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Persistent and emerging pollutants detection on aquacultures oysters *(Crassostrea gigas)* from Northwestern Portugal coast (Ria de Aveiro, Aveiro district)

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Aquaculture is the most promissory way to produce seafood in large scale and could be an alternative to avoid the excessive predation to the natural populations, such as many fish species (codfish, sardines, tuna, salmon), shrimp, lobster and oyster. But, the water catchment directly to the sea from coastal zones and freshwater, usually used by aquacultures farms, needs to be monitored and investigated in order to ensure the water quality. The present study integrate a multidisciplinary team, responsible to research a wide range of parameters to guarantee the good practices and ensure the good seafood quality to the final consumers. Oyster tissues were analyzed to quantify the polycyclic aromatic hydrocarbons (PAHs), Butyltins (BTs), Organo Flame Retardants, Musks, UV filters, Miscellaneous and Fecal Biomarkers during a complete seasonal cycle. The local water and sediment were also analyzed to give baseline information about the aquaculture real state. The weight and size were also monitored during spring, summer, autumn and winter in order to evaluate which is the best time to consume these much appreciated seafood. Sampling was made on a traditional region of aquaculture activities on Northwestern Portugal coast (Mira Channel, Aveiro district). In general, no significant levels of the analyzed persistent and emergent pollutants were detected. These results are in agreement to the expectation, once that Oysters produced on these regions are largely consumed in Portugal and also in other European countries. So, in general the seafood is safe to human being consumption.

Biography

Gadelha J R has completed her PhD on Marine Biology/Ecotoxicology in 2015, from Universidade de Aveiro. Currently, she is a Doctoral research integrate at CIIMAR (Interdisciplinary Center of Marine and Environmental Research), working in an emblematic Project funded by Horizon 2020, called INSEAFOOD: Innovation and valorization of seafood products: meeting local challenges and opportunities. She has published 13 papers in reputed journals and participated on 13 projects, national and international, more than 40 conferences communications and published one book in 2007. On the last decade, she works on environmental risk assessment and applications of biological concepts to biotechnology and environmental safety.

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