J. Exp. Zool. India Vol. 14, No. 2, pp. 587-589, 2011 *ISSN 0972-0030*

EVALUATION OF BIOCHEMICAL CHANGES INDUCED BY LINDANE AND CHLORPYRIFOS IN A FRESH WATER CATFISH *CLARIAS BATRACHUS* (BLOCH) DURING SPAWNING PHASE

V. K. Tripathi, Nitya Singh, D. B. Mishra and R. C. Gupta

Department of Zoology, T. D. Postgraduate College, Jaunpur – 222 002, India.

(Accepted 15 July 2011)

ABSTRACT : The acute toxicity of organochlorine (lindane) and organophosphate (chlorpyrifos) pesticides on biochemical constituents in liver and ovary of fresh water fish Clarias batrachus were observed during spawning phase. The fish was exposed to sublethal concentrations of these pesticides for 96 hours. The levels of total protein, glycogen and nucleic acids were significantly lower in both the tissues in comparison with controls. It is concluded that biochemical concentrations in liver and ovary of Clarias batrachus are useful biomarkers of sublethal effects of pesticides under observation.

Keywords : Lindane, chlorpyrifos, nucleic acids, *Clarias batrachus.*