

# **Microplastics in marine benthic filter feeder: A review on the occurrence, routes of ingestion, method of extraction and effects to the ecosystem**

## **ABSTRACT**

Plastic pollution has been a global concern as it contaminates the earth. Hence, the purpose of this review discusses the rate of plastic pollution and how it has accumulated in the various benthic feeders in the ocean. This review focuses on the occurrences of microplastics, routes of ingestion, method of extraction and the effects of plastic on marine ecosystems. The marine invertebrates considered in this study include filter and benthic feeders. Hence, a compilation of 54 published studies, reviewed articles, conference materials and books from related topics were reviewed to identify the gaps in the research. Microplastics were identified with a scheme to colour, size, shape and polymer type. Techniques to extract these microplastics were also described. Findings from this review showed that the animals tended to accumulate large amounts of denser forms of microplastics. Therefore, this review will be a fundamental touchstone for the studies regarding microplastics in marine invertebrates.