عنوان مقاله:

بررسی تغییرات هماتولوژی و شاخص های استرس ماهی فیتوفاگ (Hypophthalmichthys molitrix) در مواجهه با غلظت های کشنده و تحت کشنده کلرید سرب

محل انتشار:

فصلنامه محیط زیست جانوری, دوره 12, شماره 2 (سال: 1399)

تعداد صفحات اصل مقاله: 10

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خلاصه مقاله:

Importance of the fish health diagnosis will be confirmed by aquaculture industrial development. Blood indices are useful biomarkers to assess the physiological status of aquaculture in response to applied stress and the changes in the fish body exactly in response to pollutants. In this study the lethal concentration of lead was determine in the ۳۸.۰۹ ppm through calculation of carp exposed to lead chloride at ۲۴, ۴۸, ۷۲ and ۹۶ hours with the probit analysis, then in a separate experiment, fish were exposed at the acute and subacute treatments of lead chloride for ۹۶ hours (۱۰ and ۵۰ percent of LC۵۰ ۹۶h) and a control group each with ۳ replicates were placed.After sampling, hematological and biochemical indices such as hematocrit, hemoglobin, red blood cell, total number of white blood cells and red and differential count of blood cell, glucose, cortisol and total protein were studied. The results showed a significant reduction in red blood cells, hematocrit, hemoglobin and an increase in the number of neutrophils by increasing the concentration of the toxin (P<۰.۰۵). Also it was significantly increased of glucose, cortisol observed in biochemical parameters and also a significant reduction in total protein (P<۰.۰۵). As a result, it can be stated that heavy metal lead .could have physiological lesion and secondary stress response in fihses even under sub acute concentrations

کلمات کلیدی:

آلودگی, هماتولوژی, سرب (Pb), فیتوفاگ, فلزات سنگین