

Identification assisted by molecular markers of larval parasites in two limpet species (Patellogastropoda: Nacella) inhabiting Antarctic and Magellan coastal systems

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In the Southern Ocean, many parasites of vertebrates (mainly helminth groups) have been recognized as endemic species, but parasites of marine invertebrates remain almost unknown. It is reasonable to assume that digenean larvae will parasitize gastropods, bivalves, amphipods, and annelids, the usual first and second intermediate hosts for those parasites. Here, using an identification assisted by molecular markers, we report the Digenea species parasitizing the most abundant limpet species inhabiting ice-free rocky intertidal and subtidal zones of the Southern Ocean, viz. *Nacella concinna* from the Antarctic and *Nacella deaurata* from the Magellan region. The limpets harbored larval Digenea (two metacercariae and one sporocyst). Phylogenetic analysis based on the multilocus tree supported the hypothesis that *N. concinna* is parasitized by a species of Gymnophallidae, whereas the limpet *N. deaurata* is parasitized by *Gymnophalloides nacellae* and a species of Rencolidae. In addition, differences in prevalence and intensity were also recorded between the two compared host species and also from other congeneric species. This new knowledge in parasite species in marine invertebrates from the Southern Ocean reveals the presence of a particular parasite fauna and confirms the utility of molecular tools to identify biodiversity still scarcely known.