

## ABSTRAK

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KANDUNGAN MIKROPLASTIK PADA IKAN MUJAIR (*Oreochromis mossambicus*) DAN IKAN BANDENG (*Chanos chanos*) DI PASAR BENOWO, DESA BENOWO, KECAMATAN PAKAL, SURABAYA TAHUN 2025

xv + 48 Halaman + 7 Tabel + 6 Lampiran

Mikroplastik menimbulkan dampak negatif bagi ekosistem perairan maupun kesehatan manusia. Ikan mujair (*Oreochromis mossambicus*) dan ikan bandeng (*Chanos chanos*) merupakan ikan konsumsi yang dibudidayakan di tambak wilayah Benowo. Lokasi tambak yang berdekatan dengan Tempat Pembuangan Akhir (TPA) Benowo menimbulkan kekhawatiran akan potensi kontaminasi mikroplastik akibat pencemaran lingkungan. Penelitian ini bertujuan untuk mengidentifikasi kandungan mikroplastik dalam tubuh ikan mujair (*Oreochromis mossambicus*) dan ikan bandeng (*Chanos chanos*) yang dijual di Pasar Benowo.

Penelitian ini merupakan penelitian deskriptif dengan pendekatan kualitatif. Objek dalam penelitian ini adalah ikan mujair dan ikan bandeng yang dijual di Pasar Benowo. Variabel penelitian meliputi kandungan mikroplastik. Data dikumpulkan melalui observasi, dokumentasi, dan uji laboratorium menggunakan mikroskop stereo. Hasil penelitian dianalisis secara deskriptif.

Hasil penelitian pada pemeriksaan kandungan mikroplastik pada ikan mujair dan ikan bandeng yang dijual di Pasar Benowo menunjukkan bahwa sebagian besar sampel ikan mujair dan ikan bandeng yang diuji mengandung mikroplastik. Mikroplastik berbentuk fiber ditemukan lebih dominan dibandingkan bentuk fragmen. Setelah dilakukan proses penggorengan, mikroplastik tetap ada dan terdeteksi pada daging ikan. Analisis menunjukkan bahwa mikroplastik tetap bertahan meskipun telah mengalami proses penggorangan, sehingga berpotensi dikonsumsi oleh manusia. Penelitian lanjutan disarankan untuk mengidentifikasi jenis polimer mikroplastik menggunakan metode FTIR atau GC-MS guna mengetahui dampak lebih lanjut terhadap kesehatan manusia.

Kata kunci : ikan mujair, ikan bandeng, mikroplastik, polimer, pasar benowo

Daftar bacaan : 41 pustaka (2019-2024)

## ABSTRACT

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*MICROPLASTIC CONTENT IN TILAPIA (Oreochromis mossambicus) AND MILKFISH (Chanos chanos) AT BENOWO MARKET, BENOWO VILLAGE, PAKAL SUB-DISTRICT, SURABAYA IN 2025*

xv + 48 Pages + 7 Tables + 6 Appendices

Microplastics posed significant threats to both aquatic ecosystems and human health. Tilapia (*Oreochromis mossambicus*) and milkfish (*Chanos chanos*) were among the commonly consumed fish species that were cultivated in fishponds around the Benowo area. The proximity of these ponds to the Benowo Final Waste Disposal Site raised concerns regarding potential microplastic contamination due to environmental pollution. This study aimed to identify the presence and characteristics of microplastic particles in the bodies of tilapia and milkfish sold at Benowo Market, Surabaya. The results were intended to provide early insight into food safety risks associated with fish consumption in areas near unmanaged waste disposal.

This research was a descriptive study with a qualitative approach. The objects of the research were tilapia (*Oreochromis mossambicus*) and milkfish (*Chanos chanos*) sold at Benowo Market. The research variable focused on the presence of microplastics. Data were collected through observation, documentation, and laboratory testing using a stereo microscope. The results were analyzed descriptively.

The results showed that most of the tilapia and milkfish samples examined contained microplastics. Microplastics were identified mainly in the digestive organs and, to a lesser extent, in the flesh. Fiber-shaped microplastics were more dominant than fragments. After the frying process, microplastics were still detected in the flesh of both fish species. This indicated that microplastic particles remained intact even after being exposed to high temperatures during cooking, and thus posed a potential risk of entering the human food chain. Further research was recommended to identify the polymer types of the detected microplastics using FTIR or GC-MS methods in order to assess their possible impacts on human health more comprehensively.

Keywords : microplastic, tilapia fish, milkfish, Benowo market, polymer

References : 41 books (2019-2024)