## Review of the genus Haploops Liljeborg, 1856 (Amphipoda, Ampeliscidae): from taxonomy to dynamic of dense populations

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## Résumé

A review of the available data on the amphipod *Haploops* genus including taxonomy, biogeography, ecology and biology and some ways of research in the future on this genus of the Ampeliscidae family is given. Since the overview of the genus Haploops at the end of the 1980's, several new species of this genus had been described in the North Atlantic Ocean. So, the number of species has increased from 15 at the end of the 1980' to 27 nowadays. New records are mainly acquired during the BIOICE, BIOFAR and IceAGE programmes for the North Atlantic Ocean. With 19 species the North Atlantic Ocean is the richest. Only four species has been known for the south hemisphere. Moreover, some recent ecological studies mainly from the North-eastern Atlantic along the south Brittany coast in the north of the Bay of Biscay and in the North-Atlantic and Arctic Ocean have focused on the role of the dense Haploops density as an 'ecosystem engineer' in the macrobenthic communities functioning. Secondary production and relation with the pockmarks are studied in the north of the Bay of Biscay which show high link between the dense populations of the tubicolous H. nirae and the formation and the colonisation of the pockmarks. New biogeographical data concern also deep-sea species. Haploops are found from shallow water (10 m) to 3,800 m. Some ways of research in the future on this genus of the Ampeliscidae family on which a great confusion existed is proposed. The importance of a high taxonomy process based on precise descriptions, accompanied if possible by topographical and ecological data, as accurate as possible, is need to better understand the relationships between species and environmental variables. These data are of major efficiency in the context of a reasonable estimate of the temporal biodiversity changes and the need to understand the functioning, and propose preservation of this particular benthic marine habitat.

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