

EXTRACTION OF COMPOUND FROM *Illicium verum* (bunga lawang) AS POTENTIAL INGREDIENT AS AN ANTIBACTERIAL SOAP

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ABSTRACT

EXTRACTION OF COMPOUND FROM *Illicium verum* (bunga lawang) AS POTENTIAL INGREDIENT AS AN ANTIBACTERIAL SOAP

Numerous years into the coronavirus disease 2019 pandemic, handwashing with soap and hand sanitizers are still necessary as a fundamental method of preventing the spread of infection in public areas and health care settings. Environmental issues have arisen due to the remarkable increase in demand for handwashing products. The sensible course of action is to advocate for eco-friendly alternatives to the current products because soaps are intricate mixes of hazardous and durable active chemicals. In this inquiry, *Illicium verum* extracts have been investigated since they exhibit antibacterial properties. Using Kirby-Bauer methods, this study evaluated the potency of this extract against *Escherichia coli* (*E. Coli*) and *Bacillus subtilis* (*B. Subtilis*). For each bacteria, both agar plates produce satisfactory outcomes. Zone of inhibition of the extracts with low and high concentration for *E. Coli* are 9 mm and 15 mm. Meanwhile, inhibition zone for *B. Subtilis* are 10 mm and 13 mm respectively. By exhibiting a good inhibition zone diameter, the extracts have a tendency to prevent bacterial growth. This implies that each extract contains antibacterial elements such as flavonoids, alkaloids, saponins, and tannins among its constituents. The pH value of the soap was 8.037. The foam height of the soap reduced by 5 cm in 20 minutes. With the growing demand for soap, this has highlighted the prospect of producing soap from organic substances like *Illicium verum*.