

***Pyrostephos vanhoeffeni* (Cnidaria, Siphonophora): New data on zooid development and an updated review on its distribution.**

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The order Siphonophora, free-swimming colonial pelagic hydrozoans (Cnidaria), has the greatest degree of polymorphism and functional specialization and the most complex organization of all colonial animals. For those reasons and their fragility, they are very difficult to study, and many of described earlier species require a complement or expansion of their taxonomic features. *Pyrostephos vanhoeffeni* Moser, 1925 is a Physonectae siphonophore with a very complex morphology, especially in their nectophores. This species was been considered to be endemic to the Antarctic and Subantarctic waters until recent studies and it is one of the very few Physonectid species well adapted to cold waters. We recorded *P. vanhoeffeni* in the continental shelf of Argentina up to 39° S; the most northern occurrence in Atlantic waters so far. A total of 599 colonies were found in 71 zooplankton samples collected between 1996 and 2008. Although the colonial structure was damaged during sampling and fixation, we were able to recognize that they were mainly young colonies composed of many young nectophores and an active nectosome budding zone. The main objective of this work is to describe the different *P. vanhoeffeni*'s nectophores development stages. As well as to make an updated review of its geographical distribution based in all published records that we afterwards related it to environmental and oceanographic features in order to have a better understanding of this species biogeography. Moreover, as it was the only siphonophora species present in many of the samples, the presence of post-larval stages allowed us to definitively assign the form previously known as *Mica micula* Margulis, 1982 to *P. vanhoeffeni*. These new taxonomic descriptions plus the information about the expansion of its geographical distribution will be of great importance in future studies.