Title of Article: Effects of ethanolic leaf extract of Chrysophyllum albidum G. on biochemical and haematological parameters of albino Wistar rats

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Abstract

The effect of oral administration of the leaf extract of Chrysophyllum albidum G. on biochemical and haematological parameters were investigated in albino rats for 16 days. The extract did not show any significant effect (p > 0.05) on the plasma concentrations of total bilirubin, albumin and alkaline phosphatase (ALP) as well as the packed cell volume (PCV), haemoglobin (Hb), red blood cell (RBC), reticulocytes, neutrophils, lymphocytes, eosinophils, basophils, mean corpuscular haemoglobin concentration (MCHC) and mean corpuscular haemoglobin (MCH). The concentration of the platelets was significantly decreased (p < 0.05) at 1000 mg/kg body weight, while white blood cell (WBC) was significantly increased at 500 mg/kg body weight. The doses significantly reduced (p < 0.05) plasma levels of AST, ALT, total protein, glucose and creatinine while urea was significantly increased. While the extract significantly increased the lung, brain and liver-body weights, the kidney, heart, testis, spleen and epididymis-body weights were not significantly affected. The result suggests that the leaf extract of C. albidum contains antiplatelet and hypoglycemic properties and exhibited selective organ toxicity to the rats.