA	0.014 <sup>(a)</sup>	
<i>Dreissena polymorpha</i> (Bivalvia)	<i>M. aeruginosa</i> , <i>Planktothrix agardhii</i>	MC	LC-MS/HPLC/ ELISA	ND–30.0 <sup>(a)</sup>	Ibelings <i>et al.</i> (2005)[11]
Clams (unknown species)	<i>M. aeruginosa</i>	MC	PP2A/HPLC	0.02 <sup>(a)</sup>	Lehman <i>et al.</i> (2005)[12]
<i>Mytilus edulis</i> (Bivalvia)	<i>N. spumigena</i>	NOD	LC-ESI-MS	ND–244.9 <sup>(a)</sup>	Svensen <i>et al.</i> (2005)[61]
<i>Mytilus edulis</i> (Bivalvia)	<i>N. spumigena</i>	NOD	LC-ESI-MS	0.03–13.75 <sup>(a)</sup>	Strogyloudi <i>et al.</i> (2006)[62]
<i>Hydrella menziesi</i> (Bivalvia)	<i>Anabaena</i> spp., <i>Microcystis</i> spp.	MC	LC-MS/ELISA	ND–0.97 <sup>(a)</sup>	Wood <i>et al.</i> (2006)[63]
<i>Melanoides tuberculata</i> (Gastropoda)	<i>C. raciborskii</i>	CYN	HPLC	ND–250 <sup>(a)</sup>	White <i>et al.</i> (2006)[64]
<i>Anodonta</i> sp.—Lake Kastoria (Bivalvia)	<i>M. aeruginosa</i> , <i>M. novacekii</i>	MC	PP2A	3.27 <sup>(a)</sup>	Gkelis <i>et al.</i> (2006)[65]
<i>Viviparus contectus</i> —Lake Pamvotis (Bivalvia)	<i>M. aeruginosa</i> ; <i>A. flos-aquae</i>	MC	PP2A/ELISA	1.66–3.50 <sup>(a)</sup>	
<i>Lymnaea stagnalis</i> —Juvenile (Gastropoda)	<i>P. agardhii</i>	MC	ELISA	ND–194.8 <sup>(a)</sup>	Lance <i>et al.</i> (2006)[66]
<i>Lymnaea stagnalis</i> —Adults (Gastropoda)	<i>P. agardhii</i>	MC	ELISA	ND–135.8 <sup>(a)</sup>	
<i>Cristaria plicata</i> (Bivalvia)	<i>Microcystis</i> spp.	MC-LR, -RR, -YR	LC-MS	0.004–24.69 <sup>(a)</sup>	Chen and Xie (2007)[67]
<i>Hyriopsis cumingii</i> (Bivalvia)	<i>Microcystis</i> spp.	MC-LR, -RR, -YR	LC-MS	0.005–13.64 <sup>(a)</sup>	
<i>Lamprotula leai</i> (Bivalvia)	<i>Microcystis</i> spp.	MC-LR, -RR, -YR	LC-MS	0.004–7.37 <sup>(a)</sup>	
<i>Mytilus edulis</i> (Bivalvia)	<i>N. spumigena</i>	NOD	LC-MS	up to 1.1 <sup>(a)</sup> 0.6–9.8 <sup>(b)</sup>	Kankaanpää <i>et al.</i> (2007)[68]
<i>Mytilus edulis</i> (Bivalvia)	<i>N. spumigena</i>	NOD	ELISA	0.003–0.14 <sup>(a)</sup>	Mazur-Marzec <i>et al.</i> (2007)[69]
<i>Cristaria plicata</i> (Bivalvia)	<i>Microcystis</i> spp.	MC	ELISA/LC-MS	0.045–0.73 <sup>(a)</sup>	Song <i>et al.</i> (2007)[33]
<i>Bellamyia aeruginosa</i> (Gastropoda)	<i>Microcystis</i> spp.	MC	ELISA/LC-MS	0.0656–2.34 <sup>(a)</sup>	
<i>Sinotaia histrica</i> (Gastropoda)	<i>Microcystis</i> spp., <i>A. flos-aquae</i>	MC	HPLC	0.07–23.2 <sup>(a)</sup>	Xie <i>et al.</i> (2007)[70]

Table S1. Cont.

