



## **Antibacterial of Terpenoid A from Sarang Semut (*Myrmecodia pendans*) Against *Streptococcus mutans***

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**Abstract:** Caries is one of human diseases, which most commonly occur. This disease is the result of hard tooth tissue damage caused by *Streptococcus mutans*. Previous studies have introduced alternative antibacterial agent extracted from *Myrmecodia pendans* Merr & Perry, an indigenous plant from Papua. It has antibacterial-active phytochemical compounds and have been used empirically as natural medicine. This study was done to determine an active compound derived from *M. pendans* and to investigate its activity against *S. mutans* ATCC 25175. Ethyl-acetate soxhlet method was performed to extract of *M. pendans*, subsequently separated and purified through chromatography. The compound is determined as terpenoid A. Antibacterial activity of the compound was tested using Kirby-Bauer method with 0.5 Mc Farland in blood agar plate. The inhibition zones of terpenoid A after 48 hours incubation for 10.000, 5.000, 1.000 µg/mL were 13.7, 13.6, 11.8 and 14,6 mm respectively. Minimum Inhibitory Concentration (MIC) of terpenoid A against *S. mutans* was 39 µg/mL and Minimum Bactericide Concentration (MBC) was 312.5 µg/mL.

**Keywords :** *Streptococcus mutans*, Terpenoid A, *Myrmecodia pendans*, antibacterial activity

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