EFFECTS OF THIOURACIL AND THYROXINE ON ENZYMES, NUCLEOTIDE AND PROTEIN PROFILE OF A CATFISH

G. Tripathi, J. Shasmal, H. Singh and N. Bandooni
Department of Zoology, J.N.V. University, Jodhpur-342033, India
email: drgst@rediffmail.com.
(Accepted 13 February 2009)

ABSTRACT – Effects of thiouracil and thyroxine on catalase (CAT), lactate dehydrogenase (LDH), DNA, RNA and protein of brain, liver, gill and skeletal muscle of Heteroneustes fossilis were investigated. Exposure of thiouracil, the specific activity of catalase and lactate dehydrogenase (LDH) as well as DNA, RNA and protein content in different tissues were studied. Injection of thyroxine to thiouracil treated fish increased all these biochemical constituents. The study suggests that anti-thyroidal effects can be abolished by exogenous administration of thyroxine in fish.

Keywords: Thiouracil, thyroxine, CAT, LDH, RNA, DNA, protein.