



ABSTRACT

Current drugs used for the treatment of hyperlipidemia such as Atorvastatin and other statins have been associated with a number of side effects such as liver complications. Herbal medicines are being studied to come up with a hypolipidemic and hepatoprotective drug. Betalains are tested for its wide range of biological activity. Rivianin, a type of betalain found in the *Rivina humilis* L. berries was similar to the betanin pigment of *Beta vulgaris*. The treatments used were T0= HFD (negative control), T1= Atorvastatin (positive control), T2=40% *R. humilis* L. methanolic extract and T3= 60% *R. humilis* L. methanolic extract. Treatments were administered to HFD induced albino rats for 7 days. T-test and one-way ANOVA showed that there was no significant difference between the total cholesterol in the sera of Atorvastatin and 40% and 60% *R. humilis* L. extracts treated albino rats. Furthermore the histopathological examinations of livers of rats treated with *R. humilis* L. extract revealed a significant difference with the livers of HFD and Atorvastatin treated rats, using mode based from the grades given after evaluation.

Keywords: rivianin, atorvastatin, hepatoprotective, hypolipidemic, betalains