

**Biochemical Alterations in the Gonads of  
*Chrotogonus trachypterus* (Blanchard) Treated  
with Sub-lethal Dose of Monocrotophos**

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**ABSTRACT** Effects of sub-lethal doses (176.95 and 75.5 ppm) of monocrotophos on gonads of female and male *Chrotogonus trachypterus* (Blanchard) were studied respectively. The changes in the level of total protein, cholesterol, alkaline phosphatase, acid phosphatase and ATPase at intervals of 12, 24 and 48 h of treatment were evaluated. Monocrotophos led to highly significant ( $P \leq 0.001$ ) decrease in protein at 12, 24 and 48 h of treatment in both the sexes. Cholesterol level showed highly significant ( $P \leq 0.001$ ) rise after 12 and 24 h of treatment but at 48 h it significantly ( $P \leq 0.05$ ) decreased in male while in female a continuous highly significant ( $P \leq 0.001$ ) rise was recorded at 12, 24 and 48 h of treatment. Alkaline phosphatase level decreased non-significantly at 12 h but this decrease became highly significant after 24 and 48 h ( $P \leq 0.001$ ) in male while in female non-significant decrease was recorded at 12 h, significant ( $P \leq 0.01$ ) at 24 h and after 48 h decrease was highly significant ( $P \leq 0.001$ ). Acid phosphatase level increased non-significantly at 12 and 24 h but significantly ( $P \leq 0.05$ ) increased at 48 h in male while in female non-significant increase was recorded at 12 and 24 h. After 48 h it was more significantly ( $P \leq 0.01$ ) observed. ATPase activity increased significantly ( $P \leq 0.05$ ) at 12 h, highly significant ( $P \leq 0.001$ ) increase at 24 and 48 h in male but in female ATPase level non-significantly decreased at 12 h and highly significant ( $P \leq 0.001$ ) increase was observed at 24 and 48 h. The relationship of these changes in biochemical parameters with insecticide has been discussed in this paper.