

Impact of Waterborne Copper on the Structure of Gills and Hepatopancreas and its Impact on the Content of Metallothionein in Juvenile Giant Freshwater Prawn *Macrobrachium rosenbergii* (Crustacea: Decapoda)

Na Li · Yunlong Zhao · Jian Yang

Published online: 17 March 2009
© Springer Science+Business Media, LLC 2009

**Erratum to: Arch Environ Contam Toxicol 52(1):73–79
DOI 10.1007/s00244-005-0214-5**

An incorrect version of Fig. 1 was printed in this paper.
The corrected version is reprinted on the following page.

The online version of the original article can be found under
doi:[10.1007/s00244-005-0214-5](https://doi.org/10.1007/s00244-005-0214-5).

N. Li · Y. Zhao
School of Life Science, East China Normal University,
Shanghai 200062, People's Republic of China

J. Yang (✉)
Key Laboratory of Ecological Environment and Resources of
Inland Fisheries, Freshwater Fisheries Research Center,
Chinese Academy of Fishery Sciences, Wuxi 214081,
People's Republic of China
e-mail: yangj@ori.u-tokyo.ac.jp

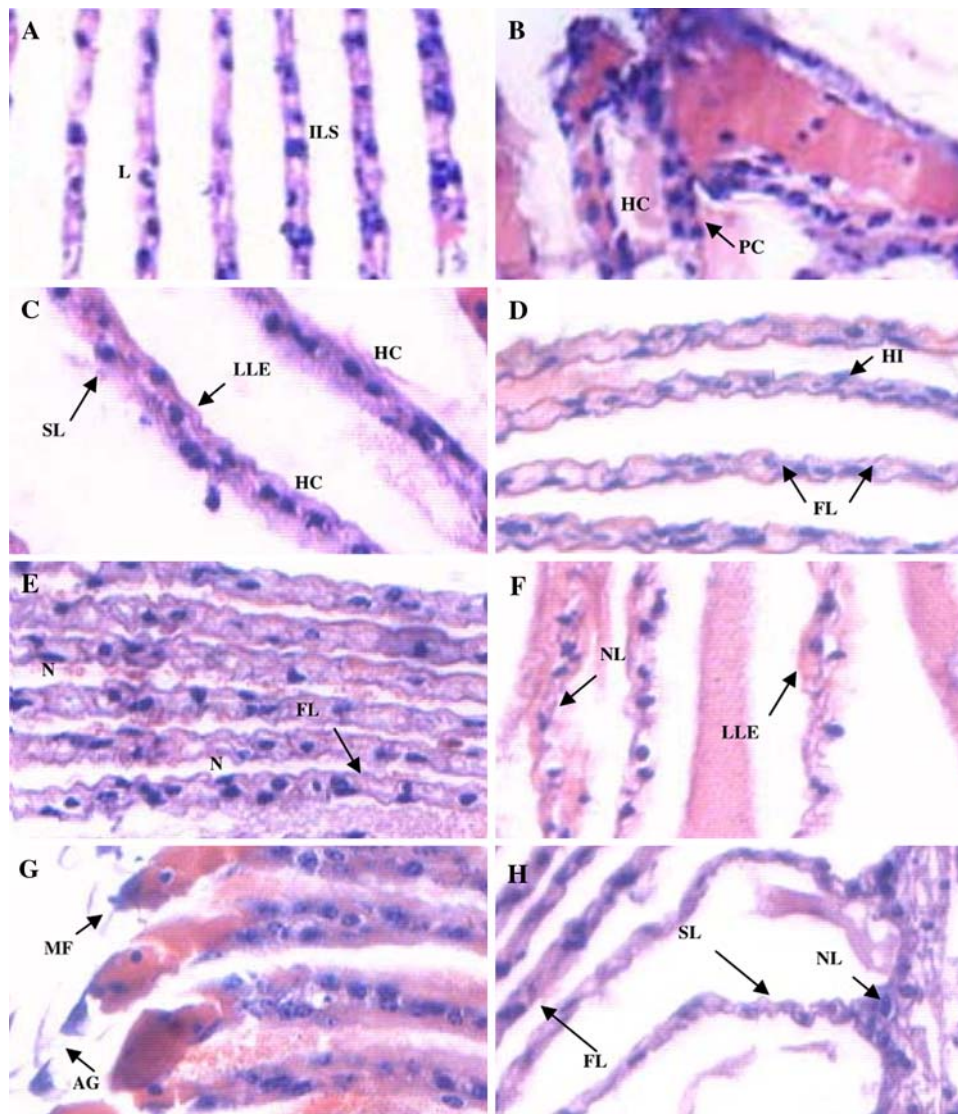


Fig. 1 Effects of waterborne copper on the microstructure of gills from juvenile *Macrobrachium rosenbergii*. **a** Typical organization of the gills (control). Gill lamellae (L) with uniform interlamellar space (ILS), $\times 200$; **b** Typical organization of the gills (control). Normal hemocoelic space with the optimum number of hemocytes (HC) and pillar cells (PC) were found to extend into the lamellar sinus, $\times 400$; **c** Exposure to 0.01 mg/L copper. Swelling of gill lamellae (SL), lifting of lamellar epithelium (LLE) and the accumulation of hemocytes (HC) in the hemocoelic space of the gill lamellae, $\times 400$; **d** Exposure to 0.05 mg/L copper. Hemocytic infiltration (HI) in the

hemocoelic space and fusion of gill lamellae (FL) in test prawns, $\times 400$; **e** Exposure to 0.1 mg/L copper. Narrower (N) or obstructed hemolymph vessels and fusion of gill lamellae (FL) in test prawns, $\times 400$; **f** Exposure to 0.2 mg/L copper. Necrotic gill lamellae (NL) and lifting of lamellar epithelium (LLE) in test prawns, $\times 400$; **g** Exposure to 0.3 mg/L copper. Abnormal gill tips (AG) and malformation (MF) at the tips of the gills in test prawns, $\times 400$; **h** Exposure to 0.4 mg/L copper. Fusion of gill lamellae (FL), swelling of gill lamellae (SL), and necrotic gill lamellae (NL) in test prawns, $\times 200$