Anthelmintic activity of papaya seeds on Hymenolepis diminuta infections in rats

Abstract

The purpose of this study is to see the anthelmintic activity potential of papaya seeds against Hymenolepis diminuta in rats. The objectives of this study were: (1) to determine the effectiveness of papaya seeds on helminths especially H. diminuta in rats and (2) to determine the effective dose level on helminths in rats. Thirty six male rats from strain Sprague-Dawley were chosen as samples in this experiment. Two types of dose level were used for papaya seeds treatments such as 0.6 g kg\(^{-1}\) and 1.2 g kg\(^{-1}\). The geometric mean (GEM) was used to calculate mean for eggs per gram (EPG) before and after the treatment to be included in the reduction percentage calculation. After 21 days post treatment, necropsies were done to get the worm count and the GEM was used to calculate the efficacy percentage for the treatment. Results from this study showed that the reduction percentages in EPG for papaya seeds treatment for both doses level were very high which is 96.8% for 0.6 g kg\(^{-1}\) dose level and 96.2% for 1.2 g kg\(^{-1}\) dose level. Whereas the efficacy percentage based on the worm counts for both doses level were also very high that was 90.77% for 0.6 g kg\(^{-1}\) dose level and 93.85% for 1.2 g kg\(^{-1}\).