

LISTE DES PUBLICATIONS 2012-2014

GdR PHYCOTOX

AXE 4



1 = Equipe TRYPSIN (CNRS Gif/Yvette)
2 = Unité Toxicologie des contaminants (Anses Fougères)
3 = PHYC, Ifremer Nantes
4 = Unité Pesticides et Biotoxines marines (Anses Maisons Alfort)

2014 :

- FERRON, P.-J., HOGEVEEN, K, FESSARD, V, LE HEGARAT, L. (2014). Comparative analysis of the cytotoxic effects of okadaic acid-group toxins on human intestinal cell lines. *Mar Drugs*. 12(8):4616-34 (**Equipe 2**)
- FESSARD, V. (2014). Toxicity of okadaic acid/dinophysistoxins and microcystins on biological systems. In: *Toxins and biologically active compounds from microalgae. Vol. 2: Biological Effects and Risk Management*. G.P. Rossini (Ed). CRC Press Inc. Taylor & Francis Inc., Boca Raton, Florida, USA, pp. 253-282. ISBN 9781482231465. (**Equipe 2**)
- FLEMING, L.E., MC DONOUGH, N., AUSTEN, M., L, M., MOORE, M., HESS, P., DEPLEDGE, M.H., WHITE, M., PHILIPPART, K., BRADBROOK, P., SMALLEY, A. (2014). Oceans and Human Health: A Rising Tide of Challenges and Opportunities for Europe. *Mar. Environ. Res.* 2014, 99, 16-19. (**Equipe 3**)
- KITTLER K., FESSARD, V., MAUL, R., HURTAUD-PESSEL, D. (2014). CYP3A4 activity reduces the cytotoxic effects of okadaic acid in HepaRG cells. *Arch Toxicol* 88(8):1519-26 (**Equipe 2**)
- HENRI, J., LEIGHFIELD, T.A., LANCELEUR, R., HUGUET, A., RAMSDELL, J. S., FESSARD, V. (2014). Permeability of dihydro- and cysteine-brevetoxin metabolites across a Caco-2 cell monolayer. *Harmful Algae* 32 : 22-26 (**Equipe 2**)
- MATTEI, C., MOLGÓ, J., BENOIT, E. (2014). Involvement of both sodium influx and potassium efflux in ciguatoxin-induced nodal swelling of frog myelinated axons. *Neuropharmacology*, 85: 417-426. doi:10.1016/j.neuropharm.2014.06.001. (F.I. = 4,819) (**Equipe 1**)
- MOLGO, J., ARAOZ, R., BENOIT, E., IORGA, B.I. (2014). Cyclic imine toxins: chemistry, origin, metabolism, pharmacology, toxicology, and detection. In: *Seafood and Freshwater Toxins: Pharmacology, Physiology, and Detection. Third Edition*. L.M. Botana (Ed.). Taylor and Francis, LLC, Boca Raton, Florida USA, pp. 951-989. ISBN 9781466505148. (**Equipe 1**)

- MOLGO, J., ARAOZ, R., IORGA, B.I., BENOIT, E., ZAKARIAN, A. (2014). Cyclic imine neurotoxins acting on muscarinic and nicotinic acetylcholine receptors. In: Toxins and biologically active compounds from microalgae. Vol. 2: Biological Effects and Risk Management. G.P. Rossini (Ed). CRC Press Inc. Taylor & Francis Inc., Boca Raton, Florida, USA, pp. 116-146. ISBN 9781482231465. (**Equipe 1**)
- RUBIO, F., KAMP, L., CARPINO, J., FALTIN, E., LOFTIN, K., MOLGÓ, J., ARÁOZ, R. (2014). Colorimetric microtiter plate receptor-binding assay for the detection of freshwater and marine neurotoxins targeting the nicotinic acetylcholine receptors. *Toxicon* (sous presse), doi: 10.1016/j.toxicon.2014.08.073. (F.I. = 2,581) (**Equipe 1**)
- STIVALA, C.E., BENOIT, E., ARÁOZ, R., SERVENT, D., NOVIKOV, A., MOLGÓ, J., ZAKARIAN, A. (2014). Synthesis and biology of cyclic imine toxins, an emerging class of potent, globally distributed marine toxins. *Nat. Prod. Rep.*, (in press) DOI: 10.1039/C4NP00089G. (F.I. = 10,715) (**Equipe 1**)

