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Amino acid analysis of P. monodon muscle

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Values obtained for white tuna meat are also shown for comparison (Table 1). The results show that amino acid values of Prawn I and Prawn II are fairly close, with some differences obtained for proline, alanine and lysine. However, on the whole, the analysis shows similar patterns. Comparing with tuna meat which is used as feed for *P. monodon* postlarvae, significantly lower values were obtained for arginine, proline, lysine and aspartic acid. Cystine has low concentration in tuna meat and is not detected in prawn. Ammonia is derived from glutamine and asparagine. Thus, the total concentration of glutamic acid and aspartic acid, in micrograms per 100 micrograms of protein, is 11.12 for tuna, 18.63 for Prawn I and 18.58 for Prawn II.

Table 1. Amino acid composition of muscle protein of *P. monodon.* Prawn 1 = 33.84 g; Prawn II = 38.71 g. Values for white tuna meat are also shown.

Amino Acid	Concentration in microgram per 100 micrograms of protein		
	Prawn I	Prawn 11	Tuna (white meat)
aspartic acid	7.66	8,02	5.86
threonine	2.51	1.76	4.04
serine	3.13	2.66	3.87
glutamic acid	12.22	11.58	13.50
proline	6.20	9.87	3.71
glycine	6.45	5.53	5.34
alanine	3.22	5.49	5.28
cystine	N.D. 1 /	N.D. <u>¹</u> /	0.57
valine	4.48	3.55	6.37
methionine	3.43	2.33	3.66
isoleucine	3.63	3.20	5.10
leucine	6.95	6.14	8.64
tyrosine	3.99	3.23	3.69
phenylalanine	2.44	2.28	3.03
tryptophan	<u>2</u> /	<u>_2</u> /	N.D. <u>^{1/}</u>
lysine	14.86	17.18	10.96
histidine	2.66	2.46	3.31
amonia (NH ₃)	1.25	1.02	8.24
arginine	14.62	13.68	4.84

^{1/}Not detectable



^{2/}Not analyzed