

ABSTRACT

TEST OF ANTIBACTERIAL INHIBITORY ACTIVITY OF NEEM LEAVES (*Azadirachta indica* A. Juss) AGAINST *Escherichia coli* BY PERCOLATION METHOD

Firnanda Devi Eka Arasanti

*The purpose of this study was to determine the activity of the antibacterial inhibitory power of neem leaves (*Azadirachta indica* A. Juss) against *Escherichia coli* bacteria using the percolation method. In this study, neem leaf extraction (*Azadirachta indica* A. Juss) was carried out using the percolation method with a 96% ethanol solvent. Inhibition testing is carried out by the diffusion method of disc paper. The method uses 3 concentrations, namely 1%, 2%, 3%, and DMSO 10% as negative controls. The average results of all three concentrations were obtained; 0.25 mm (1%); 0.8 mm (2%); 1.98 mm (3%); and negative control of 0 mm (DMSO 10%) with a zone diameter of weak ability to the growth of *Escherichia coli* bacteria. The conclusions in this study were neem leaf extract (*Azadirachta indica* A. Juss) extracted using the percolation method with 96% ethanol solvent showing an inhibitory zone against the growth of *Escherichia coli*.*

Keywords : *Antibacterial, neem leaves, Escherichia coli*