

## METALLIC STUDY OF THE INVASIVE SPECIES *Cronius ruber*. ASSESSMENT OF TOXIC RISK.

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### Abstract:

Three types of toxic heavy metals (Cd, Pb and Hg) were analyzed in the new invasive species present in the Canary Islands, *Cronius ruber*. The high growth rate it presents and its wide variety in terms of its diet is a problem for the canarian marine ecosystem. The study was carried out by Electrothermal Vaporization Atomic Absorption Spectrometry (GF-AAS) and Cold Vapor Atomic Absorption Spectrophotometry (CV-AAS). Significant differences were found regarding the factors of location and gender. In the case of Cd in muscle tissue, depending on the location and sex of the specimens, The females present in El Pajar presented significant differences ( $0.008 \pm 0.006$  mg/kg), having a higher concentration of this metal in their tissue, compared to males from the same locality ( $0.002 \pm 0.001$  mg/kg) with males ( $0.001 \pm 0.001$  mg/kg) and females ( $0.004 \pm 0.003$  mg/kg) of Agaete. On the other hand, it determined that the intake of this animal does not pose any toxic risk to public health. Also, the levels obtained in the muscle tissue of this species do not exceed the established metal limits. In such a way, that its consumption together with other activities that can be carried out by an outpost can help control the proliferation of this species on the canary coasts.

**Key words:** Heavy metals, *Cronius ruber*, Invasive species, GF-AAS, CV-AAS

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