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Hepatoprotective effect of *Cyperus esculentus* milk extract on acetaminophen induced hepatic damage in albino rats

Akinloye Oluseyi Adeboye, Akinloye Dorcas Ibukun and Adejumo Adeola Peter
Federal University of Agriculture, Nigeria

Cyperus Esculentus (Tiger nut) is an edible nut with nutritional and medicinal benefits. This study investigated the Hepatoprotective activity of *Cyperus Esculentus* milk extract against acetaminophen-induced liver damage in experimental rats. Thirty albino rats weighing between 150 – 200g used were grouped into six. Rats in groups one and two received feed pellet, while those in groups three, four and five were fed with feed pellet and 100 mg, 200 mg and 400 mg per kilogram body weight (kgbw) of *Cyperus Esculentus* milk extract respectively. Group six rats received feed pellet and ascorbic acid (8.57mg/kg bwt). On the 22nd day of the experiment, acetaminophen (1g/kg body weight) was administered orally to rats in group two, three, four, five and six. The animals were sacrificed after 24 hours. The effect of the milk extracts on specific activities of Aspartate transaminase (AST), Alanine transaminase (ALT), alkaline phosphatase (ALP), glutathione-S-transferase (GST) and Malondialdehyde (MDA) concentration were determined in acetaminophen-induced hepatotoxicity in rats. Histopathology analysis of the liver was also carried out. The liver function markers were restored to normal levels by the milk extracts as compared to the elevated levels observed in the acetaminophen group at $p < 0.05$. The observed elevated serum and liver levels of MDA in acetaminophen group were restored to normal levels by the milk extracts. Reversal of hepatoarchitecture by the milk extracts was also observed. The present study shows that *Cyperus Esculentus* milk extracts possess Hepatoprotective effect on acetaminophen induced hepatic damage in albino rats.

akinloyedi@funaab.edu.ng