



Photo: Tony Sánchez Déniz

Marine plastic pollution is becoming a problem of growing concern to the scientific community, environmental policy makers and society. So much so that our age is referred to as the “Plastic Age”. Microplastics in particular represent a serious problem because, due to their size, they can be ingested by marine organisms and pass through food webs. In addition to the damage that ingestion cause, microplastics adsorb chemical contaminants that can be endocrine disruptors, and the effect they can have on the health of organisms is unknown. The ingestion of microplastics has been documented in numerous species of marine mammals and birds, fish, molluscs, crustaceans and corals, among others. This work is the first study that evidences the ingestion of plastics and microplastics in *Pelagia noctiluca*.



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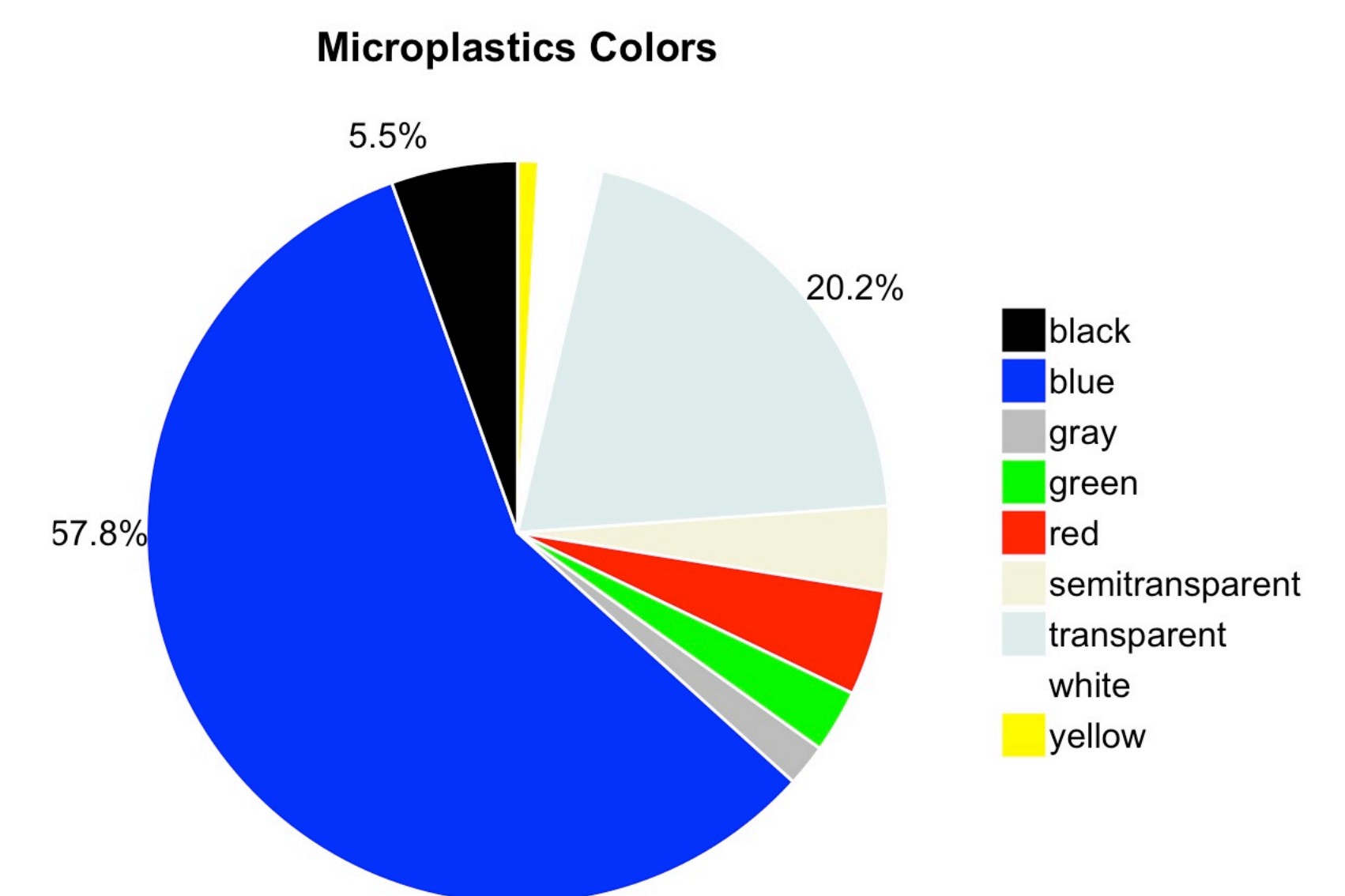
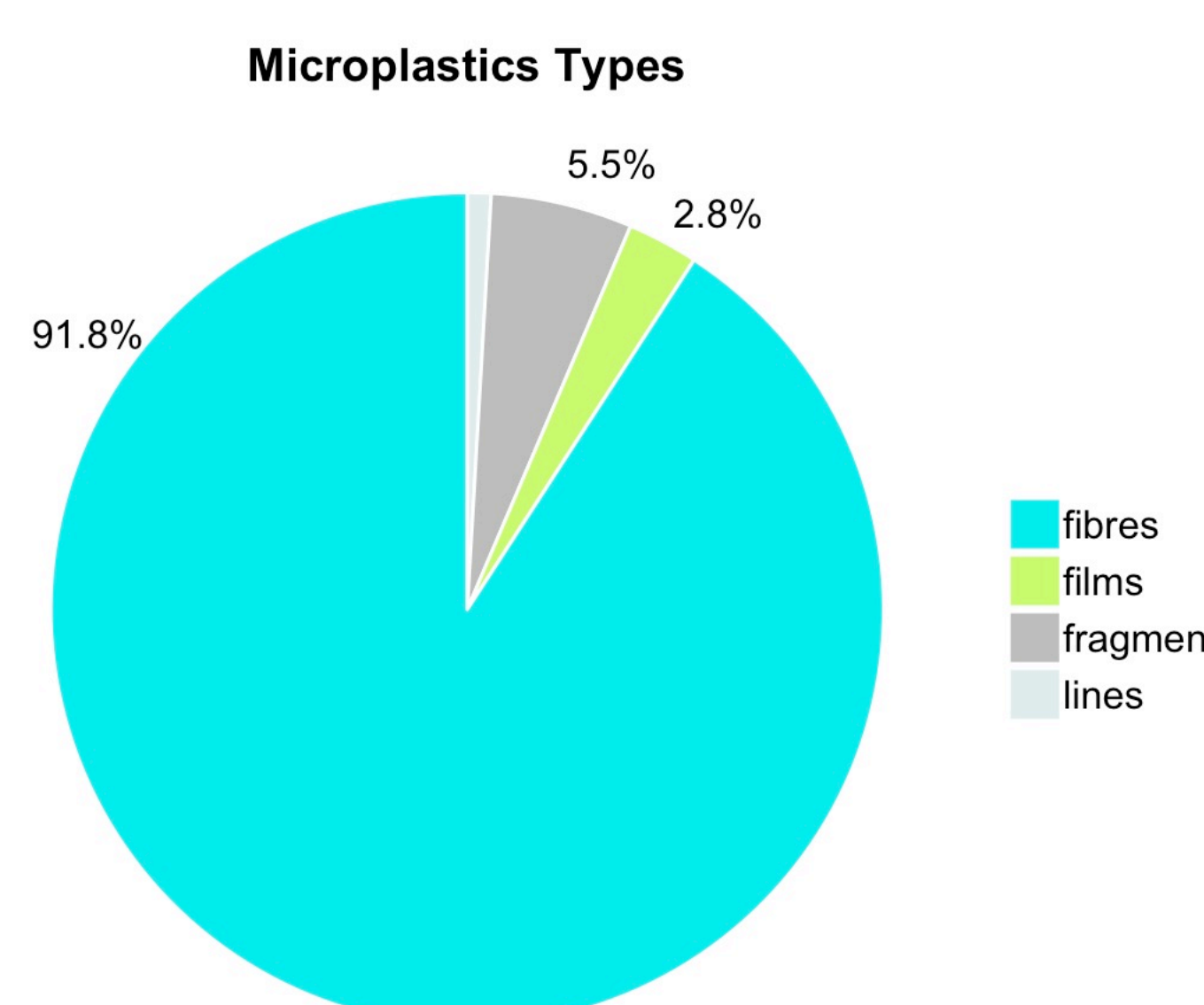
