FRACTIONATION AND IDENTIFICATION OF ACTIVE COMPOUND EXTRACT-FRACTION HERBAL SAMBILOTO (Andrographis paniculata Nees) AND ITS ANTIBACTERIAL ACTIVITIES AGAINTS Streptococcus pyogenes

ABSTRACT

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Streptococcus pyogenes bacteria are gram-positive bacteria. The bacterium is one of the pathogens that infect humans and the Streptococcus pyogenes bacteria is also known as group A streptococci which is the most common cause of pharyngitis. Bitter plant (Andrographis paniculata Nees) has many benefits for humans, one of which is as an antibacterial. This study aims to determine the activity of active compounds of bitter plant as antibacterial against Streptococcus pyogenes bacteria. The test sample was prepared by maceration to get the crude extract and using VLC (Vacuum liquid Cromatograpy) to obtain fractions, such as the ethanol fraction and ethyl acetate fraction. Antibacterial activity test was carried out by diffusion and dilution method, where the results showed that ethanol extract at a concentration of 45% and ethyl acetate fraction at a concentration of 15% had the greatest antibacterial activity with the same average inhibitory zone value of 9,5mm. For phytochemical screening results showed that ethanol extract bitter plant contains alkaloid, flavonoid, phenol, saponin and terpenoid compounds, then for ethyl acetate fraction containing alkaloids, flavonoids, phenols and terpenoids.

Keywords: Sambiloto, Streptococcus pyogenes, Diffusion, Dilution.