Pertanika J. Trop. Agric. Sci. 43 (4): 477 - 490 (2020)

PERTANIKA JOURNALS

TROPICAL AGRICULTURAL SCIENCE

Journal homepage: http://www.pertanika.upm.edu.my/

The Feasibility Study of Physicochemical Properties of Sarawak *Liberica* sp. Coffee Pulp

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ABSTRACT

Liberica coffee is a minor species that is planted all around the world. Therefore, there is little study conducted on this coffee species as only one percent is cultivated all around the world. In Malaysia, there is still no research focusing on coffee pulp from Sarawak *liberica* sp. and thus leading to this study. The wastes and by-product such as coffee pulps will become the residues as they were not needed in processing the coffee. This will create environmental pollution. Thus, this research aimed to evaluate the feasibility study on the physicochemical properties of coffee pulp from Sarawak *liberica* sp. including determination by colorimetric assays for phenolic and flavonoid content, antioxidant activity, and reducing sugar analysis. The antibacterial activities of coffee pulp were evaluated against Gram-positive, *Staphylococcus aureus*, and Gram-negative *Salmonella typhimurium* using a disc diffusion method. As a result, Sarawak *liberica* sp. coffee pulp extract contained total phenolic content of 24.24 mg GAE/g of coffee pulp, a total flavonoid content of 39.39 mg QE/g of coffee pulp, DPPH scavenging activity of 92.24 ± 0.03%, reducing sugar analysis of 13.13 mg GE/g of coffee pulp, and there was no significant effect of antibacterial activities. Therefore, the physicochemical study determination in this study would add values toward Sarawak

ARTICLE INFO

Article history:
Received: 06 May 2020
Accepted: 20 July 2020
Published: 27 November 2020

DOI: https://doi.org/10.47836/pjtas.43.4.05

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ISSN: 0128-7680
e-ISSN: 2231-8526