**Abstract**

In the present experiment effect of electroplating industrial effluent chromium on the behavioral responses of freshwater air-breathing cat fish *Mystus cavasius* was studied. The toxicity of chromium to aquatic life is strongly influenced by the form of chromium and quality of water. The two most prevalent chromium forms found in plating industry waste water are hexavalent chromium (Cr+6) and trivalent chromium (Cr+3). The fishes exhibited various behavioral responses – locomotory, physiological, neurological and morbidity responses under influence of chromium industrial effluent. One of the major advantages of using data on behavioral effects is that they are more sensitive indicators of potential for impacts on survival in the filed than are measures of lethality. Study noted the possible utility of the behavior responses as rapid biomonitory assessment technique for qualitative evaluation of various industrial pollutants.