<i>Potamopyrgus antipodarum</i> (Gastropoda)	<i>P. agardhii</i>	MC	ELISA	ND–4.9 <sup>(a)</sup>	Lance <i>et al.</i> (2008)[71]
Clams (unknown species)	<i>Microcystis</i> sp.	MC	PP2A/HPLC	0.15–0.37 <sup>(a)</sup>	Lehman <i>et al.</i> (2008)[18]
<i>Mytilus edulis</i> (Bivalvia)	<i>N. spumigena</i>	NOD	LC-MS	0.012–0.08	Sipiä <i>et al.</i> (2008)[72]
<i>Mytilus galloprocincialis</i> (Bivalvia)	<i>M. aeruginosa</i>	MC	ELISA	ND–0.38 <sup>(a)</sup>	Fernandes <i>et al.</i> (2009)[73]
<i>Sphaerium corneum</i> (Bivalvia)	<i>M. viridis</i> , <i>P. agardhii</i>	MC	ELISA	ND–0.04 <sup>(a)</sup>	Gérard <i>et al.</i> (2009)[74]
<i>Pisidium</i> sp. (Bivalvia)	<i>A. flos-aquae</i> , <i>M. aeruginosa</i> , <i>P. agardhii</i> , <i>A. circinalis</i>	MC	ELISA	ND–0.39 <sup>(a)</sup>	
<i>Potamopyrgus antipodarum</i> (Gastropoda)	<i>A. flos-aquae</i> , <i>M. aeruginosa</i> , <i>P. agardhii</i> , <i>A. circinalis</i>	MC	ELISA	ND–0.35 <sup>(a)</sup>	
<i>Planorbis planorbis</i> (Gastropoda)	<i>A. flos-aquae</i> , <i>M. aeruginosa</i> , <i>P. agardhii</i> , <i>A. circinalis</i>	MC	ELISA	ND–0.15 <sup>(a)</sup>	
<i>Radix auricularia</i> (Gastropoda)	<i>A. flos-aquae</i> , <i>M. aeruginosa</i> , <i>P. agardhii</i> , <i>A. circinalis</i>	MC	ELISA	ND–1.04 <sup>(a)</sup>	
<i>Radix ovata</i> (Gastropoda)	<i>A. flos-aquae</i> , <i>M. viridis</i> , <i>M. aeruginosa</i> , <i>P. agardhii</i> , <i>A. circinalis</i>	MC	ELISA	ND–0.20 <sup>(a)</sup>	
<i>Physella acuta</i> (Gastropoda)	<i>M. viridis</i> , <i>P. agardhii</i> , <i>A. flos-aquae</i> , <i>M. aeruginosa</i> , <i>A. circinalis</i>	MC	ELISA	ND–242.7 <sup>(a)</sup>	
<i>Aplexa hypnorum</i> (Gastropoda)	No cyanobacteria found	MC	ELISA	ND–0.07 <sup>(a)</sup>	
<i>Bellamya aeruginosa</i> (Gastropoda)	<i>M. aeruginosa</i>	MC-LR, -LR-GSH, -LR-Cys	LC-MS	ND–9.70 <sup>(a)</sup>	Zhang <i>et al.</i> (2009)[34]
<i>Bellamya aeruginosa</i> (Gastropoda)	<i>M. aeruginosa</i>	MC-LR,-RR,-YR	LC-MS	ND–12.2 <sup>(a)</sup>	Zhang <i>et al.</i> (2009)[75]
<i>Pomacea patula catemacensis</i> (Gastropoda)	<i>Cylindrospermopsis catemaco</i> , <i>C. philippinensis</i>	CYN	ELISA, HPLC, LC-MS	ND–0.00335 <sup>(a)</sup>	Berry and Lind (2010)[76]
				STXs	ND–0.00104 <sup>(a)</sup>
<i>Utterbackia imbecillis</i> (Bivalvia)	Undetermined cyanobacterial blooms	BMAA	HPLC-LC/MS/MS	251–261	Brand <i>et al.</i> (2010)[35]
<i>Crassostrea virginica</i> (Bivalvia)	Undetermined cyanobacterial blooms	BMAA	HPLC-LC/MS/MS	281–305	
<i>L. stagnalis</i> (Gastropoda)	<i>P. agardhii</i>	MC	LC-ESI-MS/MS ELISA	up to 32.4 <sup>(a)</sup> free MC	Lance <i>et al.</i> (2010)[77]

Table S1. Cont.

