

## ABSTRACT

### ISOLATION AND IDENTIFICATION OF SECONDARY METABOLITE FROM THE ARA OR TIN (*Ficus racemosa*)

by

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*Ficus racemosa* is one of the genus of *Ficus* belongs to Moraceae family, also known as Ara or Tin. This study aims to isolate and identify the secondary metabolite contained in the fruit of *F. racemosa*. *F. racemosa* fruits were obtained from Pekon Pehabung, East Kota Agung, Tanggamus. The stages of this study performed included the collection and sample preparation, then the extraction, isolation, and purification of compounds was carried out using the VLC and CC methods, while the molecular structures of the compounds were determined based on the physical data and spectroscopy (UV-Vis and FT-IR). Two compounds were successfully isolated and characterized. The first compound is  $\beta$ -sitosterol, with quantity of 53 mg (0.011% yield) in the form of white needle-shaped crystals with a melting point 134.8°-135.7 °C. The second compound is  $\alpha$ -amiriltetracosanoic with the quantity of 16 mg (0.003% yield) in the form of white amorphous solid with a melting point of 173.8-175.7°C.

Keywords: Stigmast-5-en-3 $\beta$ -ol ( $\beta$ -sitosterol), steroid, terpenoid,  $\alpha$ -amiriltetracosanoic, *Ficus racemosa*.