

## عنوان مقاله:

Evaluation of using metallothionein as a biomarker of Hg pollution in *Scatophagus argus* for marine pollution biomonitoring

## محل انتشار:

سیزدهمین همایش صنایع دریایی (سال: 1390)

تعداد صفحات اصل مقاله: 6

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## خلاصه مقاله:

The effect of mercury exposure on total MT response and bioaccumulation under control and acute Hg exposure were investigated in scats (*Scatophagus argus*). scats were exposed to different Hg concentrations (10,20,30 µg/L) during 24,48,72 hours. Total MT levels were determined by Enzyme-linked Immunosorbent assay (ELISA) method. Mercury contents were determined through cold Vapour atomic Absorption spectrometry. Induction of MT during exposure was tissue specific, displaying different response pattern in gill and liver. Mercury accumulated much stronger in liver than gill and the latter also showed lower MT level. MT biosynthesis in liver showed a significant increase after exposure to different Hg concentration during different times. This increase was significantly correlated with Hg bioaccumulation. By contrast, in gills presence of different Hg concentration during different times did not significantly modify total MT except for 72hrs at 30µg/L. Our results suggest that this form of MT existing in *S. argus* was Hg-inducible. This could be extended the use of MT in *S. argus* as a biomarker of mercury in marine pollution biomonitoring

## کلمات کلیدی:

*Scatophagus argus*, metallothionein, Bioaccumulation, Biosynthesis, mercury, Biomarker

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/138936>

