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Authors: Manoella Sibat, Christine Herrenknecht, H el ene Taiana Darius, M elanie Rou e, Mireille Chinain, Philipp Hess



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Detection of pacific ciguatoxins using liquid chromatography coupled to either low or high resolution mass spectrometry (LC-MS/MS)

Manoella Sibat^{a*}, Christine Herrenknecht^b, H  l  ne Taiana Darius^c, M  lanie Rou  d, Mireille Chinain^c, Philipp Hess^a

^a Ifremer, Laboratoire Phycotoxines, Rue de l'  le d'Yeu, 44311 Nantes, France;

manoella.sibat@ifremer.fr, philipp.hess@ifremer.fr,

^b LUNAM, Universit   de Nantes, MMS EA2160, Facult   de Pharmacie, 9 rue Bias, 44035 Nantes, France, christine.herrenknecht@univ-nantes.fr

^c Institut Louis Malard   (ILM), Laboratory of Toxic Microalgae - UMR 241-EIO, PO box 30, 98713 Papeete, Tahiti, French Polynesia; tdarius@ilm.pf, mchinain@ilm.pf

^d Institut de Recherche pour le D  veloppement (IRD) - UMR 241-EIO, PO box 53267, 98716 Pirae, Tahiti, French Polynesia; melanie.roue@ird.fr

* Corresponding author at: Ifremer/Laboratoire phycotoxines, Rue de l'  le D'Yeu, 44311 Nantes, France.

Tel.: +33 (2) 40 37 42 54. Fax: +33 (2) 02 40 37 42 41 E-mail address: manoella.sibat@ifremer.fr

Highlights

- MeOH improved selectivity and sensitivity for P-CTXs over ACN-based mobile phase
- HRMS fragmentation allowed for development of selective LRMS method
- LRMS method using $[M+NH_4]^+$ precursor gave better selectivity & less matrix effects
- Low LODs thanks to methanol-based mobile phase and $[M+NH_4]^+$ precursor ion
- HRMS 2- to 12-fold higher LODs but confirmed P-CTXs and eliminated artefacts

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