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CONTENT OF HEAVY METALS IN ECOSYSTEM MONTENEGRIN COAST AS A RESULT OF ENVIRONMENTAL POLLUTION

Anthropogenic seawater pollution with heavy metals has significantly increased in past decades. These pollutants aim to integrate in bottom sediments, making sediments in ecosystems in areas with constant inflow of heavy metals highly contaminated.

Currently, in the country and abroad, numerous investigations focused on analysis of environmental protection and improvement, particularly water as a sensitive and limited resource, is being conducted. One of main environmental tasks is water quality monitoring, i.e. monitoring of the possible presence of harmful substances as well as determining their concentrations in water. Monitoring of marine environment trace metals pollution, which represent a basis for the control of pollution of the marine environment is usually limited by performance and detection limits of the existing analytical techniques, but also by the general lack of interest, since rivers and oceans have for quite some time been used for disposal of various wastes.

In recent decades anthropogenic activities (agricultural, urban and industrial) have led to increased pollution of marine ecosystems, especially in the bays. As a consequence of these actions, pollutants get into the water and often cause irreversible changes in marine ecosystem. Beside these pollutants, heavy metals are of the major concern due to their persistence and bio-accumulative nature. Heavy metals can be introduced into the aquatic environment and accumulate in sediments by disposal of liquid effluents, chemical lichgates and runoff originating from domestic, industrial and agricultural activities, as well as atmospheric deposition.

Therefore, investigations of the south-eastern Adriatic marine environment quality have been intensified in the last decade monitoring sea water, biota and sediment quality related to heavy metals pollution along the Montenegrin coastal area.

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