<i>L. stagnalis</i> (Gastropoda)	<i>P. agardhii</i>	MC	MMPB LC-ESI-MS/MS	up to 37.5 <sup>(a)</sup> bound MC	
<i>Physia acuta</i> (Gastropoda)	Several	MC	ELISA	ND–4.32 <sup>(a)</sup>	Lance <i>et al.</i> (2010)[78]
Several gastropod species	Several	MC	ELISA	0.02–1.26 <sup>(a)</sup>	
<i>L. stagnalis</i> (Gastropoda)— Caged experiment	Several	MC	ELISA	0.02–0.32 <sup>(a)</sup>	
<i>Potamopyrgus antipodarum</i> (Gastropoda)— Caged experiment	Several	MC	ELISA	0.01–0.02 <sup>(a)</sup>	

**Table S2.** Cyanotoxins content in aquatic vertebrates. Concentrations of microcystins are given in equivalents of MC-LR, and concentrations of saxitoxins are given in equivalents of STX. Concentrations represent the range for the different organs/tissues in  $\mu\text{g g}^{-1}$  DW. Concentrations in  $\mu\text{g g}^{-1}$  WW were converted to  $\mu\text{g g}^{-1}$  DW multiplying by 10 or by 5 (fish muscle). MC = microcystins; NOD = nodularin; CYN = cylindrospermopsin; STX = saxitoxins; ANTX-a = anatoxin-a; BMAA =  $\beta$ -N-methylamino-L-alanine. HPLC = High Performance Liquid Chromatography; LC-MS = Liquid Chromatography–Mass Spectrometry; ELISA = Enzyme Linked Immunosorbant Assay; PP2A = Phosphatase 2A Inhibition Assay; PP1 = Phosphatase 1 Inhibition Assay; GC-MS = Gas Chromatography–Mass Spectrometry; WW = wet weight; DW = dry weight. ND = not detectable.

Group of organism/Taxa	Trophic guild	Dominant cyanobacteria	Toxin	Analytical method	Concentration $\mu\text{g g}^{-1}$ DW	Reference
<b>FISH</b>						
<i>Melanotaenia eachamensis</i> (Melanotaeniidae)	Carnivore	<i>C. raciborskii</i>	CYN	HPLC	1.2	Saker and Eaglesham (1999)[22]
<i>Dorosoma cepedianum</i> (Clupeidae)	Omnivore	<i>M. aeruginosa</i>	MC	ELISA	2.97–11.91	Babcock-Jackson (2000)[23]
<i>Perca flavescens</i> (Percidae)	Carnivore	<i>M. aeruginosa</i>	MC	ELISA	0.46–2.30	
<i>Sander vitreus</i> (Percidae)	Carnivore	<i>M. aeruginosa</i>	MC	ELISA	0.50	
<i>Morone</i> spp. (Moronidae)	Carnivore	<i>M. aeruginosa</i>	MC	ELISA	0.62–2.33	
<i>Semolitis atromaculatus</i> (Cyprinidae)	Omnivore	<i>M. aeruginosa</i>	MC	ELISA	0.60–0.94	
<i>Neogobius melanostomus</i> (Gobiidae)—Field data	Carnivore	<i>M. aeruginosa</i>	MC	ELISA	0.48–1.87	
<i>Neogobius melanostomus</i> (Gobiidae)—Lab experiment	Carnivore	<i>M. aeruginosa</i>	MC	ELISA	up to 2.82	

Table S2. Cont.

