

## Effect of 17 $\alpha$ -Methyltestosterone Hormone on Haematological Profiles of the Sex Reversed, Sarotherodon Melanotheron

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**Abstract :** The effects of 17 $\alpha$ -Methyltestosterone Hormone on blood composition of the Sex Reversed Sarotherodon melanotheron were investigated. S. melanotheron fry were reared in six (6) plastic tanks for three (3) months, of which three (3) tanks served as treatment tanks while the other three (3) served as the control. The fry were fed with 17 $\alpha$ -methyl testosterone enzyme, which functions as a sex reversal hormone. The fry were administered this hormone for 30 days, to ensure complete sex reversal. All the S. melanotheron fry were reared to table size for duration of three (3) months, after which, blood samples were taken from both the control and treatment fishes. The blood parameters showed no significant differences with the same values of White Blood Cell count (WBC) and Total plasma protein for the control and experimental fishes. A total protein value for sex reversed specimens was 3.99g/dL, while urea and creatinine values were 0.2g/dL. Alkaline Phosphatase, Aspartate transaminase and Alanine transaminase for the treatment specimen were 183nm/mg protein/min, 98nm/mg protein/min and 105nm/mg protein/min respectively. A total protein value for control specimens was 2.81g/dL, while urea and creatinine values were 0.2g/dL. Alkaline Phosphatase, Aspartate transaminase and Alanine transaminase for the control species were 174nm/mg protein/min, 93nm/mg protein/min and 106nm/mg protein/min respectively. The safety of MT on S. melanotheron is therefore proved since there is no adverse effect on the fish.

**Keywords :** 17 $\alpha$ -Methyltestosterone, haematology, sex reversal, sarotherodon melanotheron

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