2013

- DANESHIAN, M., BOTANA, L.M., DECHRAOUI BOTTEIN, M.Y., BUCKLAND, G., CAMPÀS, M., DENNISON, N., DICKEY, R.W., DIOGENE, J., FESSARD, V., HARTUNG, T., HUMPAGE, A., LEIST, M., MOLGO, J., QUILLIAM, M.A., ROVIDA, C., SUAREZ-ISLA, B.A., TUBARO, A., WAGNER, K., ZOLLER, O., DIETRICH, D. (2013). A roadmap for hazard monitoring and risk assessment of marine biotoxins on the basis of chemical and biological test systems. *ALTEX*, 30(4): 487-545. (I.F. = 3,63) (**Equipe 1+2**)
- GEIGER, M., DESANGLOIS, G., HOGEVEEN, K., FESSARD, V., LEPRÊTRE, T., MONDEGUER F., GUITTON, Y., HERVÉ, F., SÉCHET, V., GROVEL, O., POUCHUS, Y-F., HESS, P. (2013). Cytotoxicity, fractionation and dereplication of extracts of the dinoflagellate *Vulcanodinium rugosum*, a producer of Pinnatoxin G. *Mar. Drugs*, 11, 3350-3371 (**Equipes 1+3**)
- GRANDIČ, M., ARÁOZ, R., MOLGO, J., TURK, T., SEPČIĆ, K., BENOIT, E., FRANGEŽ, R. (2013). Toxicity of the synthetic polymeric 3-alkylpyridinium salt (APS3) is due to specific block of nicotinic acetylcholine receptors. *Toxicology*, 303C: 25–33. doi: 10.1016/j.tox.2012.10.013. (F.I. = 3,745) (**Equipe 1**)
- HESS, P., ABADIE, E., HERVÉ, F., BERTEAUX, T., SÉCHET, V., ARÁOZ, R., MOLGÓ, J., ZAKARIAN, A., SIBAT, M., RUNDBERGET, T., MILES, C.O., AMZIL, Z. (2013). Pinnatoxin-G is responsible for atypical toxicity in mussels (*Mytilus galloprovincialis*) and clams (*Venerupis decussata*) from Ingril, a French Mediterranean lagoon. *Toxicon*, 75: 16-26. doi: 10.1016/j.toxicon.2013.05.001. (F.I. = 2.924) (**Equipes 1 + 3**)
- MARROUCHI, R., BENOIT, E., LE CAER, J-P., BELAYOUNI, N., BELGHITH, H., MOLGO, J., KHARRAT, R. (2013). Toxic C17-sphinganine analogue mycotoxin, contaminating Tunisian mussels, causes flaccid paralysis in rodents. *Mar. Drugs*, 11: 4724-4740; doi:10.3390/md11124724 (F.I. = 3,978). (**Equipe 2**)

- MARROUCHI, R., ROME, G., KHARRAT, R., MOLGO, J., BENOIT, E. (2013). Analysis of the action of gymnodimine-A and 13-desmethyl spirolide C on the mouse neuromuscular system *in vivo*. *Toxicol.*, 75: 27-34. doi: 10.1016/j.toxicol.2013.08.050. (F.I. = 2,924) (**Equipe 1**)
- MOLGO, J., ARAOZ, R., BENOIT, E., IORGA, B.I. (2013). Physical and virtual screening methods for marine toxins and drug discovery targeting nicotinic acetylcholine receptors. *Expert. Opin. Drug Discov.*, 8(10): 1203-1223. doi: 10.1517/17460441.2013.822365. (F.I. = 2,297) (**Equipe 1**)
- PÉREZ RODRÍGUEZ L., VILARIÑO, N., MOLGO, J., ARAOZ, R., LOUZAO, M.C., TAYLOR, P., TALLEY, T., BOTANA, L.M. (2013). Development of a solid-phase receptor-based assay for the detection of cyclic imines using a microsphere-flow cytometry system. *Anal. Chem.*, 85: 2340-2347. doi: 10.1021/ac3033432. (F.I. = 5, 825) (**Equipe 1**)
- RODRÍGUEZ, L.P., VILARIÑO, N., MOLGO, J., ARAOZ, R., BOTANA, L.M. (2013). High-throughput receptor-based assay for the detection of spirolides by chemiluminescence. *Toxicol.*, 75: 35-43. doi:pii: 10.1016/j.toxicol.2013.06.015. (F.I. = 2,924) (**Equipe 1**)

