

PLASTIC WASTE IN YELLOW-LEGGED GULL (*LARUS MICHAHELLIS ATLANTIS*) NESTS IN BIOSPHERE RESERVES OF THE CANARY ISLANDS (SPAIN)

INTRODUCTION

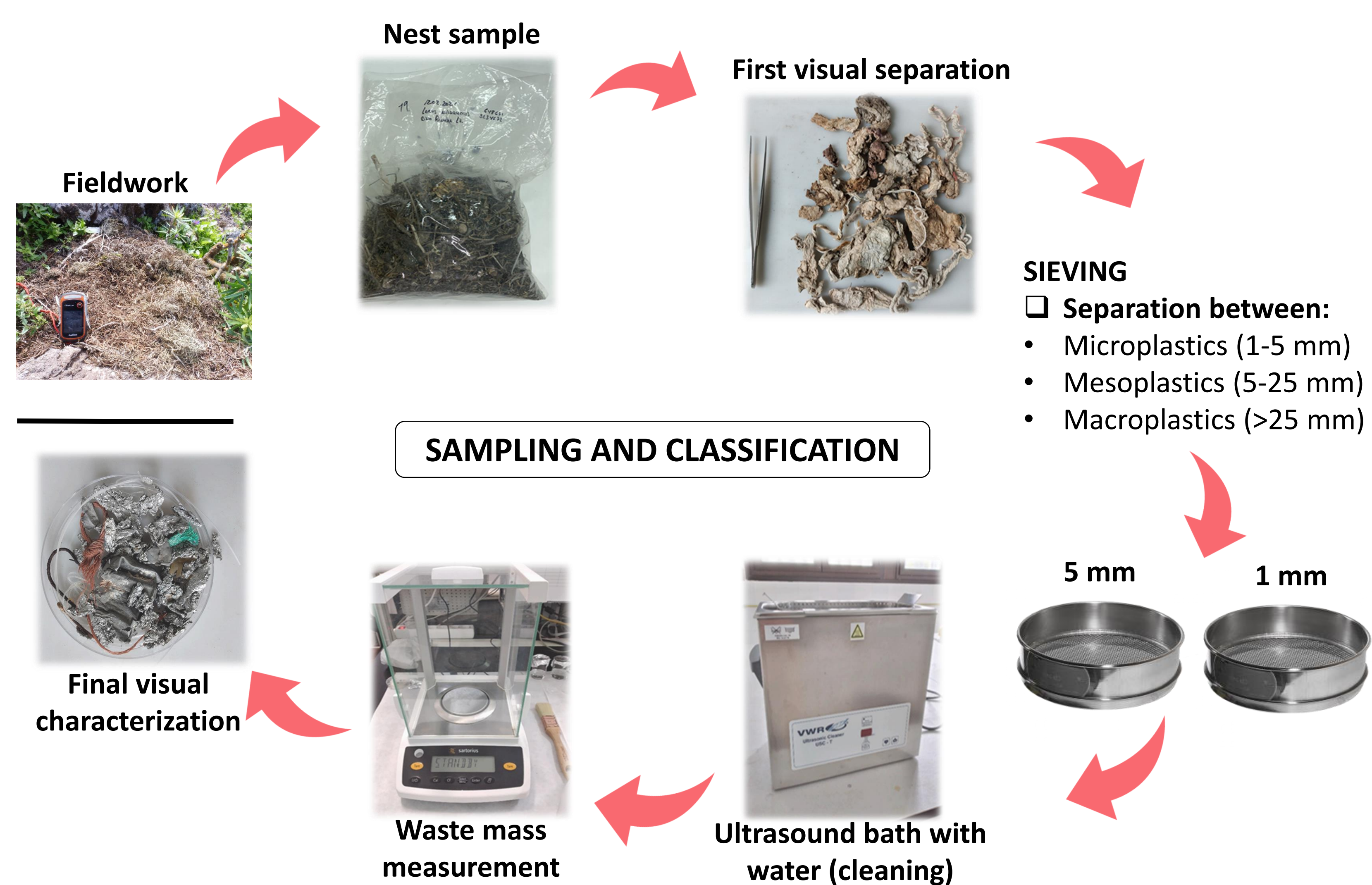
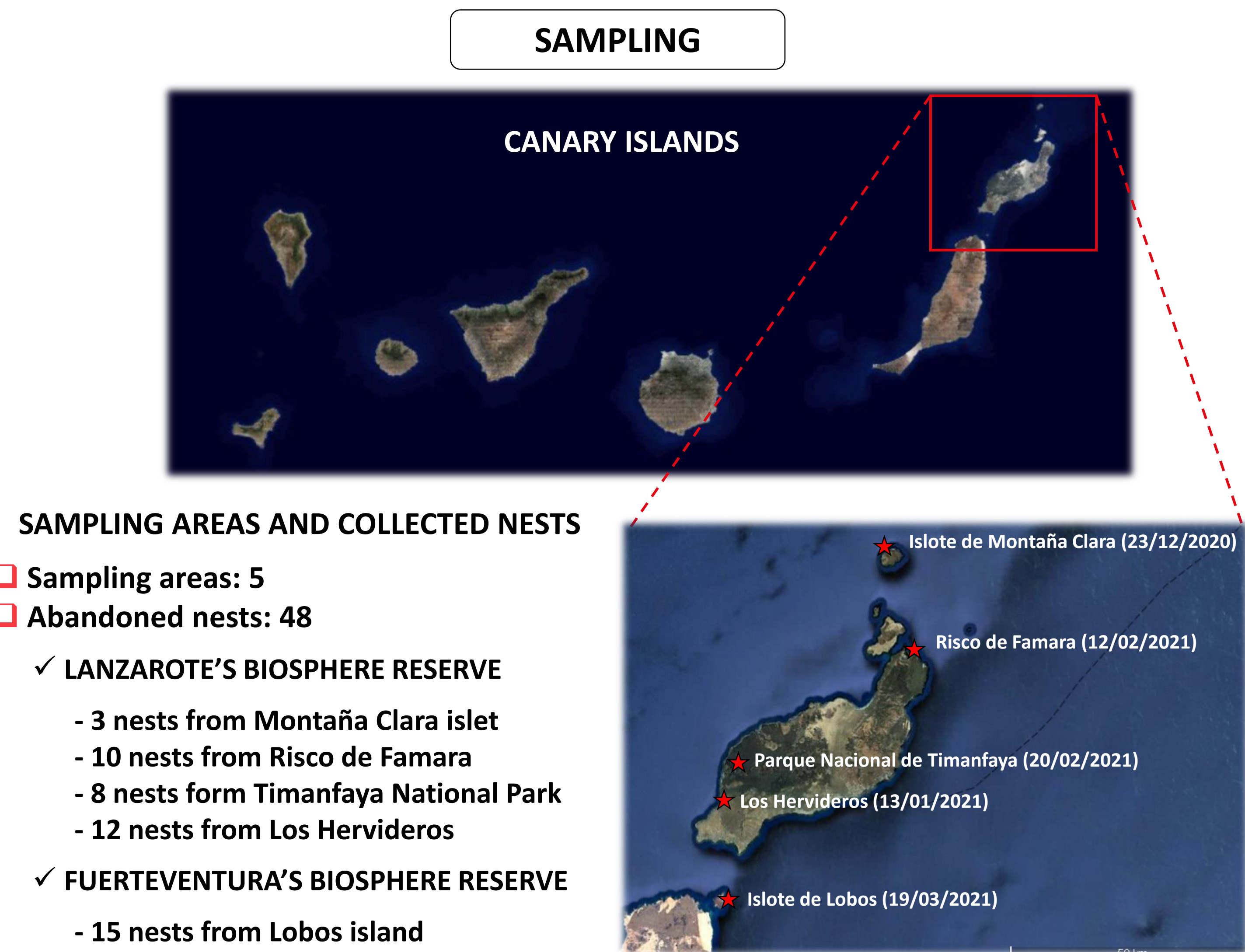
Plastic waste is the cause of the death of thousands of birds due to ingestion, starvation or entanglement, with marine species being the most affected by this problem [1]. Several articles have shown a growth of bird species that use plastic waste to make their nests [2]. This behaviour has a dangerous repercussion: once the plastic is placed in the nest, it becomes part of the ecosystem, generating pollution in an area where this threat did not exist before [3]. One of these species is the yellow-legged gull (*Larus michahellis atlantis*), widely distributed throughout the Macaronesian region.

Considering the above, in this work the determination of plastic residues (macro, meso and microplastics) in abandoned yellow-legged gull nests located in two Biosphere Reserves of the Canary Islands (Fuerteventura and Lanzarote) has been carried out.



