

THE EXTRACTION OF ANTHOCYANIN FROM
HALABAN (Vitex pinnata) FRUIT

By

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BACHELOR'S DEGREE
in
FOOD TECHNOLOGY
LIFE SCIENCES AND TECHNOLOGY

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ABSTRACT

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The purpose of this thesis was to determine the best extraction method from a native fruit named *halaban (Vitex pinnata)*, which originated from Borneo, Indonesia. This study was done to check the effect of three factors, mainly types of solvent (HCl and HCl + Ethanol), extraction time (30, 60, and 90 minutes), and temperature (40°C, 50°C, and 60°C), to the monomeric anthocyanin content, polymeric anthocyanin content, antioxidant activity, and total phenolic content. Characterization process of total flavonoid content and monomeric anthocyanin content was done based on the chosen extraction method, which was HCl + Ethanol as solvent at 40°C for 60 minutes. Types of solvent showed to be significant to the monomeric and polymeric anthocyanin content, antioxidant activity, and total phenolic content. Extraction time was only significant to the antioxidant activity, while temperature showed no significant difference to any of the result.

Keywords: *Halaban, Laban, Vitex pinnata, Anthocyanin, Extraction*



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DEDICATION

For my family, especially my mom and dad, and for all the hard work, sleepless nights, and laboratory time that my friends and I had to endure. This is for you guys.



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