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Protective Effect of Aframomun chrysanthum Seed Aqueous Extract in Acetaminophen-Induced Liver Toxicity in Rats

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Abstract : Owing to the outbreak of different diseases and microbial resistance to some available drugs, proper identification, and evaluation of plants have been encouraged. There have been claims worldwide by the traditional system that some plants possessed medicinal properties. Plants and their components have been said to be source of large amount of drugs which comprise of distinct groups such as antispasmodics, anticancer and antimicrobials. Researchers have reported that chemicals in plants are responsible for the medicinal uses of plants. Thus this study evaluated the protective effect of Aframomun chrysanthum seed aqueous extract in acetaminophen-induced liver toxicity in rats. A suspension of 750 mg/kg acetaminophen was administered once every 72 hours to induce toxicity in the rats. Oral administration of 500, 1000 and 2000 mg/kg body weight of the extract and 100 mg/kg of silymarin (reference drug) were administered for 10 days. Biochemical analysis showed significant ($p < 0.05$) increase in the activities of aspartate aminotransferase (AST), alanine aminotransferase (ALT)and alkaline phosphatase (ALP)as well as the concentrations of albumin (ALB) and total bilirubin (T.B.) levels in rats administered with acetaminophen only. The levels of these parameters were significantly ($p < 0.05$) decreased in the groups pretreated with the extract.

Keywords : Aframomun chrysanthum, silymarin, hepatoprotective, toxicity
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