

Antibacterial Activity of Papaya Leaves (*Carica Papaya,L*) Infusum against *Escherichia coli*

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Abstract

Diarrhea is a clinical symptom of gastro-intestinal tract characterized by increased frequency of bowel movements and often in conjunction with changes in the shape and consistency of stools. *Escherichia coli* pathogens is one of the causes of diarrhea. In Indonesia, people are used to use papaya leaves (*Carica papaya, L*) to cure diarrhea. Some research showed that *Carica papaya, L* contains antibacterial compound such as alkaloid, papain, and flavonoids. Therefore, this research tried to determine antibacterial activity of *Carica papaya, L* infusum against *E.coli*. This true experimental study used *E.coli* which was kept in Department of Microbiology Faculty of Medicine Airlangga University as stocked culture. *Carica papaya, L* was used as infusum by adding 100 ml distilled water for every 20 grams of crushed papaya leaves. Then, it was heated and evaporated until the volume became one tenth. After that it was divided into several concentrations that range from 1.57% to 100%. Antibacterial activity assay were performed with the dilution method in Mueller Hinton broth medium. This research found that *Escherichia coli* grew in all tubes containing *Carica papaya, L* infusum with concentration that range from 1.57% to 100%. In conclusion, *Carica papaya, L* infusum has no antibacterial activity against *Escherichia coli* at concentration that range from 1.57% to 100%.

Key words: diarrhea, papaya leaves infusum, *Escherichia coli*, minimum inhibitory concentration (MIC)