ABSTRACT

The kidney has numerous functions such as removing waste products from the body and stabilizing body's chemical processes. However, these functions and metabolic activities of this excretory organ can also be disrupted by some biological agents such as drugs. The study assessed the nephroprotective effects of Zea mays L. (corn) husk and Spirulina platensis on NPAA(mefenamic acid)induced nephrotoxicity Wistar rats. Mefenamic acid was administered (500mg/kg) to the control and treatment groups for seven days. Corn husk and Spirulina extracts were given to the three treatment groups $(T_1, T_2 \text{ and } T_3)$ according to different combined concentrations of 25% corn husk:75% Spirulina, 50% corn husk:50% Spirulina, and 75% corn husk:25% Spirulina, respectively. Blood urea nitrogen (BUN), serum creatinine (SC), renal size index and histologic features of the kidneys were examined. Effects of the corn husk and Spirulina extract on the renal biomarkers (Blood urea nitrogen, serum creatinine and renal size index) showed no significance difference (p>0.05) among the treatment group. Histopathologic assessment indicated no further damage after the administration of extracts. Thus, the findings suggest that corn husk and Spirulina extracts have nephroprotective effects on the kidneys of the test organisms.