SEARCHING HOTSPOTS OF NEUSTONIC MICROPLASTICS CONTAMINATION IN THE CANARY ISLANDS.

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The Canary Islands are in the North Atlantic subtropical gyre and influenced by the African coastal upwelling and the Canary Current, which is fed by the Azores Current that transports high concentrations of plastics that end up reaching the Canary Islands archipelago (Eriksen et al., 2010). In the study by Herrera et al. 2020 on neustonic microplastic in the Macaronesia region, they found a high variability in the concentration of microplastics, with values ranging from 15283 items/km^2 in Los Gigantes (Tenerife) to 1007872 items/km^2 in Las Canteras (Gran Canaria). The results showed a microplastics to zooplankton dry weight ratio of 2 ± 1.3, so that in some areas were found double the microplastics as zooplankton. These values reveal the potential negative impact of microplastics and associated chemical pollutants on the marine environment and biota, especially on filter-feeding animals. To study the current state and impact of sea surface microplastics the IMPLAMAC expedition was carried out in October 2021 from Lanzarote to La Gomera, and 12 surface water samples were collected from the Canary Islands with a manta net. The objectives of this study were found hotspots of microplastic pollution in surface waters, to quantify and characterise microplastics and neustonic zooplankton. With this study it will be observe the evolution of microplastic pollution in surface waters respect to the study previously carried out by Herrera et al. 2020.

Key words: Canary Islands, neustonic microplastics, zooplankton, hotspots.

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