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Authors: Cong Yuan, Meng Li, Yao Zheng, Ying Zhou, Feili

Wu, Zaizhao Wang

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ACCEPTED MANUSCRIPT

Accumulation and detoxification dynamics of Chromium and antioxidant

responses in juvenile rare minnow, Gobiocypris rarus

Cong Yuan, Meng Li, Yao Zheng, Ying Zhou, Feili Wu, Zaizhao Wang*

College of Animal Science and Technology, Northwest A&F University, Shaanxi Key

Laboratory of Molecular Biology for Agriculture, Yangling, Shaanxi 712100 China

*Corresponding Author:

Zaizhao Wang, PhD

College of Animal Science and Technology

Northwest A&F University

22 Xinong Road

Yangling, Shaanxi 712100 China

Tel: +86-29-87092139

Fax: +86-29-87092164

E-mail: zzwang@nwsuaf.edu.cn

Highlights

• The ability to resist and detoxify Cr^{6+} was strong in *G. rarus* juveniles.

• GST and MT proteins may be involved in the detoxification of Cr⁶⁺.

• Antioxidases exhibited an obvious response to environmental stress.

• The capability of antioxidant enzyme systems to recover was strong.

Abstract

Hexavalent chromium (Cr⁶⁺) compounds are hazardous via all exposure routes. To

explore the dynamics of Cr accumulation and elimination and to reveal the mechanisms

underlying detoxification and antioxidation in juvenile Gobiocypris rarus, one-month

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