

Presence of emergent pollutants in sediments of a tropical coastal lagoon in Baja California Sur, Mexico

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Introduction

Since the last decades, human needs and technology development allowed synthesis of new substances, of which is not well understood the probable environmental risks. These new substances had been referred as Emerging pollutants (EC), and in this group of pollutants we can find different compounds: flame retardants, pharmaceuticals and personal care products (PPCPs), detergents, and new types of herbicides and pesticides [1]. Particularly in Mexico, there are few studies for PPCPs because of the high cost-time for developing analytical methods for determining them. According to several studies, PPCPs on freshwater and marine environments, can affect the organisms living in these ecosystems. These compounds can affect some biological processes as growth and reproduction in some fish and mussels, moreover can cause significantly stress processes [2]. There are some marine organisms of commercial interest that could be on threat by being exposed to PPCPs on this coastal lagoon.

Results and Discussion: The expected results of this study show the existence of PPCPs on sediments of coastal lagoon of La Paz, as reported in other marine sediments studies. There are marine species of commercial interest (clams, mussels, and scallops) may be threatened by these PPCPs, due to possibly modifying biological processes as growth and sexual behaviour [3, 4].

[1]Liberty *et al.* (2006) *North American Journal of Aquaculture*, **69**, 44-52. [2] Martin-Díaz *et al.* (2009) *Environmental Toxicology and Pharmacology*, **28**, 237-242. [3] Long *et al.* (2013) *Environmental Toxicology and Chemistry*, **32**, 1702-1710. [4] Klosterhaus *et al.* (2013) *Environment International*, **54**, 92-99.