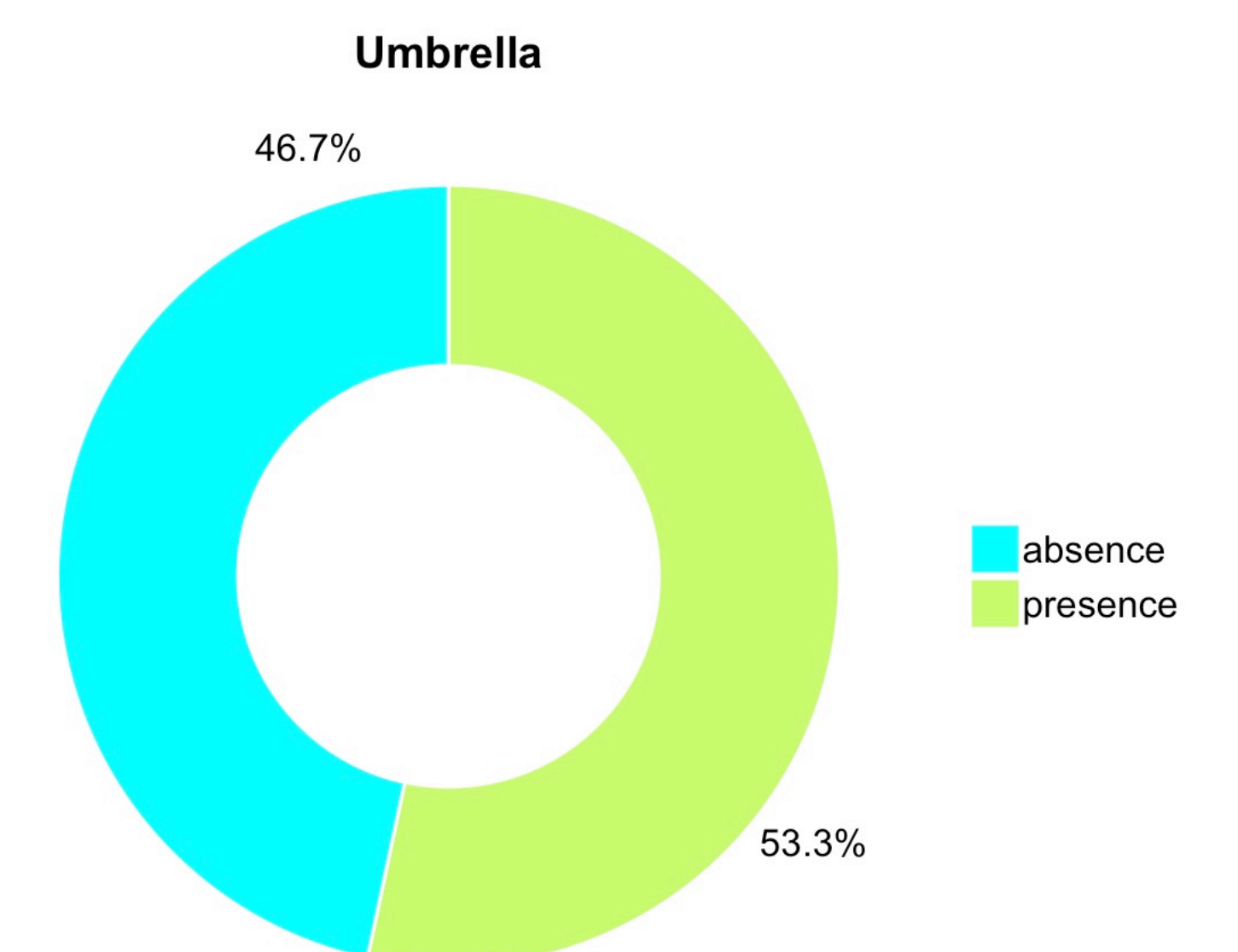
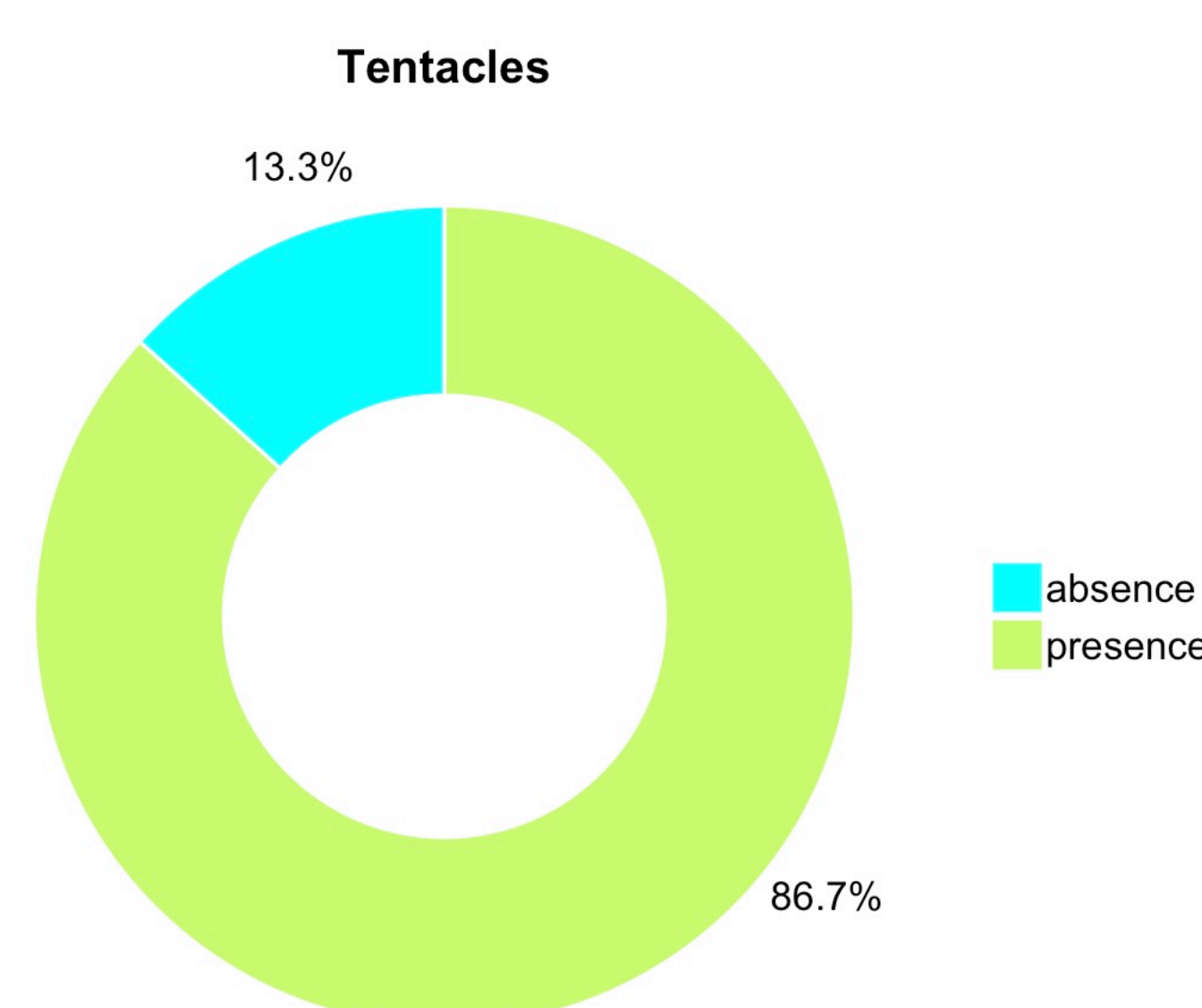
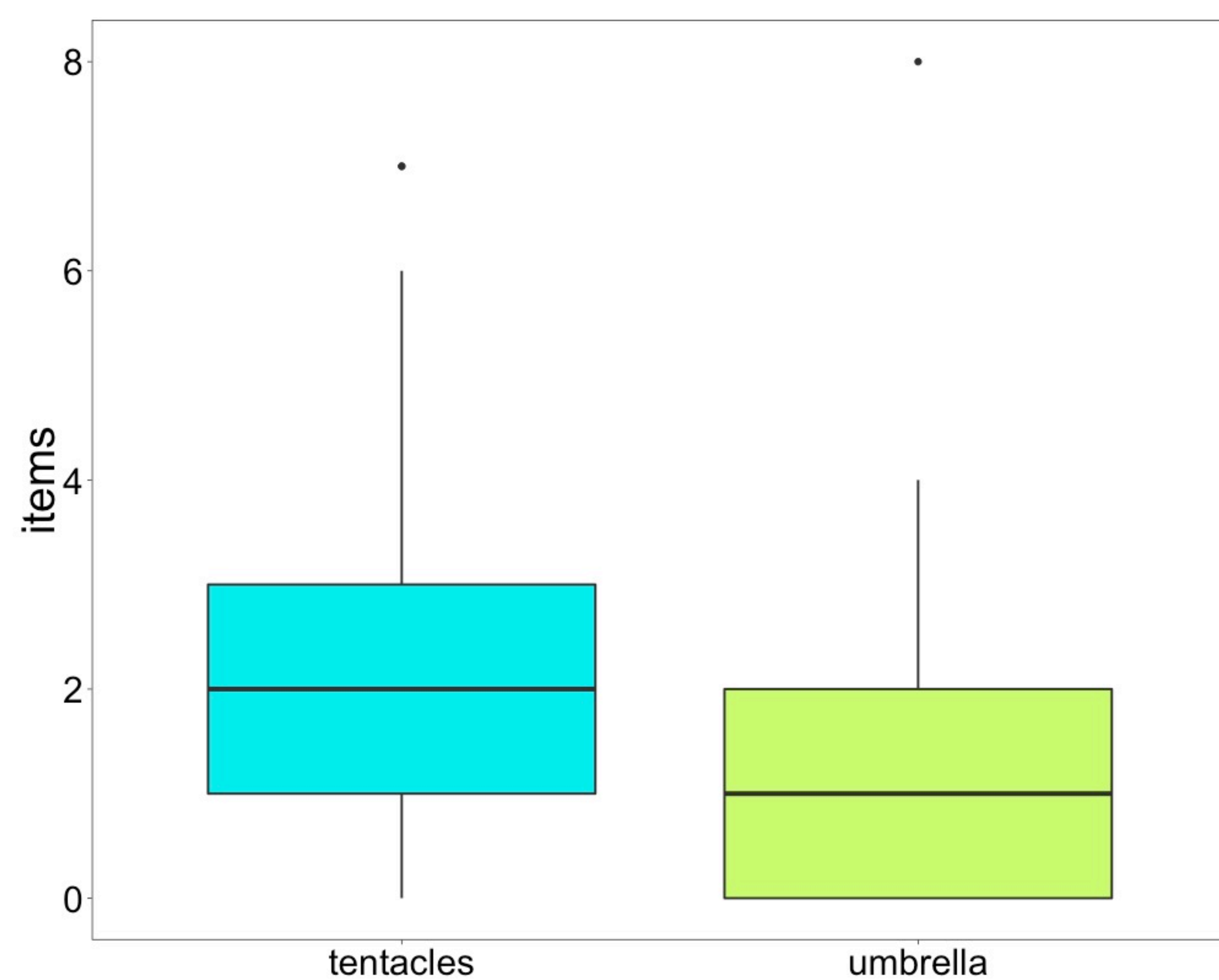
Material and Methods

During the summer of 2019, a bloom of jellyfish occurred in the Canary Islands. A total of 30 *Pelagia noctiluca* were collected, floating near the shore of Las Canteras beach. They were stored separately in the freezer at -20°C for later analysis in the laboratory. In the laboratory the surface of the jellyfish was carefully rinsed with bidistilled water. All necessary measures were taken to avoid airborne fibre contamination. All material was carefully washed with bidistilled water, the samples were processed inside a hood and cotton laboratory coats were used during all process. The umbrella and tentacles of the jellyfish were analysed separately in order to determine whether the microplastics are within the gastrovascular cavity or adhered to the tentacles.

Number of items

Results

Microplastics impact



Conclusions

- 97% of the individuals analyzed had microplastics, with maximum values of 8 items in the umbrella and 7 items in the tentacles .
- A total of 109 microplastics were found, 91.8% were fibres and 5.5% were fragments being the predominant colors, blue, transparent and black.
- A greater impact was observed in the tentacles than in the umbrella, being the incidence of 86.7% and 53.3% respectively.
- The presence of microplastics in *Pelagia noctiluca* is very high, and the effects they may have on the health of organisms are unknown.