

## **Haematology and Gill Pathology of *Clarias Gariepinus* Exposed to Refined Petroleum Oil, Kerosene under Laboratory Conditions**

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### **Abstract**

Juveniles of the African catfish, *C. gariepinus* (mean total length, 31.49±5.45cm, sem; total length, 18.50±2.42 g, sem) were exposed to grade levels of refined petroleum product- kerosene (0, 75, 150 and 300 ppm) in triplicates for two under laboratory conditions. The values of all the parameters in the control except MCHC, MCH, neutrophils, monocytes and thrombocytes were higher than those in the treatment. Hb, Ht, MCV and WBC values in the treatment declined with increase in the concentration of the toxicant. But the reverse was the case with MCHC, MCH, neutrophils and thrombocytes. Significant differences between the haematological parameters of the control and the treatment levels ( $p > 0.05$ ) occurred in the Hb, Ht and RBC. But in the MCH, MCV, WBC, neutrophils, monocytes and thrombocytes differences ( $p < 0.05$ ) were recorded between the control and some of the treatment levels, particularly the highest concentration (300 ppm). Secondary lamellae of gills of exposed fish were hypertrophic, necrotic and suffered different levels of curving and blunting and fusion. There was atrophy and dystrophy of secondary lamellae. Most of the primary and secondary lamellae were distended with oedematous fluid. Gills from exposed fish showed increased vascular congestion with infiltration of the submucosa by inflammatory cells with increasing concentration of the toxicant.