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Enterovirus detection in mussels from Morocco by cell culture and RT-PCR

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The bivalve shellfish are filter feeder. They act as natural bio-filters in seawater and can thus efficiently bio-concentrate and bio-accumulate enteric viruses in their digestive tissue. In Morocco, shellfish sanitary quality analysis does not currently include enteric virus detection. Therefore, the objective of this study was to detect the presence of enterovirus in mussels (*Mytilus galloprovincialis*) collected from three wild populations in order to get an overview on the viral contamination in the hydric environment. Between February 2014 and February 2015, Two hundred and eighty-eight samples were collected and tested for viral contamination using cell culture and Real-Time--Polymerase Chain Reaction (RT-PCR) for Intratypic Differentiation (ITD) of poliovirus. The results by cell culture and RT-PCR showed that the consumption of mussels originated from a contaminated environment revealed a clear risk of contamination. For this reason, the presence of viruses in shellfish production area represents a potential health risk by causing serious illnesses (gastroenteritis, hepatitis, poliomyelitis.).

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