

## Electronic supplementary information (ESI)

**Table S1** Methods for the determination of MG, CV, and their metabolites

Analyte	Matrix	Pretreatment method	Detection system	LOD	Ref.
MG, CV	Environmental water	TC-IL-DLLME	HPLC-UV	0.086, 0.030 µg/L	4
MG	Environmental water	IL-HF-LPME	HPLC-UV	0.01 µg/L	5
MG, CV, LMG, LCV	Fish	IAC	HPLC-VIS	0.15, 0.1, 0.18 and 0.14 ng/g, respectively	6
MG, LMG	Fishpond water	-	ELISA	0.05 µg/L	7
MG, CV, LMG, LCV	Salmon	SPE	LC-MS/MS	0.17, 0.35, 0.15 and 0.17 µg/kg, respectively	8
MG, LMG	Aquatic species	SPE	LC-MS/MS	0.1 ng/g	9
MG, LMG	Fish	SPE	LC-MS/MS	0.13, 0.16 µg/kg	10
MG, LMG	Water	SPE	LC-vis/FLD; LC-MS/MS	0.05, 0.04 µg/L; 0.04, 0.03 µg/L, respectively	11
MG, CV	Water	MSPE	VIS	-	12

-: no mention;

TC-IL-DLLME: temperature-controlled ionic liquid dispersive liquid-liquid microextraction;

IAC: immunoaffinity column.