

The amino acid compositions of muscle from wild and cultured of male and female *Acanthopagrus latus*

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Abstract:

The crude protein content and amino acid compositions of muscle from wild and cultured of male and female *Acanthopagrus latus* were determined by HPLC. There were quantitative differences between individual amino acids in the tissues investigated, depending on the sex and location. It was noted that, among all the samples studied in tissues, sexes and locations, lysine and isoleucine were the principal essential amino acid (EAA) and glutamic acid was mainly for non-essential amino acid (NEAA). Lysine and isoleucine of male muscles had a significantly higher ($P < 0.05$) amount than female muscles. The crude protein content in male and female muscles was not found to be significantly different. Depending on location, the percentages of arginine, leucine, isoleucine, lysine, serine, glycine, alanine and tyrosine were significantly different ($P < 0.05$) in muscles of wild and cultured fish. The wild seabream possessed considerably higher protein content than cultured seabream muscle. The results showed that wild male fish muscle contained a higher ($P > 0.05$) level of EAA than other groups. The results indicate that the *Acanthopagrus latus* is a healthful component of the human diet.

Keywords: *Acanthopagrus latus*, amino acid, muscle, sex, location.

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