First revision of the current status of seahorses (Syngnathidae) and their distribution throughout the Macaronesia (NE Atlantic)

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The seahorse populations have suffered a worldwide progressive declining trend in the last decades. The knowledge about these fishes in the Macaronesian region is scarce and scattered, and most of available information comes from local collections without clear taxonomic accuracy. This study represents the first revision of the current status of seahorses and their distribution in the Macaronesian archipelagos, based on general reports on fish community assemblages, specific assessments and overall data obtained from preserved specimens held in various museums and universities collections along the Macaronesia region. These reports have confirmed the presence of one main species throughout the region, the European short-snouted seahorse *Hippocampus hippocampus*. Occasionally, two other species were also recorded, with one specimen of H. erectus caught in the Azores in 2004, and two individuals of H. algiricus observed in the Canary Islands in 2009-2010. The latter species are sighted in the Caribbean and West African coasts respectively, and their Macaronesian records may represent, till now, isolated dispersal events related to the particular oceanographic characteristics of this Atlantic area. Additionally, the unique seahorse assessment,

made in Gran Canaria Island, showed that wild populations of *H. hippocampus* occur at low abundances compared to other areas of its geographical distribution, and their structure and demography is conditioned by the environmental conditions of studied site. Nowadays, the information concerning seahorse wild stocks in Macaronesia is insufficient to make an assessment of their risk of extinction based on their distribution and population status. However, some of the main species recorded are heavily traded in nearest African coasts, and therefore its monitoring could guide future conservation actions and would benefit related species sharing their habitats and ecosystems. The study of seahorses could also reflect habitat loss cues, biological invasions, human introductions or global climate change effect all over these islands.