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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≤0.001) decrease in protein at 12, 24 and 48 h of treatment in both the sexes. Cholesterol level showed highly significant (P≤0.001) rise after 12 and 24 h of treatment but at 48 h it significantly (P≤0.05) decreased in male while in female a continuous highly significant (P≤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≤0.001) in male while in female non-significant decrease was recorded at 12 h, significant (P≤0.01) at 24 h and after 48 h decrease was highly significant (P≤0.001). Acid phosphatase level increased non-significantly at 12 and 24 h but significantly (P≤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≤0.01) observed. ATPase activity increased significantly (P≤0.05) at 12 h, highly significant (P≤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≤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.