

# Turkish Journal of Zoology

Turkish Journal


of

Zoology

Behavioural Abnormalities of *Cyprinion watsoni* on Exposure to Copper and Zinc

Syed Lal SHAH

Department of Biology, Faculty of Sciences, University of Ankara,  
Ankara - TURKEY

 [Keywords](#)  
 [Authors](#)



[zool@tubitak.gov.tr](mailto:zool@tubitak.gov.tr)

[Scientific Journals Home](#)  
[Page](#)

**Abstract:** *Cyprinion watsoni* were exposed to three treatments of copper (0.03, 0.06, 0.12 mg/L) and three treatments of zinc (0.5, 3.0, 7.0 mg/L) for a period of one week to allow behavioural changes to be observed. None of the treatments caused mortality. Treatment with 0.03 mg Cu/L caused little change in fish behaviour; however, 0.06 mg Cu/L caused increased swimming activity and breathing movements. The highest treatment of copper (0.12 mg Cu/L) caused lethargy and loss of equilibrium in *C. watsoni*. Similarly, the lowest concentration of zinc (0.5 mg/L) caused no visible change in fish behaviour; however, with 3.0 mg Zn/L, fish tended to swim faster and showed an increased breathing rate. The highest concentration of zinc (7.0 mg/L) resulted in increased lethargy and a tendency of loss of equilibrium in fish.

**Key Words:** *Cyprinion watsoni*, Copper, Zinc, Behavioural abnormalities.

---

Turk. J. Zool., **26**, (2002), 137-140.

Full text: [pdf](#)

Other articles published in the same issue: [Turk. J. Zool., vol.26, iss.1.](#)