<i>Platichthys flesus</i> (Pleuronectidae)	Carnivore	<i>Nodularia spumigena</i>	NOD	ELISA/PP1	0.05–0.06	Sipiä <i>et al.</i> (2000)[79]
<i>Gadus morhua</i> (Gadidae)	Carnivore	<i>Nodularia spumigena</i>	NOD	ELISA/PP1	ND–0.14	
<i>Tilapia rendalli</i> (Cichlidae)	Omnivore	<i>M. aeruginosa</i>	MC	HPLC/ELISA	ND–678	Magalhães <i>et al.</i> (2001)[80]
<i>Platichthys flesus</i> (Pleuronectidae)	Carnivore	<i>Aphanizomenon</i> sp., <i>N. spumigena</i> , <i>Anabaena</i> sp.	NOD/MC	ELISA	ND–0.40	Sipiä <i>et al.</i> (2001)[48]
<i>Platichthys flesus</i> (Pleuronectidae)	Carnivore	<i>Aphanizomenon flos-aquae</i> , <i>N. spumigena</i>	NOD/MC	ELISA/LC-MS/ MS	ND–0.41	Sipiä <i>et al.</i> (2002)[49]
<i>Gasterosteus aculeatus</i> (Gasterosteidae)	Planktivore	<i>N. spumigena</i>	NOD	ELISA/PP1	0.15–0.80	Engström-Öst <i>et al.</i> (2002)[25]
<i>Salmo trutta</i> m. <i>trutta</i> L. (Salmonidae)	Carnivore	<i>N. spumigena</i>	NOD-like compound	ELISA	0.011–1.60	Kankaanpää <i>et al.</i> (2002)[81]
Fish muscle—unidentified species	Unknown	Picoplanktonic cyanobacteria (unidentified)	MC	ELISA	ND–0.02	Magalhães <i>et al.</i> (2003)[26]
<i>Oreochromis niloticus</i> (Cichlidae)	Omnivore	<i>M. aeruginosa</i>	MC	ELISA	0.4–8.3	Mohamed <i>et al.</i> (2003)[82]
<i>Tilapia rendalli</i> (Cichlidae)	Omnivore	<i>M. aeruginosa</i>	MC	ELISA	0.02–28.0	Soares <i>et al.</i> (2004)[83]
<i>Hypophthalmichthys molitrix</i> (Cyprinidae)	Phytoplanktivore	<i>Microcystis viridis</i>	MC-RR, -LR	HPLC	49.2–115.3	Xie <i>et al.</i> (2004)[84]
<i>Jenynsia multidentata</i> (Anablepidae)	Omnivore	Purified toxin	MC-RR	HPLC	0.55–16.0	Cazenave <i>et al.</i> (2005)[85]
<i>Corydoras paleatus</i> (Callichthyidae)	Omnivore	Purified toxin	MC-RR	HPLC	0.2–196.3	
<i>Odontesthes bonariensis</i> (Atherinidae)	Carnivore	Undetermined cyanobacterial blooms	MC-RR	HPLC	ND–10.1	
<i>Perca fluviatilis</i> (Percidae)	Carnivore	<i>M. aeruginosa</i> , <i>Planktothrix agardhii</i>	MC	LC-MS/HPLC/ ELISA	17.0–51.0	Ibelings <i>et al.</i> (2005)[11]
<i>Gymnocephalus cernua</i> (Percidae)	Omnivore	<i>M. aeruginosa</i> , <i>Planktothrix agardhii</i>	MC	LC-MS/HPLC/ ELISA	9.0–194	
<i>Osmerus eperlanus</i> (Osmeridae)	Zooplanktivore	<i>M. aeruginosa</i> , <i>Planktothrix agardhii</i>	MC	LC-MS/HPLC/ ELISA	59–874	
<i>Platichthys flesus</i> (Pleuronectidae)	Carnivore	<i>N. spumigena</i>	TEH/NOD	ELISA/LC-MS	ND–2.230	Kankaanpää <i>et al.</i> (2005)[86]
<i>Hypophthalmichthys molitrix</i> (Cyprinidae)	Phytoplanktivore	<i>Microcystis</i> sp., <i>Anabaena</i> sp.	MC	HPLC	1.16–137.0	Xie <i>et al.</i> (2005)[87]
<i>Parabramis perkinensis</i> (Cyprinidae)	Herbivore	<i>Microcystis</i> sp., <i>Anabaena</i> sp.	MC	HPLC	0.66–7.5	
<i>Carassius auratus</i> (Cyprinidae)	Omnivore	<i>Microcystis</i> sp., <i>Anabaena</i> sp.	MC	HPLC	1.8–42.6	



Table S2. Cont.

