Table 2: Methods used to detect freshwater cyanobacterial producing hepatotoxins

Method	Genera targeted	Genes targeted in the toxin cluster	Sample origin	References
PCR	*Microcystis*	*mcyA, mcyC*	Malpas Dam (Australia)	[57]
	Microcystis	*mcyB*	Lake Wannsee (Germany)	[80]
	Nostoc	*mcyE*	Antarctic mats	[81]
Multiplex PCR	*Microcystis*	*mcyA,B,C,D,E,G*	Cultures, Spanish reservoirs	[82]
Real-time PCR	*Microcystis*	*mcyB*	Lake Wannsee (Germany)	[88]
	Microcystis	*mcyA*	Lake Mikata (Japan)	[89, 90]
	Microcystis	*mcyB*	Grangent reservoir (France)	[91]
	Planktothrix	*mcyA*	Paris suburban Lake (France)	[92]
	Planktothrix	*mcyA*	Cultures	[93]
	Cylindrospermopsis and CYN producers	*aoaA,B,C*	Cultures and Australian lakes, reservoirs and rivers	[95]
Microarray	*Anabaena, Microcystis, Planktothrix, Nostoc, Nodularia*	*mcyE, ndaF*	Cultures, lakes (Finland, Netherlands, France, Canada) and Baltic Sea	[98]