

**EFEECT OF DIFFERENT EXTRACTION METHOD ON  
ANTIMICROBIAL ACTIVITY AND PYTOCHEMICAL ANALYSIS  
OF *Centella asiatica***

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## ABSTRACT

### EFFECT OF DIFFERENT EXTRACTION METHOD ON ANTIMICROBIAL ACTIVITY AND PHYTOCHEMICAL ANALYSIS OF *Centella asiatica*

*Centella asiatica* also known as pegaga, was a small herbaceous plant that found in India, Sri Lanka, northern parts of Australia, Indonesia, Iran, Malaysia and other parts of Asia. This herb was used in wound healing, cleansing for skin problem and digestive disorders. The present study shows the antimicrobial activity and phytochemical analysis of leaf and root of *C. asiatica* extracts by using different solvent of extraction (ethanol and distilled water). The Kirby-Bauer disc diffusion assay (zone inhibition assay) was used to determine the antibacterial activity on *Escherichia coli* (Gram-negative bacteria) and *Staphylococcus aureus* (Gram-positive bacteria) at different concentrations of *C. asiatica* extracts. The maximum growth of zone inhibition (12.0 – 13.3 mm) was observed in ethanol extract of leaves at 100 % concentration against both microorganisms. The leaf of *C. asiatica* extract (0 – 13.3 mm) showed larger zone inhibition than root extract (2.3 – 9.7 mm). Ethanol could be more effective solvent than distilled water for the extraction of *C. asiatica*. In the phytochemical screening, alkaloids, terpenoids, steroids, flavonoids, tannins, saponins and reducing sugars were presence in all of the tested extracts of leaf and root of *C. asiatica*.