

Antifungal Activity and Spectra Profiles of Essential Oil from Three Ginger Cultivar Rhizomes

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ABSTRACT

In Indonesia, three types of Ginger (*Zingiber officinale* Roscoe) have been distinguished (1) Jahe gajah, jahe putih besar or jahe badak (2) Jahe merah or jahe sunti (3) jahe putih kecil or jahe emprit. Their rhizomes differ in shape, colour, aroma and chemical composition and all types can be considered as cultivars. The antifungal activity of essential oil of three ginger cultivar rhizomes on *Trichophyton ajelloi* showed the Minimum Inhibitory Concentration (MIC) values of each ginger (1) Jahe Gajah : 0.3 µl/ml, (2) Jahe Merah : 0.4 µl/ml and (3) Jahe Emprit : 0.8 µl/ml. The distinction of MIC values may be caused by the distinction of essential oil spectra profiles obtaining from three ginger cultivar rhizomes which were determined by Gas Chromatography.

Keywords : Antifungal activity, essential oils, ginger cultivars, MIC, spectra profiles