<i>Cyprinus carpio</i> (Cyprinidae)	Omnivore	<i>Microcystis</i> sp., <i>Anabaena</i> sp.	MC	HPLC	0.65–6.46	
<i>Culter erythropterus</i> (Cyprinidae)	Carnivore	<i>Microcystis</i> sp., <i>Anabaena</i> sp.	MC	HPLC	2.0–13.7	
<i>Culter ilishaeformis</i> (Cyprinidae)	Carnivore	<i>Microcystis</i> sp., <i>Anabaena</i> sp.	MC	HPLC	2.73–5.0	
<i>Pseudobagrus fulvidraco</i> (Bagridae)	Carnivore	<i>Microcystis</i> sp., <i>Anabaena</i> sp.	MC	HPLC	2.0–8.0	
<i>Coilia ectenes</i> (Bagridae)	Carnivore	<i>Microcystis</i> sp., <i>Anabaena</i> sp.	MC	HPLC	ND–0.91	
<i>Esox lucius</i> (Esocidae)	Carnivore	<i>N. spumigena</i>	NOD	Radiolabeled NOD	0.41	Karjalainen <i>et al.</i> (2005)[29]
<i>Hypophthalmichthys molitrix</i> (Cyprinidae)	Phytoplanktivore	<i>M. aeruginosa</i>	MC-LR, -RR, -YR	LC-MS	ND–97.48	Chen <i>et al.</i> (2006)[88]
<i>Ascipenser gueldenstaedtii</i> (Acipenseridae)— Lake Pamvotis	Carnivore	<i>M. aeruginosa</i>	MC	PP2A/ELISA	0.30–1.44	Gkelis <i>et al.</i> (2006)[64]
<i>Carassius auratus</i> (Cyprinidae)—Lake Pamvotis	Omnivore	<i>M. aeruginosa</i>	MC	PP2A/ELISA	0.12–5.40	
<i>Carassius gibelio</i> (Cyprinidae)—Lake Kastoria	Omnivore	<i>M. aeruginosa</i> , <i>M. flos-aquae</i>	MC	PP2A/ELISA	0.09–0.72	
<i>Carassius gibelio</i> (Cyprinidae)—Lake Kerkini	Omnivore	<i>Microcystis</i> spp.	MC	PP2A/ELISA	0.14–2.80	
<i>Cyprinus carpio</i> (Cyprinidae)—Lake Kerkini	Omnivore	<i>Microcystis</i> spp.	MC	PP2A/ELISA	0.09–0.82	
<i>Cyprinus carpio</i> (Cyprinidae)—Lake Pamvotis	Omnivore	<i>M. aeruginosa</i> ; <i>A. flos-aquae</i>	MC	PP2A/ELISA	0.02–1.30	
<i>Cyprinus carpio</i> (Cyprinidae)—Lake Yliki	Omnivore	<i>Microcystis</i> spp.	MC	PP2A/ELISA	0.07–0.15	
<i>Perca fluviatilis</i> (Percidae)—Lake Kastoria	Carnivore	<i>M. aeruginosa</i> , <i>M. flos-aquae</i>	MC	PP2A/ELISA	0.07–1.60	
<i>Rutilus rubilo</i> (Cyprinidae)—Lake Pamvotis	Omnivore	<i>M. aeruginosa</i>	MC	PP2A/ELISA	0.02–0.39	
<i>Silurus aristoteles</i> (Siluridae)—Lake Pamvotis	Carnivore	<i>M. aeruginosa</i>	MC	PP2A/ELISA	0.09–0.24	
<i>Silurus glanis</i> (Siluridae)—Lake Pamvotis	Carnivore	<i>M. aeruginosa</i>	MC	PP2A/ELISA	0.04–0.16	
<i>Oreochromis niloticus</i> (Cichlidae)	Omnivore	<i>M. aeruginosa</i>	MC	ELISA/PP2A	0.2–25.0	Mohamed and Hussein (2006)[89]
<i>Rutilus rutilus</i> (Cyprinidae)	Omnivore	<i>N. spumigena</i>	NOD	LC-MS/ELISA	ND–0.9	Sipiä <i>et al.</i> (2006)[90]
<i>Platichthys flesus</i> (Pleuronectidae)	Carnivore	<i>N. spumigena</i>	NOD	LC-MS/ELISA	0.003–1.1	
<i>Lepomis gibbosus</i> (Centrarchidae)— Barbadoes Pond	Zooplanktivore	<i>Microcystis</i> sp.	MC	ELISA	0.02–0.06	Smith and Haney (2006)[14]
<i>Lepomis gibbosus</i> (Centrarchidae)— Lab. experiment	Zooplanktivore	<i>Microcystis</i> sp.	MC	ELISA	0.01–0.11	

Table S2. Cont.

