

## **MICROPLASTIC POLLUTION ON SIX BEACHES IN THE EASTERN CANARY ISLANDS.**

**A. Campillo, M. Gómez, I. Martínez and A. Herrera,**

Marine Ecophysiology Group (EOMAR), IU-ECOQUA, Universidad de Las Palmas de Gran  
Canaria, Las Palmas de Gran Canaria, SPAIN.

*alex.campillo101@alu.ulpgc.es, may.gomez@ulpgc.es, ico.martinez@ulpgc.es,*  
*alicia.herrera@ulpgc.es*

The spatio-temporal distribution of marine debris pollution was studied on six beaches in the Eastern Canary Islands (Lambra, Famara, Caleta del Marrajo, Caletillas, Las Canteras and Vagabundos). Marine debris sampling was carried out every 3 months (one for each season of the year) and 5 replicates were carried out on each beach. No seasonal patterns were found as they varied in each area. Lambra is the beach with the least anthropogenic pressure, however, it was the most polluted, with an average concentration of 2618 items/m<sup>2</sup> and 51.64 g/m<sup>2</sup>. Vagabundos was the beach with the least marine litter accumulation with concentrations of 35.4 items/m<sup>2</sup> and 0.6 g/m<sup>2</sup>. The most frequent type of marine debris was mainly plastic fragments (83.1%), tar (9.2%), and pellets (4.7%), suggesting that the pollution on the beaches is of exogenous origin. The most frequent colors were white (46.7%) black (11.5%), yellow (11.4%), and blue (8.7%). The results obtained affirm that some of the beaches studied have high levels of plastic pollution, similar or higher to other regions of the planet. This study demonstrates that the Canary Islands are a hotspot for the accumulation of plastic and tar pollution.

**Key words:** Canary Islands, beaches, marine debris, microplastics, mesoplastics.

**Acknowledgments:** This work was financed by IMPLAMAC project (MAC2/1.1a/265) Interreg MAC (European Fund to Regional Development, Macaronesian Cooperation).