ABSTRACT

ACTIVITY OF PAPAYA (Carica papaya L.) SEED EXTRACT ON Pseudomonas aeruginosa BACTERIA USING THE PERCOLATION METHOD (Study was conducted at the Surabaya Pharmacy Academy Laboratory)

Trianti Andini

Papaya seeds (*Carica papaya* L.) have medicinal properties, especially papaya seeds which have antibacterial potential. The aim of this research was to determine the ability of papaya seeds (*Carica papaya* L.) extracted with ethanol solvent to inhibit the growth of *Pseudomonas aeruginosa*. Dried papaya seeds are made into powder before extracting 400 grams. Extraction of papaya seed powder was carried out using the percolation method for 4 hours with repetition 3 times. The solvent used for extraction was 1500ml 96% ethanol. The resulting extract was evaporated for 6 hours then dried using an oven. The results obtained were 68.30 grams. The concentration used was 10% DMSO as a negative control and was repeated 6 times. The results from concentrations of 25% and 50% did not form an inhibitory zone around the disc paper, which indicates that papaya seed extract could not inhibit the growth of *Pseudomonas aeruginosa*. At concentrations of 75% and 100%, it showed the formation of a clear zone around the paper.

Keywords: Carica papaya L. Pseudomonas aeruginosa, percolation, ethanol, disc method.