

Abstract

In most parts of Africa, *Ximenia americana* is used in folklore to treat various disorders such as oedema, pain, fever, helminthiasis, diarrhoea, burns among other diseases. This study tested the antipyretic activities of dichloromethane-methanolic (DCM-MeOH) stem bark and leaf extracts of *X. americana* in rats. Qualitative phytochemical screening was also done to evaluate the presence of alkaloids, flavonoids, steroids, saponins, cardiac glycosides, phenolics and terpenoids in the extract. The plant materials were collected from Mbeere North sub-county, Embu county, Kenya. Methanol and dichloromethane in the ratio of 1:1 was used to extract the active compounds. Two to three months old male Wistar rats were employed for the antipyretic studies. Animals were divided into six groups of five rats each: normal, negative, reference and three experimental groups (50, 100 and 150 mg/kg body weight). Pyrexia was induced experimentally using turpentine. The experimental groups were treated with predetermined dose quantities of prepared extracts. Aspirin was used as the reference drug. Data were analyzed using one-way analysis of variance (ANOVA). The extracts from the leaves lowered rectal temperature by 0.45% to 2.11% while the stem bark extracts lowered rectal temperature in the range of 0.71% to 2.13%. Aspirin lowered the rectal temperature in the range of 0.74% and 1.67%. Qualitative phytochemical screening showed presence of alkaloids, flavonoids, saponins, cardiac glycosides, phenolics and terpenoids in the extract. DCM-MeOH leaf and stem bark extracts of *X. americana* is effective in management of fever and therefore it can be explored as a possible bio-resource in the development of herbal antipyretic medicines.