

EFFECTIVENESS OF HONEY (*CITRUS AURANTIFOLIA*) AS AN ANTIMICROBA AGAINST TO BACTERIA THAT CAUSE PHLEGHMONOUS GASTRITIS

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BACKGROUND : Phlegmonous gastritis, a rare but rapidly progressive type of gastritis and has a high mortality rate. This type of gastritis is caused by several bacteria such as *Streptococcus*, *Staphylococcus*, *Escherichia coli*, *Haemophilus influenzae*, *Proteus* and *Clostridia*; which can cause death in a short time (24 hours) if not detected early. This disease affects all ages. The treatment requires quite high costs, so some people choose to use herbal ingredients to treat the disease including honey for treating gastritis because it is more affordable and has an antimicrobial effect against various types of bacteria.

METHODS : The study using the true experimental post test with disc diffusion method; using honey with levels 50%, 75% and 100% applied then drops to growth medium agar that has been cultured for bacteria that cause phlegmonous gastritis (*Staphylococcus aureus* and *Escherichia coli*) and measuring the diameter of minimal inhibition zone formed and then comparing it with the positive controls eritromycin (for *Staphylococcus aureus*) and ciprofloxacin (for *Escherichia coli*).

RESULTS : The diameter of minimal inhibition zone of honey 50%, 75% & 100% shows results exceeding the minimum sensitive limit (26 mm), namely 31,94 mm, 35,00 mm & 39,23 mm. Meanwhile, the results of minimal inhibition zone for positive control are 11,66 mm and 12,33 mm.

CONCLUSION : Honey has an antimicrobial effect and shows effective results against bacteria that cause phlegmonous gastritis (*Staphylococcus aureus* and *Escherichia coli*) with a minimal inhibition zone that is greater than the minimum sensitive limit.

Keyword: honey, effectiveness, phlegmonous gastritis, *Staphylococcus aureus*, *Escherichia coli*