<i>Oncorhynchus myskiss</i> (Salmonidae)— Lake Rotoiti	Carnivore	<i>Microcystis</i> sp., <i>Anabaena</i> sp.	MC	LC-MS/ELISA	0.04–0.46	Wood <i>et al.</i> (2006)[63]
<i>Oncorhynchus myskiss</i> (Salmonidae)— Lake Rotoehu	Carnivore	<i>Microcystis</i> sp., <i>Anabaena</i> sp.	MC	LC-MS/ELISA	0.28–0.79	
<i>Cyprinus carpio</i> (Cyprinidae)	Omnivore	<i>M. aeruginosa</i> , <i>M. ichtyoblade</i> , <i>A. flos-aquae</i>	MC	ELISA	0.07–1.32	Adamovský <i>et al.</i> (2007)[91]
<i>Hypophthalmichthys molitrix</i> (Cyprinidae)	Phytoplanktivore	<i>M. aeruginosa</i> , <i>M. ichtyoblade</i> , <i>A. flos-aquae</i>	MC	ELISA	0.05–1.24	
<i>Platichthys flesus</i> (Pleuronectidae)	Carnivore	<i>N. spumigena</i>	NOD	ELISA	ND–0.47	Mazur-Marzec <i>et al.</i> (2007)[69]
<i>Cyprinus carpio</i> (Cyprinidae)	Omnivore	<i>Anabaena</i> sp. (ANA 37)	ANTX-a	HPLC	0.03–0.77 <sup>(a)</sup>	Osswald <i>et al.</i> (2007)[92]
<i>Gasterosteus aculeatus</i> (Gasterosteidae)	Planktivore	<i>N. spumigena</i>	NOD	LC-MS	0.003–0.7	Sipiä <i>et al.</i> (2007)[93]
<i>Clupea harengus</i> (Clupeidae)	Planktivore	<i>N. spumigena</i>	NOD	LC-MS	ND–0.09	
<i>Carassius auratus auratus</i> (Cyprinidae)	Omnivore	<i>Microcystis</i> spp.	MC	ELISA/LC-MS	ND–3.64	Song <i>et al.</i> (2007)[33]
<i>Carassius auratus</i> (Cyprinidae)	Omnivore	<i>Microcystis</i> spp., <i>A. flos-aquae</i>	MC-RR	HPLC	0.49–0.82	Xie <i>et al.</i> (2007)[70]
<i>Cyprinus carpio</i> (Cyprinidae)	Omnivore	<i>Microcystis</i> spp., <i>A. flos-aquae</i>	MC-RR	HPLC	0.27–2.06	
<i>Silurus glanis</i> (Siluridae)	Omnivore	<i>Microcystis</i> spp., <i>A. flos-aquae</i>	MC-RR	HPLC	0.14	
<i>Hypophthalmichthys molitrix</i> (Cyprinidae)	Phytoplanktivore	<i>M. aeruginosa</i>	MC-RR, -LR	HPLC-MS	13.5–91.0	Zhang <i>et al.</i> (2007)[94]
<i>Clupea harengus membras</i> (Clupeidae)	Planktivore	<i>N. spumigena</i>	NOD	ELISA	up to 0.22	Karjalainen <i>et al.</i> (2008)[17]
<i>Sprattus sprattus</i> (Clupeidae)	Planktivore	<i>N. spumigena</i>	NOD	ELISA	up to 0.10	
<i>Gasterosteus aculeatus</i> (Gasterosteidae)	Planktivore	<i>N. spumigena</i>	NOD	ELISA	up to 0.80	
<i>Perca flavescens</i> (Percidae)	Carnivore	<i>M. aeruginosa</i>	MC	ELISA	0.017–1.18	Wilson <i>et al.</i> (2008)[95]
<i>Tilapia rendalli</i> (Cichlidae) Furnas Reservoir	Omnivore	<i>Pseudanabaena mucicola</i> , <i>Microcystis panniformis</i> , <i>M. aeruginosa</i>	MC	PP1-HPLC	0.005–24	Deblois <i>et al.</i> (2008)[96]
<i>Oreochromis niloticus</i> (Cichlidae)— Furnas Reservoir	Omnivore		MC	PP1-HPLC	0.06–112	
<i>Oreochromis niloticus</i> (Cichlidae)— Funil Reservoir	Omnivore	<i>M. panniformis</i> , <i>M. viridis</i> , <i>P. mucicola</i> , <i>Anabaena</i> cf. <i>crassa</i>	MC	PP1-HPLC	0.02–321	

Table S2. Cont.

