

Anti-Diarrheal Activity of Extracts Kedondong Leaf in Mice Balb/C Strain Males in Vivo

Authors : Johanrik, Arini Apriliani, Fikri Haikal, Dias Yuca, Muhammad Abdul Latif, Edijanti Goenarwo, Nurita Pratama Sari

Abstract : Diarrhea is one of the leading causes of morbidity and mortality in many countries, as well as responsible for the deaths of millions of people each year. Previous research showed that the leaves, bark, and root bark of kedondong contains saponins, tannins, and flavonoids. Tannins have anti-diarrheal effects that work as the freeze of protein/astringent, and may inhibit the secretion of chloride over the tannate bonding between protein in the intestines. Chemical compounds of flavonoids also have an effect as anti-diarrheal block receptors Cl^- in intestinal thus reducing the secretion of Cl^- to the intestinal lumen. This research aims to know the anti-diarrheal activity of extracts kedondong leaf in mice Balb/C strain males in vivo. This research also proves kedondong leaves as an anti-diarrhea through trial efficacy of kedondong leaves as antisekretori and antimotilitas. This research using post-test only controlled group design. Analysis of statistical data normality and homogeneity were tested by Kolmogorov Smirnov. If the data obtained homogenous then using ANOVA test. This research using ethanolic extracts kedondong leaf 200, 400 and 800 mg/kgBW to prove there is anti-diarrhea it makes into six treatment groups, for anti-secretory it makes into five treatment groups and anti-motility became five treatment groups. The result showed dose of ethanolic extracts kedondong leaf 800 mg/kgBW have significant value ($p < 0.005$). The conclusion from this extracts kedondong leaf research 800 mg/kgBW have pharmacological effects as antidiarrhea on Balb/C strain male mice with a mechanism of action as anti-secretory and anti-motility.

Keywords : anti-diarrhea, anti-secretory, anti-motility, kedondong leaf

Conference Title : ICPPS 2015 : International Conference on Pharmacy and Pharmacological Sciences

Conference Location : Paris, France

Conference Dates : July 20-21, 2015