

ABSTRACT
(LITERATURE REVIEW)

**POTENTIAL RESISTANT TEST OF NEEM LEAVES (*Azadirachta indica*)
AGAINST GRAM POSITIVE BACTERIA**

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Traditional medicine in Indonesia is currently well developed. Efficacious plants such as drugs have been studied scientifically. The use of traditional medicinal plants to date tends to increase in line with the development of the industry in the health sector. One of the plants that has long been used as traditional medicine is the neem plant (*Azadirachta indica*). This neem is empirically used in traditional medicine as an anti-diabetic, skin disease, ulcers, anti-dysentery, antimalarial, insecticide, fungicide, and antidiarrheal.

The parts of this plant that are commonly used are the bark, leaves, and seeds. Neem plants contain triterpenoid and tetraterpenoid compounds (limonoids, protolimonoids and the gedunin group). Seed oil contains nimbolin A and B, nimbin, and gedunin. Tannins and essential oils are found in the bark. Neem leaves contain chemical compounds, including: Azadirachtin, paraisin, alkaloids, tannins, and volatile oil components containing sulfide compounds.

These active compounds which act as antimicrobial active ingredients are still being researched further. Extracts of leaves, bark and seeds of neem are known to be very active against Gram positive bacteria and showed significant antimicrobial activity against the tested pathogens. Several other studies also showed that neem seed oil was able to inhibit the growth of *Staphylococcus aureus*.

Apristiani and Astuti in their research used neem leaf chloroform extract with a concentration of 1000 g/mL which actively inhibited the growth of *Staphylococcus aureus*. Ambarwati also reported the effectiveness of neem seed powder immersion and strong resistance to *Staphylococcus aureus* (19.67 mm). Sayekti et al., reported in their research that the most potent bacterial inhibition zone was 70% neem leaf extract, then 65% neem leaf extract, and finally 2.5% NaOCl against *Enterococcus faecalis* bacteria.

Based on the above background, the authors see the potential inhibition of neem leaves against various types of bacteria, therefore the authors consider it necessary to conduct a literature study on the inhibitory potential of neem leaves (*Azadirachta indica*) against various types of bacteria by searching and collecting data. library data, scientific articles, and all available information.

Keywords : extract, mimba, *Azadirachta indica*, minimum inhibition concentration, bacteria