

**ABSTRACT**  
**(LITERATURE REVIEW)**

**ANTIBACTERIAL ACTIVITY OF CINNAMON (*Cinnamomum burmannii*)  
BARK EXTRACT AGAINST *Escherichia coli* BACTERIA**

*Escherichia coli* is a Gram negative bacteria that normally lives as a normal flora in the human digestive system, and can also be a pathogen that causes infection. Utilization of plants as medicine is one way to reduce the level of resistance to antibiotics. One of the plants used as traditional medicine is cinnamon (*Cinnamomum burmannii*).

The purpose of this study was to determine the antibacterial activity of cinnamon bark extract (*Cinnamomum burmannii*) against *Escherichia coli* bacteria through a literature study. The data collection method used is to collect several research articles (literature review).

From the review of articles conducted, it was found that one article gave results that 80% ethanol extract of cinnamon bark with a concentration of 100,000 ppm (10%); 130,000 ppm (13%); 150,000 ppm (15%); 180,000 ppm (18%); and 200,000 ppm (20%) did not inhibit *Escherichia coli*. 96% ethanol extract of cinnamon bark with concentrations of 75% and 100% had activity in inhibiting the growth of *Escherichia coli*, namely 3.15 mm and 4.85 mm, respectively. Methanol extract 80% cinnamon bark with a concentration of 0.25% has activity in inhibiting the growth of *Escherichia coli*, which is  $8.7 \pm 0.4$  mm. Cinnamon 96% ethanol extract with 16% concentration was potentially active against *E.coli* with an inhibition zone of  $7.43 \pm 0.51$  mm. The ethanolic extract of 96% cinnamon bark at a concentration of 5% gave an inhibitory power of  $1 \pm 0.33$  mm, a concentration of 10% was  $5.69 \pm 0.69$  mm, a concentration of 20% was  $7.81 \pm 0.76$  mm, and a concentration of 20% was  $7.81 \pm 0.76$  mm. 40% of  $9.63 \pm 0.59$ . The five articles above showed that in several tests, cinnamon bark extract had antibacterial activity against *Escherichia coli* bacteria, but the test in the first article did not show antibacterial activity against *Escherichia coli* bacteria.

**Keywords:** Cinnamon, *Escherichia coli*, Antibacterial activity.