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Contents of cadmium, mercury and lead in fish from the Atlantic Sea (Morocco) determined by atomic absorption spectrometry

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As a part of a specific monitoring program, lead (Pb) cadmium (Cd) and mercury (Hg) concentrations in important species of fish from various fishing ports of the southern Kingdom of Morocco (*Sardina pilchardus*, *Scomber scombrus*, *Plectorhinchus mediterraneus*, *Trachurus trachurus*, *Octopus vulgaris*, *Boops boops*, *Sarda sarda*, *Trisopterus capelanus*, and *Conger conger*) were investigated by the Moroccan Reference Laboratory (NRL) for trace elements in foodstuffs of animal origin. The samples were analyzed for lead and cadmium by a graphite furnace atomic absorption spectrometry (GFAAS); and for mercury by cold vapor atomic absorption spectrometry (CVAAS). The results were expressed as µg/g of wet weight (w/w). The levels of Cd, Pb and Hg in muscles of fish were 0.009- 0.036, 0.013- 0.114 and 0.049- 0.194 µg/g respectively. The present study showed that different metals were present in the sample at different levels but within the maximum residual levels prescribed by the EU for the fish and shellfish from these areas, in general, should cause no health problems for consumers.

Biography

Adil Chahid is a final year PhD in Chemistry, Section Head of the Toxicology in the Regional Laboratory of Analyses and Research Agadir-Morocco/National Office of Food Safety (ONSSA), with an experience of over 10 years in the analyzes chemical laboratory.

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