<i>Hypophthalmichthys molitrix</i> (Cyprinidae)	Phytoplanktivore	<i>Microcystis</i> spp.	MC-LR, -RR, -YR	LC-MS	ND–5.36	Chen <i>et al.</i> (2009)[97]
<i>Carassius auratus</i> (Cyprinidae)	Omnivore	<i>Microcystis</i> spp.	MC-LR, -RR, -YR	LC-MS	0.04–0.27	
<i>Culter ilishaeformis</i> (Cyprinidae)	Carnivore	<i>Microcystis</i> spp.	MC-LR, -RR, -YR	LC-MS	ND–0.01	
<i>Cyprinus carpio</i> (Cyprinidae)	Omnivore	<i>Microcystis</i> spp.	MC-LR, -RR, -YR	LC-MS	0.002–0.064	
<i>Platichthys flesus</i> (Pleuronectidae)	Carnivore	<i>N. spumigena</i>	NOD	HPLC	ND–0.78	Persson <i>et al.</i> (2009)[98]
<i>Platichthys flesus</i> (Pleuronectidae)	Carnivore	<i>N. spumigena</i>	NOD	LC-MS	0.045–0.220	Vuorinen <i>et al.</i> (2009)[99]
<i>Hypophthalmichthys molitrix</i> (Cyprinidae)	Phytoplanktivore	<i>M. aeruginosa</i>	MC-LR, -LR-GSH, -LR-Cys	LC-MS	ND–29.1	Zhang <i>et al.</i> (2009)[34]
<i>Coilia ectenes</i> (Bagridae)	Carnivore	<i>M. aeruginosa</i>	MC-LR, -RR, -YR	LC-MS	ND–0.0447	Zhang <i>et al.</i> (2009)[100]
<i>Culter ilishaeformis</i> (Cyprinidae)	Carnivore	<i>M. aeruginosa</i>	MC-LR, -RR, -YR	LC-MS	ND–0.0581	
<i>Neosalanx taihuensis</i> (Salangidae)	Carnivore	<i>M. aeruginosa</i>	MC-LR, -RR, -YR	LC-MS	ND–0.00756	
<i>Hypophthalmichthys molitrix</i> (Cyprinidae)	Phytoplanktivore	<i>M. aeruginosa</i>	MC-LR, -RR, -YR	LC-MS	ND–4.19	
<i>Carassius auratus</i> (Cyprinidae)	Omnivore	<i>M. aeruginosa</i>	MC-LR, -RR, -YR	LC-MS	ND–0.2064	
<i>Carassius gibelio</i> (Cyprinidae)— Lakes in Greece	Omnivore	Several species	MC	ELISA	0.011–35.6	Papadimitriou <i>et al.</i> (2010)[101]
<i>Odontesthes bonariensis</i> (Atherinidae)	Carnivore	<i>Planktothrix agardhii</i> , <i>Anabaena</i> sp., <i>Microcystis</i> sp.	MC-LR, -RR, -YR, -LA	HPLC-MS/MS	ND–0.673	Amé <i>et al.</i> (2010)[102]
<i>Lutjanus griseus</i> (Lutjanidae)	Carnivore	Cyanobacterial blooms	BMAA	HPLC-C/MS/MS	ND–188	Brand <i>et al.</i> (2010)[35]
Mojarra (Gerreidae)	Carnivore	Cyanobacterial blooms	BMAA		ND–567	
<i>Sphoeroides spengleri</i> (Tetraodontidae)	Carnivore	Cyanobacterial blooms	BMAA		ND–455	
<i>Sphoeroides parvus</i> (Tetraodontidae)	Carnivore	Cyanobacterial blooms	BMAA		194–7351	
<i>Acanthostracion quadricornis</i> (Ostraciidae)	Omnivore	Cyanobacterial blooms	BMAA		34–47	
<i>Archosargus rhomboidalis</i> (Sparidae)	Omnivore	Cyanobacterial blooms	BMAA		484–2349	
<i>Haemulon parra</i> (Haemulidae)	Carnivore	Cyanobacterial blooms	BMAA		203–722	
<i>Haemulon sciurus</i> (Haemulidae)	Carnivore	Cyanobacterial blooms	BMAA		1723–3776	
<i>Amia calva</i> (Amiidae)	Carnivore	Cyanobacterial blooms	BMAA		554–2559	
<i>Atractosteus spatula</i> (Lepisosteidae)	Carnivore	Cyanobacterial blooms	BMAA		797–2290	
<i>Micropterus salmoides</i> (Centrarchidae)	Carnivore	Cyanobacterial blooms	BMAA		949–2388	

Table S2. Cont.

