

MICPS2-018-PS

Determination of Phenol and Flavonoid Content and Antioxidant Activity From Fraction of Ethyl Acetate of Siam Weed Leaves

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ABSTRACT

Siam weed leaves (*Chromolaena odorata* L) are traditionally used as a medicine, such as to treat the wound, antioxidant, painkillers (analgesic), feverlowering (antipyretic), and antibacterial. The leaves contain several main compounds such as tannins, phenols, flavonoids, saponins, and steroids. This research aimed to determine the phenol, flavonoid content, and antioxidant activity from ethyl acetate fraction of siam weed leaves. The extraction was done by maceration using 96% ethanol and then fractionated by ethyl acetate. The fraction obtained was analyzed to determine phenol and flavonoid content and then antioxidant activity by the Uv-Vis spectrophotometry at the maximum wavelength. The results of this research that phenol and flavonoid content were 102,345 mgGAE/g fraction and 15,207 mgQAE/g fraction respectively, beside that this fraction analyzed its antioxidant activity by using the Ferric Reducing antioxidant power (FRAP) method and showed that its antioxidant activity was 64,686 mgQE/gram fraction.

Keywords: Phenol, flavonoid, antioxidant, ethyl acetate and FRAP