2012:

- ARAOZ, R., RAMOS, S., PELISSIER, F., GUÉRINEAU, V., BENOIT, E., VILARIÑO, N., BOTANA, L.M., ZAKARIAN, A., MOLGO, J. (2012). Coupling the Torpedo microplate receptor-binding assay with mass spectrometry to detect cyclic imine neuro-toxins. *Anal. Chem.*, 84(23): 10445–10453. DOI: 10.1021/ac3027564. (I.F. = 5,856). (**Equipe 1**)
- AUNE, T., ESPENES, A., AASEN, J.A.B., WALTER, J., QUILLIAM, M.A., HESS, P., LARSEN S. (2012). Study of possible combined toxic effects of azaspiracid-1 and okadaic acid in mice via the oral route. *Toxicol.* 60 895-906. (**Equipe 3**)
- DEL FAVERO, G., FLORIO, C., CODAN, B., SOSA, S., POLI, M., SBAIZERO, O., MOLGO, J., TUBARO, A., LORENZON, P. (2012). The stretch-activated channel blocker Gd³⁺ reduces palytoxin toxicity in primary cultures of skeletal muscle cells. *Chem. Res. Toxicol.*, 25: 1912–1920. F.I. = 3.779 (**Equipe 1**)
- GRANDIČ, M., ARÁOZ, R., MOLGÓ, J., SEPČIĆ, K., TURK, T., BENOIT, E., FRANGEŽ, R. (2012). The non-competitive acetylcholinesterase inhibitor APS12-2 is a potent antagonist of skeletal muscle nicotinic acetylcholine receptors. *Toxicol. Appl. Pharmacol.*, 265: 221–228. I.F. = 3,991 (**Equipe 1**)
- JACKSON, J.J., STIVALA, C.E., IORGA, B.I., MOLGO, J., ZAKARIAN, A. (2012). Stability of cyclic imine toxins: interconversion of pinnatoxin amino ketone and pinnatoxin A in aqueous media. *J. Org. Chem.*, 77: 10435–10440. I.F. = 4,450 (**Equipe 1**)
- LEDREUX, A., FESSARD, V., KRYS, S., TROUSSELLIER, M., BERNARD, C. (2012). Response to Letter to the Editor regarding “Collaborative study for the detection of toxic compounds in shellfish extracts using cell-based assays. Part I: screening strategy and pre-validation study with lipophilic marine toxins” and “Part II: application to shellfish extracts spiked with lipophilic marine toxins.” *Analytical and Bioanalytical Chemistry* 404 (5) : 1613-1614 (**Equipes 2+4**)

- LEDREUX, A., SÉRANDOUR, A.-L., MORIN, B., DERICK, S., LANCELEUR, R., HAMLAOUI, S., FURGER, C., KRYS, S., BIRÉ, R., FESSARD, V., TROUSSELLIER, M., BERNARD, C. (2012). Collaborative study for the detection of toxic compounds in shellfish extracts using cell based-assays. Part II: application to shellfish extracts spiked with lipophilic marine toxins. *Analytical and Bioanalytical Chemistry*, 403(7):1995-2007 (**Equipes 2+4**)
- MONDEGUER, F., ANTIGNAC, J.P., GUITTON, Y., MONTEAU, F., LEBORGNE, S., HESS, P. (2012). Nouvelle stratégie de caractérisation non ciblée de type métabolomique au service de l'identification de composés bioactifs accumulés dans les mollusques bivalves. *Spectra Analyse* 284 (3) 24-33. (**Equipe 3**)
- SERANDOUR, A.-L., LEDREUX, A., MORIN, B., DERICK, S., AUGIER, E., LANCELEUR, R., HAMLAOUI, S., MOUKHA, S., FURGER, C., BIRE, R., FESSARD, V., TROUSSELLIER, M., BERNARD, C. (2012). Collaborative study for the detection of toxic compounds in shellfish extracts using cell based-assays. Part I: screening strategy and prevalidation study with pure lipophilic marine toxins. *Analytical and Bioanalytical Chemistry*, 403(7):1983-93 (**Equipes 2+4**)