<i>Geophagus brasiliensis</i> (Cichlidae)	Omnivore	<i>C. raciborskii</i>	STXs	HPLC	0.12–0.20	Clemente <i>et al.</i> (2010)[103]
<i>Cyprinus carpio</i> larvae (Cyprinidae)	Omnivore	<i>M. aeruginosa</i>	MC-LR, -RR, -YR, -FR, -WR	HPLC-MS	0.17–0.27	El Ghazali <i>et al.</i> (2010)[104]
<i>Cyprinus carpio</i> larvae (Cyprinidae)	Omnivore	<i>M. aeruginosa</i>	MC-LR, -RR, -YR, -FR, -WR	HPLC-MS	0.22–0.55	El Ghazali <i>et al.</i> (2010)[105]
<i>Lates niloticus</i> (Latidae)	Carnivore	No information	MC-LR, -RR, -YR	HPLC-MS/MS	0.0097–0.28	Nyakairu <i>et al.</i> (2010)[106]
<i>Oreochromis niloticus</i> (Cichlidae)— Lake Mburo	Omnivore	No information	MC-LR, -RR, -YR	HPLC-MS/MS	0.731–13.12	
<i>Oreochromis niloticus</i> (Cichlidae)— Murchison Bay	Omnivore	No information	MC-LR, -RR, -YR	HPLC-MS/MS	0.048–14.79	
<i>Morone saxatilis</i> (Moronidae)	Zooplanktivore	<i>Microcystis</i> sp.	MC	PP2A	1.04–2.92	Lehman <i>et al.</i> (2010)[21]
<i>Menidia audens</i> (Atherinidae)	Zooplanktivore	<i>Microcystis</i> sp.	MC	PP2A	0.30–1.98	
<i>Chirostoma</i> spp. (Atherinidae)	Zooplanktivore	<i>Aphanizomenon</i> ; <i>Microcystis</i>	MC	ELISA	0.185	Berry <i>et al.</i> (2011)[107]
<i>Cyprinus carpio</i> (Cyprinidae)	Omnivore	<i>Aphanizomenon</i> ; <i>Microcystis</i>	MC	ELISA	0.05–0.94	
<i>Goodea</i> sp. (Goodeidae)	Phytoplanktivore	<i>Aphanizomenon</i> ; <i>Microcystis</i>	MC	ELISA	1.57–8.67	
<b>AMPHIBIANS</b>						
<i>Rana eperotica</i> (Ranidae)— Lake Pamvotis	Carnivore	<i>M. aeruginosa</i>	MC	PP2A/ELISA	0.26–0.47	Gkelis <i>et al.</i> (2006)[64]
<i>Rana ridibunda</i> (Ranidae)— Lake Gallikos	Carnivore	<i>M. aeruginosa</i>	MC	PP2A/ELISA	0.37–0.47	
<i>Bufo marinus</i> (Bufonidae) tadpoles	Phytoplanktivore	<i>Cylindrospermopsis</i> <i>raciborskii</i>	CYN	HPLC/MS-MS	0.61–8.95	White <i>et al.</i> (2007)[108]
<b>REPITILES</b>						
<i>Emys orbicularis</i> (Emydidae)	Carnivore	<i>Microcystis</i> spp.	MC-LR, -RR, -YR	PP2A/ Limieux-GC-MS	0.001–37.2	Nasri <i>et al.</i> (2008)[109]
<i>Mauremys leprosa</i> (Emydidae)	Omnivore	<i>Microcystis</i> spp.	MC-LR, -RR, -YR	PP2A/ Limieux-GC-MS	0.02–1,193	
<i>Pelodiscus sinensis</i> (Tryonichidae)	Carnivore	<i>Microcystis</i> spp.	MC-LR, -RR, -YR	LC-MS	0.011–0.021	Chen <i>et al.</i> (2009)[97]

Table S2. Cont.

BIRDS						
<i>Phoeniconaias minor</i> (Phoenicopteridae)	Omnivore	<i>Synechococcus bigranulatus</i> , <i>Spirulina subsalsa</i> , <i>Phormidium terebriformis</i> , <i>Oscillatoria willei</i>	MC ANTX-a	HPLC/MS	0.36 7.62	Krienitz <i>et al.</i> (2003)[110]
<i>Somateria mollissima</i> (Anatidae)	Carnivore	<i>N. spumigena</i>	NOD	LC-MS/ELISA	0.003–0.180	Sipiä <i>et al.</i> (2003)[111]
<i>Somateria mollissima</i> (Anatidae)	Carnivore	<i>N. spumigena</i>	NOD	LC-MS/ELISA	ND–0.198	Sipiä <i>et al.</i> (2006)[90]
<i>Somateria mollissima</i> (Anatidae)	Carnivore	<i>N. spumigena</i>	NOD	LC-MS/ELISA	0.003–0.052	Sipiä <i>et al.</i> (2008)[71]
<i>Coturnix coturnix japonica</i> (Phasianidae)	Omnivore	<i>Microcystis</i> sp.	MC	ELISA	0.0043–0.437	Pašková <i>et al.</i> (2008)[112]
<i>Anas platyrhynchos</i> (Anatidae)	Omnivore	<i>Microcystis</i> spp.	MC-LR, -RR, -YR	LC-MS	0.009–0.051	Chen <i>et al.</i> (2009)[97]
<i>Nycticorax nycticorax</i> (Ardeidae)	Omnivore	<i>Microcystis</i> spp.	MC-LR, -RR, -YR	LC-MS	0.003–0.082	

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