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PHYSICOCHEMICAL AND ANTIOXIDANT PROPERTIES OF Baccaurea angulata (BELIMBING DAYAK)

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Baccaurea angulata fruit was studied for its nutrient and chemical composition, and was evaluated for total phenolic content (TPC). Besides that, whole fruit freeze-dried powder (FDWF) was analyzed for antioxidant activity, measured with DPPH and FRAP. Results showed that TPC for FDWF is 7.91mg GAE/g sample. Antioxidant activity for FRAP is 44.91mM TE/g sample and for DPPH is 60.96mg ascorbic acid/100g sample. Finding shows nutrient compositions for FDWF which are moisture content (19.63%), mineral content (4.74%), protein (1.33%), total fat (0.11%), carbohydrate (74.12%), crude fiber (0.07%), and total dietary fiber (6.3%). Water activity for FDWF is 0.210 and gross energy of Baccaurea angulata is 302.79kcal/100g. Antioxidant content of FDWF was strongly correlated with antioxidant capacity. Thus, from this study, it can be suggested that Baccaurea angulata has the potential to be a good source for dietary intake.

Keywords: Baccaurea angulata, freeze-dry, chemical composition, antioxidant properties