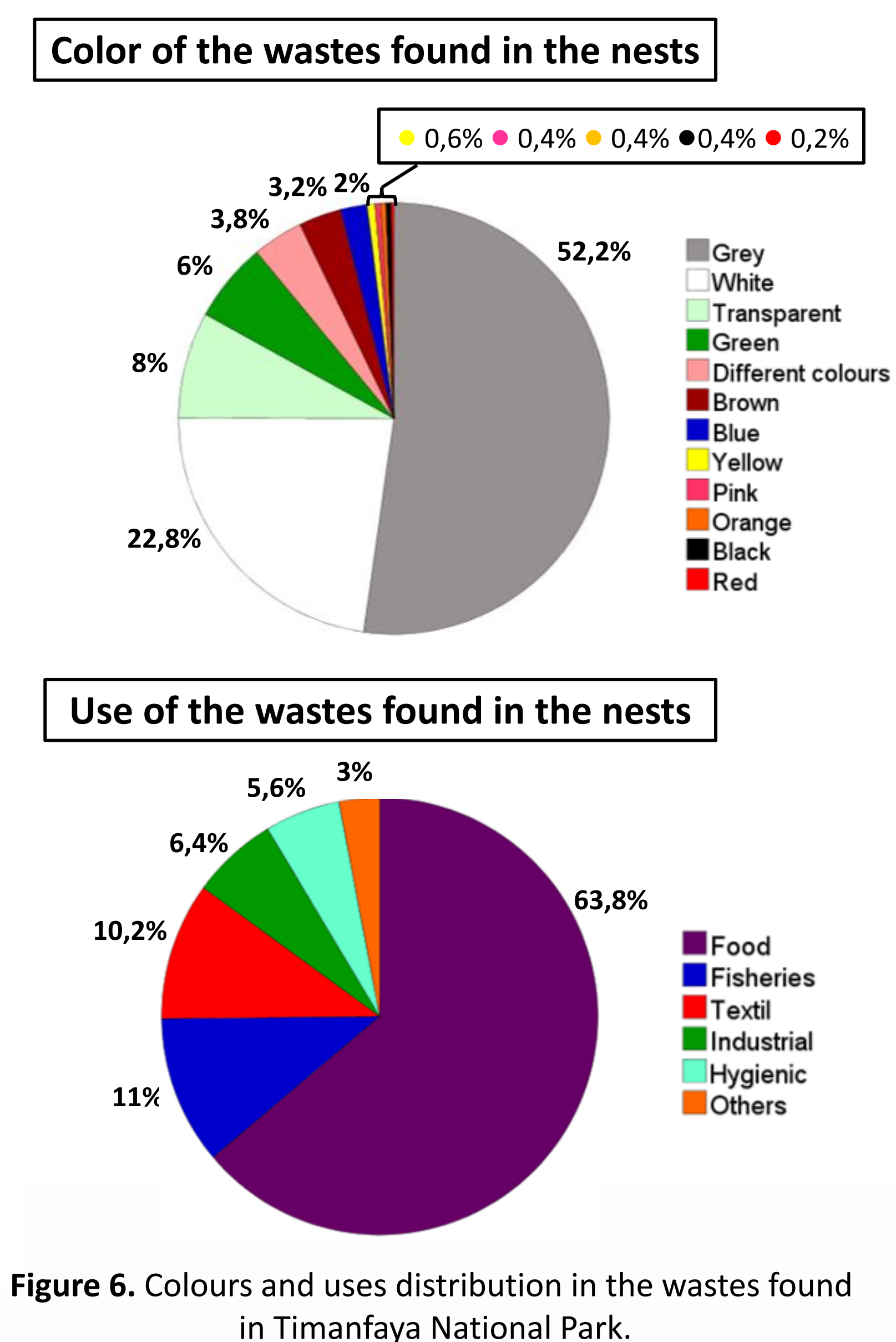
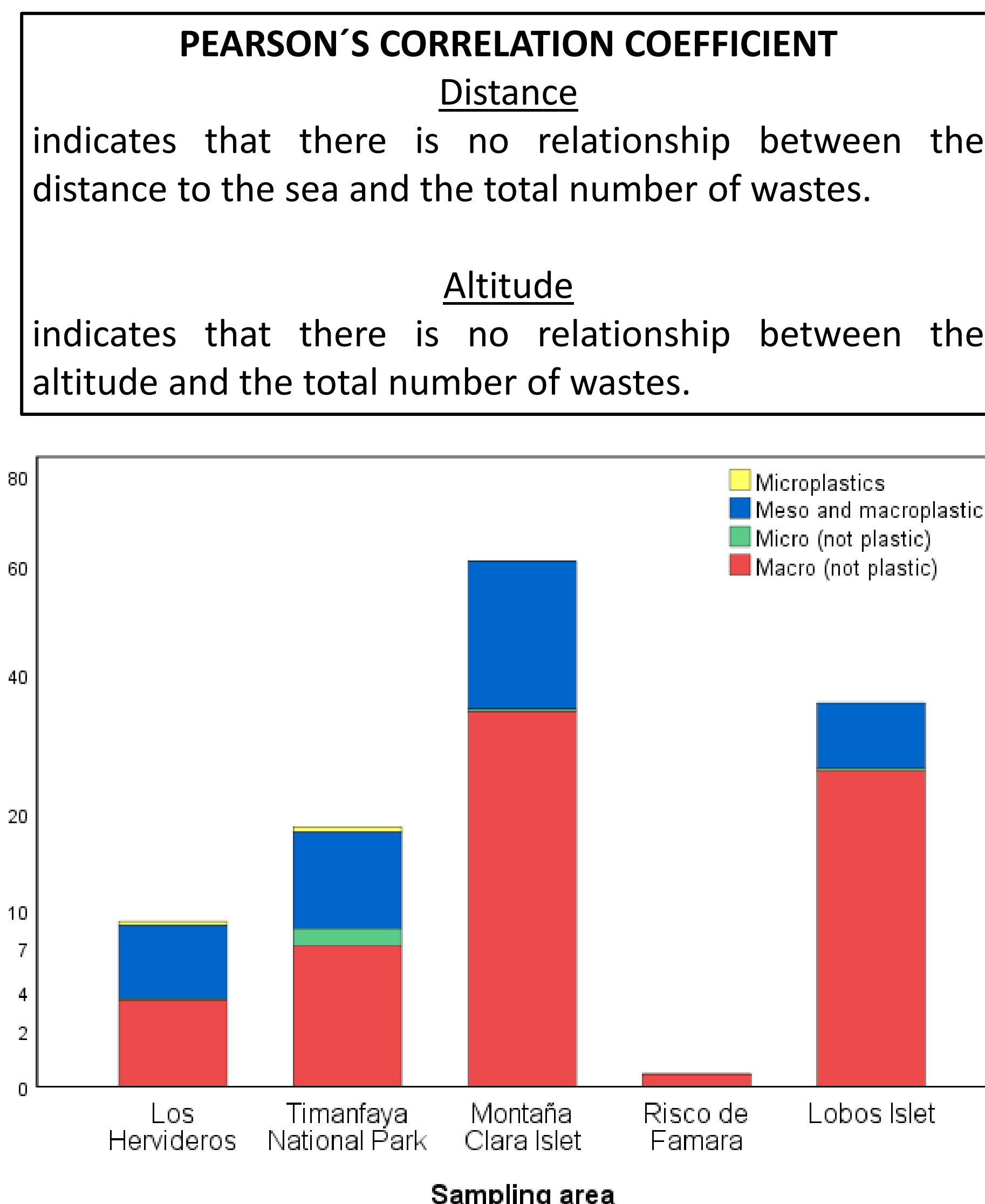
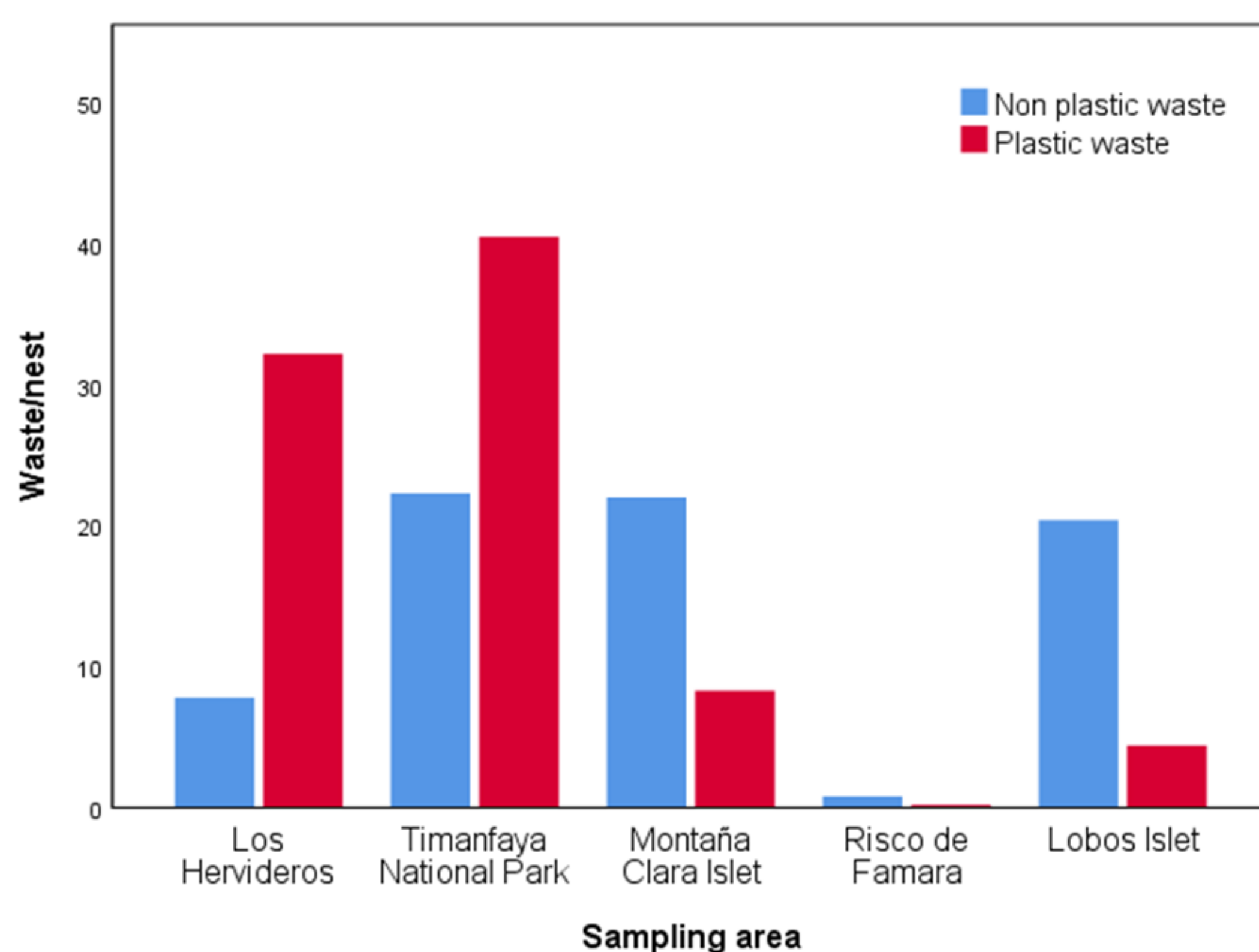
Figure 1. Yellow legged-gull (*Larus michahellis atlantis*).

EXPERIMENTAL



RESULTS AND DISCUSSION

✓ A total of 803 plastic items were found in the nests: 66 items were found in Lobos island (4.4 ± 4.6 items/nest), 386 items in Los Hervideros (32.2 ± 13.7 items/nest), 25 items in Montaña Clara islet (8.3 ± 13.6 items/nest), 324 items in Timanfaya National Park (40.5 ± 61.6 items/nest) and 2 items in Risco de Famara (0.2 ± 0.6 items/nest).



CONCLUSIONS

- The total mass of plastic waste found in the nest was 17.40 g, 17.07 g corresponding to meso and macroplastics, and 0.26 g to the microplastics fraction. Results indicate that, in the Canary Islands, the species *Larus michahellis atlantis* uses anthropic residues for the construction of its nests.
- The most common waste colors are grey/silver and white. The items most frequently found were fishing lines, fishing nets and wipes. Waste from food (i.e. aluminium foil) is more common on the coast, while in higher elevations or inland areas, hygienic waste is more common. Probably the use of the wipes are for the padding of the nest.
- The highest proportion of plastic waste per nest is located in pristine lava due to the low presence of vegetation or other natural materials (i.e. Los Hervideros or Timanfaya National Park) [4].

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