Zinc and calcium to combat cadmium toxicity in teleost

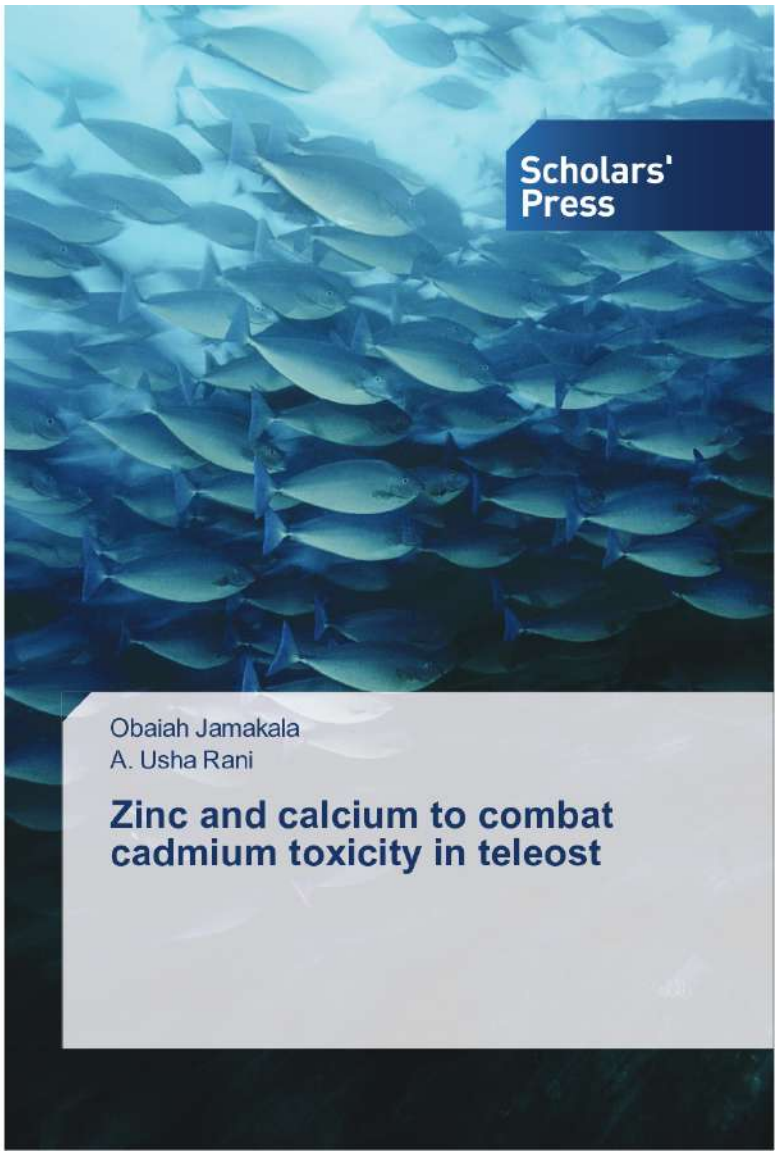
The natural aquatic bodies are extensively contaminated with heavy metals like cadmium (Cd), mercury (Hg), lead (Pb) and arsenic (As) etc., released from domestic, industrial and other anthropogenic activities. This may cause serious effects on the ecological balance of the recipient environment. Among the heavy metals Cd is one of the most deleterious heavy metal pollutants in environment, either terrestrial or aquatic. It is a non-essential heavy metal having no biological significance in vertebrates and can be found in waters that receive residues from industrial processes associated with the refining of other metals. A small step towards this, the present work is carried out to study the Cd induced bioaccumulation, antioxidant mechanism and purification and quantification of metallothionein protein in liver, kidney, brain, gill and muscle tissues of freshwater fish Oreochromis mossambicus (Tilapia) with reference to the nutrient elements (zinc and/or calcium) supplementation against Cd induced toxicity.

Prof. A. Usha Rani was born in 1959 and got her M.Sc., and Ph.D. degrees from Sri Venkateswara University, Tirupati, Andhra Pradesh, India. She is working as Professor in the Department of Zoology. She got International and National awards from various Organizations.She published more than 70 research papers in International and National journals.

978-3-659-84336-5

Cadmium Toxicity: Zinc And Calcium

Jamakala, Rani



Scholars' Press

Obaiah Jamakala
A. Usha Rani

Zinc and calcium to combat cadmium toxicity in teleost