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Proximate composition of Malaysian Trigona and Tualang Bee Honey

Norazlanshah Hazali^a| **Badr Eddin Kharsa**^a| Muhammad Ibrahim^a| Mashita Masri^a| Mohd Nur Nasyriq Anuar^a | Abdul Aziz Mohd Azoddein^b

^aDepartment of Nutrition Sciences, Kulliyyah of Allied Health Sciences, International Islamic University Malaysia

Introduction: Honey is widely known as a natural product which is collected from various plants by bees. The aim of this study was conducted to determine the proximate composition (moisture, ash, crude protein, total fat, dietary fiber and total carbohydrate) of four Malaysian honey samples. Methods: TB1 (Trigona bee honey from Kedah), TB2 (Trigona bee honey from Kelantan), TU1 (Wild Tualang bee honey from Pahang) and TU2 (Tualang bee honey was collected from a farm from Pahang) were examined for their proximate compositions. Proximate composition was determined using the methods of AOAC (1990; 1995; 2003). Results: Moisture content was significantly the highest (p<0.05) in TB2 with a value of 30.586 ± 0.109 g/100g and the lowest in TU2 with a value of 18.914 ± 0.264 g/100g. TB2 had significantly (p < 0.05) higher ash content than other examined samples with a value of 0.766±0.010 g/100g. Protein content of TU1was significantly higher than the other analyzed honey samples with a value of 1.776±0.04 g/100g. The total fat content of TB2 was significantly lower than the other honey samples. Dietary fiber of TB1 was found to be significantly higher compared to the others with a value of 0.612±0.027. Total carbohydrate content was significantly (p<0,05) the highest in TU2 compared to other samples with a value of 79.980±0.280 g/100g. Conclusions: All honey samples are good sources of nutrients for human consumption. Moreover, the differences in the components of the different honey samples were probably connected with the variances in the floral sources.

KEYWORDS: Honey; proximate composition; Trigona; Tualang

²Faculty of Chemical & Natural Resources Engineering, University Malaysia Pahang