Fatty Acid Profiles of Endemic Fish (Telmatherina Celebensis and Telmatherina Bonti) in Lake Towuti, Luwu Timur District South Sulawesi, Indonesia

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Abstract. The objective of this study was to investigate the fatty acids in T. bonti and T. celebensis endemic fish species in Lake Towuti, South Sulawesi, Indonesia. These varieties are major aquatic resources with highly significant economic and ecological values. Trap net was used to obtain the samples from the research location and gas-liquid chromatography was applied to determine the chemical composition of the fatty acids. Subsequently, a descriptive technique was employed to analyze the data. The results showed an extensive overall content of T. bonti SFA, MUFA and PUPFA, compared to T. celebensis. Moreover, the compositions of DHA, EPA and AA in T. bonti were 0.8159, 0.0913 and 0.3224%, respectively, while in T. celebensi, similar components occurred in the values of 0.6062, 0.0432 and 0.2437%, correspondingly. Furthermore, the proportions of omega 3, 6 and 9 fatty acids in T. bonti were greater, compared to T. cebensis.

Keyword: elmatherina celebensis, telmatherina bonti, fatty acid profile, towuti lake