

Fatty Acid and Amino Acid Composition in Mene maculata in The Sea of Maluku

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Abstract : Fish is a kind of food that contains many nutrients, one of those is the long chain of unsaturated fatty acids as omega-3 and omega-6 fatty acids and essential amino acid in enough amount for the necessity of our body. Like pelagic fish that found in the sea of Maluku. This research was done to identify fatty acids and amino acids composition in Moonfish (*M. maculata*) using transesterification reaction steps and Gas Chromatograph-Mass Spectrophotometer (GC-MS) and High-Performance Liquid Chromatography (HPLC). The result showed that fatty acids composition in Moonfish (*M. maculata*) contained tridecanoic acid (2.84%); palmitoleic acid (2.65%); palmitic acid (35.24%); oleic acid (6.2%); stearic acid (14.20%); and 5,8,11,14-eicosatetraenoic acid (1.29%) and 12 amino acids composition that consist of 7 essential amino acids, were leucine, isoleucine, valine, phenylalanine, methionine, lysine, and histidine, and also 5 non-essential amino acid, were tyrosine, glycine, alanine, glutamic acid, and arginine. Thus, these fishes can be used by the people to complete the necessity of essential fatty acid and amino acid.

Keywords : Moonfish (*M. maculata*), fatty acid, amino acid, GC-MS, HPLC

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