

ABSTRACT

Plastic waste is a source of dangerous pollution for all living creatures, especially marine biota. Plastic waste can be degraded into plastic measuring less than 5 mm which is called microplastic. Microplastics can also be found from waste produced by industry. Microplastics accidentally become fish food and can harm the fish. This research aims to determine the microplastic content in the gonads of trevally found in the waters of the industrial area of North Aceh Regency and Lhokseumawe City. This research was carried out in March-May 2023 using a purposive sampling method and the analysis data will be presented descriptively. The results of the research show that 6 types of microplastics have been found in the gonads of trevally fish, namely fiber, foam, fragments, films, granules and pellets. The results of the study showed that the total abundance of fiber type microplastics was 501 particles/g, fragment type microplastics were 18 particles/g, foam type microplastics were 417 particles/g, pellet type microplastics were 170 particles/g, and granule type microplastics were 18 particles/g. Fiber type microplastics are the most common microplastics found in the gonads of trevally fish, while granule and fragment type microplastics are the least common microplastics found. The highest total abundance of microplastics was found in the gonads of station 1 trevally, where th is place is an estuary where PT waste is disposed of. Aceh Kraft Paper, while the lowest total abundance of microplastics was found in the gonads of station 4 trevally.

Keywords: fiber, gonads, industry, microplastic, plastic.