



Activity of Flavonoid and Antraquinone Derivatives from *Cassia* sp. as an Antifungal Treatment for Skin Disease

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ABSTRACT

Topical disease caused by fungal infection (dermatophytosis) is important problem in Indonesia, which has tropical climate and relatively high humidity. Some traditional plants had been used in the treatment of skin diseases caused by fungal infection are *Cassia* sp. The aim of the research was to study bioactive antifungal compound from *Cassia* sp. against pathogenic skin fungi. The result showed that Minimum Inhibitory Concentration (MIC) of methanol extract and ethyl acetate (EA) fraction from *Cassia fistula* and *Cassia javanica* were 600 ppm against *Mycosporum gypseum*, while *Cassia torosa* extract did not give the antifungal activity. Isolation and purification process showed that antifungal bioactive compound from ethyl acetate fractions (EA1.2.2 and EA2.3.1 fractions) were white needle crystalline. Based on phytochemistry screening, Thin Layer Chromatography results, UV and IR spectra data, it can be concluded that bioactive compound from these fractions which had antifungal activity are flavonoid compound.

Keywords: *Cassia torosa*, *Cassia javanica*, *Cassia fistula*, Antifungal activity, *Mycosporum gypseum*