



**HAEMATOLOGICAL INDICES AND SPLENIC HISTO-ARCHITECTURE OF
WSTAR RAT TREATED WITH ANILINE: SUPPLEMENTARY ROLE OF *Moringa
oleifera* LEAVE EXTRACTS**

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ABSTRACT

Chemical industries manufacturing dyes, pigments, herbicides, explosives, rubbers and fungicides uses aniline as a raw material. Aniline is a toxic amine that affects the body organs especially hematopoietic organs. The aim of this study was to investigate the rejuvenating attributes of methanolic extracts of *Moringa oleifera* [MO] leaves on haematological parameters and histomorphology of spleen subjected to aniline [AH] in wistar rats. Thirty adult male wistar rats weighing 160-200g were used for this research work. The rats were randomly divided into five groups [A-E] of six rats each. Group A which served as control were given 1.5 ml/kg body weight of normal saline, group B were given 1 mmol/kg b. wt. of AH, Group C were given 2 mmol/kg b. wt. of AH, Group D were given 1mmol/kg b. wt. of AH and MO [300mg/Kg body weight/day] and Group E were given 2mmol/kg of AH and MO [300mg/Kg body weight/day]. All administration was done orally [a dose/day] for a period of 7 days.

The weights of rats and spleen were measured and the histology of the spleen was assessed. Selected haematological indices; Blood erythrocyte count [RBC] count, white blood cell count [WBC], Heamoglobin [Hgb] and heamatocrit [HCT] were determined. An assessment of the histological profiles of the spleen in Groups B and C showed histopathologic expansion of splenic red pulp characterized by prominent vascular congestion [most pronounced at 2 mmol/kg], increased red pulp cellularity, and cellular fragmentation when