DETECTION OF BIOGENIC AMINES IN MUSSEL (*Perna perna*) BY HPLC

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Biogenic amines are low molecular weight substances, formed mainly by decarboxylation of specific amino acids present in food through the action of bacterial enzymes; due to this fact, they may be related to bacterial growth and used as an indicator of microbial contamination. Amine determination in food is the great interest because consumption of products with high concentration represents a public health risk on account of their toxicological effects, and they can be used as an indirect bacteriological quality indicator. The aim of this study was determinate the levels of biogenic amines in mussel collected from a farm located in Niterói-RJ, Brazil. A total of 28 samples *in natura* (25 ± 0.2g each) were extracted (perchloric acid), derivatized (benzoyl chloride) and injected in HPLC system (Shimadzu LC/10AS) coupled to SPD/10AV UV-Vis detector (198 nm) and column Teknokroma Tracer Extrasil ODS2 (15 x 0.46 cm id., 5 μm) in isocratic solvent of acetonitrile:water (42:58). Presence of biogenic amines were identified by retention time and quantified by area peak using standards. The results showed the presence of tyramine, putrescine, cadaverine, spermidine and spermine in the samples. Tyramine was the most abundant amine 3300.28 mg.Kg\(^{-1}\); putrescine and cadaverine, with high values of 217.78 and 145.79 mg.Kg\(^{-1}\), respectively; and finally spermidine and spermine with the lowest values, 54.25 and 72.44 mg.Kg\(^{-1}\), respectively. Our finding suggest that the proposed HPLC method is suitable to determine biogenic amines in mussels.