Identification of Microplastics in Baby Fish Tuna (Euthynnus affinis) in Manis Market Purwokerto

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Plastic is an indispensable and persistent material used in everyday life. Plastic contamination is found in terrestrial and marine environments which can be fragmented into microscopic microplastics. This study aims to assess the level of microplastic contamination in baby fish tuna (Euthynnus affinis). Microplastics were found in 86.67% of baby fish tuna samples with an average abundance of 2.13 ± 1.41 particles per individual. Based on the size of the microplastics found to have sizes between 800 to 5000 µm. Based on the shape, the microplastic size of the fiber type was mostly found (91%), followed by the shape of the fragment/film (9%) and the granule/sphere (0%). This small size indicates that it is difficult for fish to distinguish between their diet and microplastics as well as the possibility of biomagnification due to plastic being eaten by baby fish tuna prey. The existence of microplastic contamination in baby fish tuna is an indication that microplastic pollutants have existed to the top predators and can be the basic data of microplastic pollution in captured fishery products.
Keywords: Baby Fish Tuna (Euthynnus affinis); Microplastics; Manis Market Purwokerto

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