

ISOLATION OF ANTIOXIDATIVE CONSTITUENTS OF *Gynura procumbens* LEAVES (SAMBUNG NYAWA) AND ITS ANTIBACTERIAL POTENCY AGAINST PLANT PATOGEN

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ABSTRACT

ISOLATION OF ANTIOXIDATIVE CONSTITUENTS OF *GYNURA PROCUMBENS* LEAVES (SAMBUNG NYAWA) AND ITS ANTIBACTERIAL POTENCY AGAINST PLANT PATOGEN

Gynura procumbens known as “Sambung Nyawa” which is from Asteraceae Family was used in this study to determine the antioxidative components and antimicrobial properties. *G. procumbens* is a plant that contain active secondary metabolites known as phytochemicals and commonly used as traditional medicine to treat many types of diseases and illness. The leaves of *G. procumbens* was extracted using three different polarities of solvents such as petroleum ether, ethyl acetate and methanol and was analysed by phytochemical screening using several spraying reagents to isolate the antioxidative constituents. The phytochemical screening tests revealed the presence of tannins, saponins, triterpenoids and flavonoids. The isolated compound from PE extract was labelled as S1 and isolated compound from MeOH extract was labelled as S2. The isolated compounds were further analysed by using FTIR and ¹H NMR spectroscopy to predict the structures. Based on the results, the S1 compound might be an alkaloid glycoside and S2 compound might be a phenolic glycoside. As for the antibacterial potency, the most effective extract is EA extract since it has the biggest inhibition zone of 7 mm compared to other extracts.