IJARSCT
ISSN (Online) 2581-9429
International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)
International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal
Impact Factor: 7.53
Volume 4, Issue 2, May 2024

The Impact of Microplastic on Marine Ecosystem

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Abstract: *With the growth in population, waste management is becoming a big issue; nevertheless, recent studies have also revealed another serious issue: marine litter. It was discovered that human-generated waste is accumulating in the marine environment, with high levels of microplastics found in water bodies such as rivers, lakes, seas, and oceans. According to research, UV radiation and cold temperatures assist to break down typical plastic into smaller particles known as microplastics, which then enter the marine environment via runoff.Microplastics are often made of polyvinyl chloride (PVC), polyethylene terephthalate (PET), polystyrene (PS), or nylon, among other materials. With inefficient management, the concentration of these microplastics is increasing at an alarming rate, impacting not just the marine environment but also marine life. Some recent studies have found that the marine environment around urban centres has higher levels of microplastics, and aquatic creatures in these locations have a high accumulation of microplastics in their tissues.Furthermore, it has been claimed that other water pollutants, such as dyes, heavy metals, and other chemicals, can easily bind to microplastics, and that these microplastics act as a carrier of other pollutants in the bodies of aquatic creatures, which then enter the food chain. The current paper gives an overview of microplastics, their fate, and the detrimental consequences on the ecosystem and marine health*

Keywords: microplastics, microbeads, marine biota, marine health