

IDENTIFICATION OF MICROPLASTIC CHARACTERISTICS IN MUSSELS CONSUMED BY COASTAL COMMUNITIES

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ABSTRACT

BACKGROUND : The increasing presence of microplastics in the waters has been known to have the potential to enter various types of marine biota including mussels.

METHOD : The type of research conducted was descriptive observational research. The research location was the coastal area of North Galesong Beach, Takalar Regency.

RESULT AND DISCUSSION : The results showed that the average abundance of microplastics in mussels in Galesong Waters was 4,258 items/individual. The average (mean) intake rate of respondents was 185.86 gr/day, the median value was 167 gr/day. The minimum intake rate was 115 gr/day and the maximum intake rate was 300 gr/day. The mean exposure frequency of respondents was 126 days, the median was 104 days. The minimum exposure frequency was 54 days and the maximum exposure frequency was 255 gr/day. The types of microplastics found were all in the form of lines, fragments with red, blue and black colors. The size found was between 0.505-10.488 mm.

CONCLUSION : The most common type of microplastics found in both sediments and mussels is the fragment form, followed by lines with a variety of colors, namely red, blue and black, there are differences in microplastic abundance between the two types of mussels, but differences in abundance can be seen between research stations as mussel habitat.

KEY WORD : Microplastic, Colour, Size, Form, Mussels