SOME ASPECTS OF NUTRITIONAL COMPOSITIONS OF FRESHWATER PRAWNS FROM STREAMS IN TERENGGANU

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SOME ASPECT OF NUTRITIONAL COMPOSITIONS OF FRESHWATER PRAWNS FROM STREAMS IN TERENGGANU

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ARA	arachidonic acid (20:4n-6)
DHA	docosahexaenoic acid (22:6n-3)
DM	dry matter
dw	dry weight
EFA	essential fatty acid
EPA	eicosapentaenoic acid (20:5n-3)
FA	fatty acid
FFA	free fatty acid
MUFA	monounsaturated fatty acid
P/E	Protein and Energy ratio
PL	polar lipid
PUFA	polyunsaturated fatty acid
SFA	saturated fatty acid
ST	sterol

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ABSTRACT

This research was to determine the nutritional compositions of freshwater prawns such as crude protein, crude fat, carbohydrate, moisture and ash from freshly samples, not only for food product but also for commercial value. The objective was to compare the nutrition value among five different species of freshwater prawns sampled from Sungai Peres and Lata Belatan, Terengganu using proximate analysis method. Results indicated the significant different ($P<0.05$) of crude protein, and carbohydrate analysis and no significant difference ($P>0.05$) of moisture, ash and crude fat analysis in five species of freshwater prawns. The results suggested that *Macrobrachium meridionalis* is a good source of protein with fewer carbohydrate because exhibited significantly higher ($P<0.05$) content of protein (48.0 ± 4.22 fresh weight percentages) but the lowest content of carbohydrates (45.0 ± 4.29 fresh weight percentages) as compared to other species. *Macrobrachium equidens* showed the higher source of fat value (86.6 ± 3.20 fresh weight percentages) than other four species.

KOMPOSISI NUTRISI DALAM UDANG AIR TAWAR DARIPADA SUNGAI-SUNGAI DI TERENGGANU

ABSTRAK

Kajian ini dilakukan untuk menentukan komposisi nutrisi bagi udang air tawar seperti protein kasar, lemak kasar, karbohidrat, lembapan, dan abu daripada sampel segar bukan sahaja untuk produk makanan tetapi juga untuk nilai komersial. Objektif adalah untuk membandingkan nilai nutrisi di kalangan lima sampel spesis udang air tawar daripada Sungai Peres dan Sungai Lata Belatan, Terengganu dengan menggunakan kaedah analisis proksimat. Keputusan menunjukkan perbezaan nyata ($P<0.05$) bagi analisis protein kasar dan karbohidrat dan tiada perbezaan nyata ($P>0.05$) bagi analisis lembapan, abu dan lemak kasar dalam lima spesis udang air tawar. Keputusan mencadangkan *Macrobrachium meridionalis* adalah sumber baik bagi protein dan kurang dengan karbohidrat kerana membuktikan perbezaan nyata ($P<0.05$) bagi kandungan protein (48.0 ± 4.22 peratus berat segar) tetapi kandungan terendah karbohidrat (45.0 ± 4.29 peratus berat segar) bila dibandingkan dengan spesis yang lain. *Macrobrachium equidens* menunjukkan sumber tinggi bagi nilai lemak dengan (86.6 ± 3.20 peratus berat segar) dan berbeza daripada empat spesis yang lain.